

# MINISTRY FOR PRIMARY INDUSTRIES

## **STANDARD 155.02.06**

## **Importation of Nursery Stock**

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

Regulation & Assurance
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## **ENDORSEMENT**

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

Signature of Director of Plants & Pathways Acting pursuant to delegated Director-General authority

Date: 22 July 2020

## **REVIEW**

This standard is subject to periodic review. Amendments will be made to the signed original as required. The signed original will be held by the Plant Imports Group, Ministry for Primary Industries, TSB House, 147 Lambton Quay, Wellington.

## AMENDMENT RECORD

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

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

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

39	Sections 2.2.2.4, 2.2.2.5 (new section for <i>Xylella fastidiosa</i> ), 2.2.2.6 (new section for post entry quarantine), and 2.3. Schedules for <i>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</i>	27 February 2017
40	Updated sections 1.3 and 1.4, and relevant schedules to align with commencement of Facility Standard: Post Entry Qurantine for Plants (MPI.STD.PEQ).	8 March 2017
41	Addition of Petunia schedule.	9 June 2017
42	Amendment to the Petunia schedule with new GM requirements	31 October 2017
43	Amendment to the <i>Vaccinium</i> schedule with a change to post entry quarantine requirements for tissue cultures.	11 December 2017
44	Amendment to the <i>Delphinium</i> schedule with addition of <i>Euryops</i> for conditions for <i>Xylella fastidiosa</i> .	04 April 2018
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 and creation of three new schedules (i.e. <i>Anthurium, Chichorium</i> and <i>Epipremnum</i> schedules).</i>	26 April 2018
46	Amendment to the <i>Solanum tuberosum</i> schedule with addition of ' <i>Candidatus</i> Liberibacter solanacearum' haplotype B, Columbia basin purple top phytoplasma, <i>Pectobacterium polaris</i> and <i>Potato Virus</i> H.	26 June 2018
47	Amendment to the <i>Anthurium</i> and <i>Rosa</i> schedules with additions of measures for <i>Ralstonia pseudosolanacearum</i>	25 January 2019
48	Amendment to the <i>Araucaria</i> schedule with addition of <i>Xylella 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.	30 January 2019
49	Amendment to the <i>Rosa</i> schedule with addition of measures for <i>Grapevine Pinot gris virus</i>	13 February 2019
50	Amendment to the <i>Acacia</i> and <i>Epipremnum</i> schedules with addition of measures for <i>Ralstonia pseudosolanacearum</i>	7 March 2019
51	Amendment to the <i>Solanum tuberosum</i> schedule with addition of measures for <i>Ralstonia pseudosolanacearum</i>	5 August 2019
52	Amendment to the <i>Vaccinium</i> spp. schedule with addition of measures for <i>Ralstonia pseudosolanacearum</i>	30 August 2019

53	Amendment to the <i>Actinidia</i> schedule and Section 2.2.1.12	29 November 2019
33	"Measures for Xylella fastidiosa"	2) November 201)
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
30	Ralstonia pseudosolanacearum	07 February 2020
57	Amendment to the 'Basic entry conditions' 2.2.1.6 (b) to	20 May 2020
37	manage regulated plant mites. Amendment of the <i>Calanthe</i> ,	20 May 2020
	Dahlia, Tricyrtis, Verbena, Hydrangea, Gentiana schedules	
	with removal of special measures for <i>Tetranychus kanzawai</i> .	
58	Amendment to the <i>Petunia</i> schedule: addition of option for	20 May 2020
36	importers to provide a non-GMO declaration to meet the GM	20 May 2020
	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 <i>Xylella fastidiosa</i> note. Amendment to the <i>Chrysanthemum</i> ,	_
	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 Columnea	•
	latent viroid, Tomato apical stunt viroid and Tomato chlorotic	
	dwarf viroid. Harmonization of measures for Potato spindle	
	tuber viroid on the Chrysanthemum, Dahlia and Diascia	
	schedules. Amendment to the Acacia, Anthurium, Epipremnum,	
	Ficus and Rosa schedules to add acceptable PFPP declaration	
	for Ralstonia pseudosolanacearum from Costa Rica. Addition	
	of <i>Hoya</i> schedule	

## 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 147 Lambton Quay Wellington NEW ZEALAND

Telephone: +64 4 894 5514 Fax: +64 4 894 0662

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

## 1.2 SCOPE

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

## 1.3 REFERENCES

#### **New Zealand legislation**

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

## Standards issued under the Biosecurity Act

The following standards can be accessed on the website:

http://www.mpi.govt.nz/importing/plants/nursery-stock/requirements

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

The following standards can be accessed on the website:

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

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

#### **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) [FAO, 1990; revised ICPM, 2001]

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

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

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

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

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

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

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

other genetic material which has been modified by *in-vitro* techniques.

**Graftstick:** See Cuttings

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

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

**Inspector:** Inspector under the Biosecurity Act 1993.

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

**IPPC:** International Plant Protection Convention

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

**ISPM:** International Standard for Phytosanitary Measures

Level 1 (L1), Level 2 (L2), Level 3 (L3), Level 3A (L3A) or Level 3B (L3B) Quarantine: A system of post entry quarantine screening whereby nursery stock is grown under certain specified conditions on a property and by a person registered by MPI (see Facility Standard: Post Entry Quarantine for Plants [MPI.STD.PEQ]).

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

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

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

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

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

**NPPO:** National Plant Protection Organisation

**Nursery Stock:** Whole plants or parts of plants imported for growing purposes, e.g. cuttings,

scions, budwood, marcots, off-shoots, root divisions, bulbs, corms, tubers, rhizomes, and plants *in vitro*.

**Permit to Import:** See Import permit

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

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

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

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

**Phytosanitary Certificate:** Certificate patterned after the model certificates of the IPPC [FAO, 1990]. The certificate must follow the pattern set out in the model phytosanitary certificate, ISPM Pub. No. 12, 2001, "Guidelines for phytosanitary certificate". The certificate is issued by the exporting country's NPPO, in accordance with the requirements of the IPPC, to verify that the requirements of the relevant import health standard have been met.

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

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

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

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

**Post Entry Quarantine (PEQ):** The quarantine conditions [Level 1 (open field facility), Level 2 (aquarium, greenhouse, or tissue culture facility), Level 3 (tissue culture facility), Level 3A (greenhouse facility), Level 3B (greenhouse facility)] under which nursery stock must be grown.

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

**Scionwood:** See Cuttings

Unit: The basic element selected for sampling. For nursery stock this unit may be a plant, bulb

or cutting. For tissue cultures it is the vessel containing the cultures.

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

## 1.5 GENERAL

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

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

Environmental Protection Authority PO Box 131 Wellington 6140 NEW ZEALAND

Phone: +64 4 916 2426
Fax: +64 4 914 0433
E-mail: info@epa.govt.nz
Website: http://www.epa.govt.nz

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

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

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

Telephone: +64 4 894 0862 Fax: +64 4 894 0662

E-mail: <a href="mailto:plantimports@mpi.govt.nz">plantimports@mpi.govt.nz</a>
Website: <a href="mailto:http://www.mpi.govt.nz">http://www.mpi.govt.nz</a>

## 1.6 CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES

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

A CITES import permit, issued by the Department of Conservation, may also be required by New Zealand legislation for specimens of selected species. To confirm whether is a specific species requires a CITES import permit, please contact the Department of Conservation (http://www.doc.govt.nz).

## 1.7 EQUIVALENCE

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

## 2. IMPORT SPECIFICATION AND ENTRY CONDITIONS

## 2.1 INSPECTION ON ARRIVAL AND MAXIMUM PEST LIMIT

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

Infestation by visually detectable quarantine pests on inspection at the border must not exceed the Maximum Pest Limit (MPL) which is currently set at 0.5%. To achieve a 95% level of confidence that the MPL will not be exceeded, no infested units are permitted in a randomly drawn sample of 600 units (i.e. acceptance number = 0).

## 2.2 ENTRY CONDITIONS

All imported nursery stock must comply with the following requirements:

a) **Basic Conditions** that apply to all nursery stock, as indicated in the Plants Biosecurity Index and outlined in Section 2.2.1 and 2.2.2.

AND

b) **Special Conditions** that apply to particular types of nursery stock, as indicated in the Plants Biosecurity Index and outlined in the **Schedule of Special Conditions**.

## 2.2.1 Basic Conditions

## 2.2.1.1 Types of Nursery Stock that may be imported

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

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

## 2.2.1.2 Import Permit

An import permit is required unless specified otherwise in section 2.2.2 or a schedule of special conditions. To apply for a permit, complete the Form "Application for Permit to Import Nursery Stock" available from the Permit Office or on MPI's website: http://www.mpi.govt.nz/importing/plants/nursery-stock/forms-and-templates/
The completed form should be returned to the Permit Office who will ensure that the PEQ requirements can be met before issuing an import permit.

## 2.2.1.3 Labelling

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

#### 2.2.1.4 Cleanliness

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

## 2.2.1.5 Phytosanitary Certificate

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

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

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

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

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

#### OR

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

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

### **Insects**

One of the following three treatments is required:

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

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

#### OR

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

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

#### OR

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

Chemical group	Active ingredient	Dip time	Notes
Carbamate	Carbaryl	2-5 mins	
Diacylhydrazine	Tebufenozide	2-5 mins	
Neonicotinoid	Imidacloprid (0.16 g per litre of dip/spray)	2-5 mins	Non-dormant material only
Neonicotinoid	Thiacloprid (0.16 g per litre of dip/spray)	2-5 mins	Non-dormant material only
Organophosphorous	Acephate (0.75 g per litre of dip/spray)	2-5 mins	Non-dormant material only
Organophosphorous	Chlorpyrifos (0.8 g per litre of dip/spray)	2-5 mins	Non-ionic surfactant required for dipping
Organophosphorous	Dimethoate	2-5 mins	Non-dormant material only
Organophosphorous	Pirimiphos-methyl (0.475 g per litre of dip/spray)	2-5 mins	Non-ionic surfactant required for dipping
Pyrethroid	Deltamethrin	15 mins	
Pyrethroid	Fenvalerate	15 mins	
Spinosyns	Spinosad	2-5 mins	Dip/spray at room temperature

## Mites (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 confirm that this treatment is endorsed in the disinfection 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 <u>Approved Biosecurity Treatments</u> (ABTRT) by an <u>MPI-Approved Treatment Provider</u>.
- A copy of the chemical label must be supplied if different to the table below.

One of the following two treatments is required:

(1) <u>Methyl bromide</u> (dormant material only): continuous fumigation at atmospheric pressure in accordance with a schedule that achieves the minimum concentration-time product (CT) (minimum achieved dose (g·h/m³)) at a minimum temperature (°C) that must not be less than 10 °C, is specified in the table below. Treatment must be achieved over the minimum exposure time (minimum duration (h)) that must not be less than 2 hours and not fall below a minimum

concentration (final residual concentration (g/m³)) 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.

Table 1: Methyl bromide fumigation schedules (dormant plant material only): For mites (non-diapausing), fumigation for a minimum of (i) 2, (ii) 2.5 or (iii) 3 hours at atmospheric pressure.

Minimum initial concentration (g/m³)*  Minimum concentration-time product (CT)/ achieved dose (g·h/m³)		Minimum temperature over duration of treatment (°C)			tion gation		
2 h <sup>i</sup>	2.5 h <sup>ii</sup>	3 h <sup>iii</sup>			$2\;h^i$	2.5 h <sup>ii</sup>	3 h <sup>iii</sup>
68	56	48	120	10	51	41	34
57	48	40	100	16	43	35	28
48	40	34	85	21	36	29	24
40	32	28	70	28	30	23	20

<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  $(g/m^3)$  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 (two-acaricides combined treatment option) as indicated below. For dipping, the treatment time is normally 2 minutes but must be increased to 5 minutes if bubbles remain present on the plant surface. Dip solutions must be used no more than twice or as per manufacturer's recommendations. All treatments must be carried out in accordance with manufacturer's recommendations at the maximum label rate as shown in the table below;

<sup>\*\*</sup>Minimum concentration during fumigation  $(g/m^3)$  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>&</sup>lt;sup>i</sup>Treatment duration is over a minimum of 2 continuous hours

ii Treatment duration is over a minimum of 2.5 continuous hours

iii Treatment duration is over a minimum of 3 continuous hours

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

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

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

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

#### **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
Chlorfenap	Pyrroles; group 13	0.087	SC
yr			
OPTION 2B			
Fenazaquin	METI acaricides and insecticides; group 21A	0.352	SC
Group 'b'			
Aceqinocyl	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:

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

<sup>\*\*\*</sup>Retreatment must apply according to the NOVACHEM agrichemical manual or label

(1) Methyl bromide fumigation: fumigation for 2 hours at atmospheric pressure at one of the following combinations of rate (g/m³) and temperature (°C):

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

#### OR

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

#### OR

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

#### OR

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

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

#### Mites

One of the following four treatments is required:

(1) Methyl bromide fumigation: fumigation for 2 hours at atmospheric pressure at one of the combinations of rate (g/m³) and temperature (°C) prescribed for insects above.

#### OR

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

#### OR

(3) Hot water treatment: immersion in hot water at a constant temperature of 24°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 plants must be sprayed/dipped using either Abamectin or two active ingredients belonging to different chemical groups chosen from the table below. The treatment time is normally 2 minutes but must be increased to 5 minutes if bubbles remain present on the plant surface. Dip solutions must be used no more than twice or as per manufacturer's recommendations. All treatments must be carried out in accordance with manufacturer's recommendations using either the recommended label rate or the rates shown in the table below.

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

#### Nematodes

Both of the following treatments are required:

- (1) Methyl bromide fumigation: fumigation for 2 hours at atmospheric pressure at one of the combinations of rate (g/m³) and temperature (°C) prescribed for insects above;
- OR Hot water treatment: immersion in hot water at a constant temperature of 24°C for 2 hours, followed by immersion in hot water at a constant temperature of 45°C for 4 hours (period required at the stated temperatures excluding warm-up times).

#### AND

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

#### Fungi

Both of the following treatments are required:

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

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

#### **AND**

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

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

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

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

## 2.2.1.8 Measures for *Ceratocystis fimbriata sensu lato* complex (strains not in New Zealand)

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

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

- Acacia
- Actinidia
- Alocasia
- Ananas
- Annona
- Betula
- Carya
- Cassia
- Celtis
- Citrus
- Colocasia
- Corymbia
- Eriobotrya

- Erythrina
- Eucalyptus
- Fagus
- Ficus carica
- Inga
- Juglans
- Mangifera
- Metrosideros
- Metroxylon
- Ostrya
- Passiflora
- Pimenta
- Populus

- Protea
- Prunus
- Punica
- Quercus
- Schizolobium
- Schotia
- Spathodea
- Styrax
- Syngonium
- Tilia
- Ulmus
- Xanthosoma

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

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

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

#### ii) For all other countries

The phytosanitary certificate must have the following additional declaration: "The plants have been sourced from a state/province free from *Ceratocystis fimbriata sensu lato* complex (strains not in New Zealand) or from a Pest Free Place of Production free from *Ceratocystis fimbriata sensu lato* complex (strains not in New Zealand)"

## AND

The plants must be tested for *Ceratocystis fimbriata sensu lato* complex (strains not in New Zealand) during the post entry quarantine period, at an MPI approved diagnostic facility.

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

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

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

## 2.2.1.9 Measures for *Helicobasidium mompa*

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

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

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

## For whole plants, cuttings and dormant bulbs:

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

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

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

## a) For dormant bulbs:

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

## b) For whole plants and cuttings:

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

#### **AND**

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

## Both of the following treatments are required:

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

recommendations using either the recommended label rate or the rates shown in the table below.

Active ingredient	Dip time	Notes
Bromo-chloro-dimethylhydantoin (8.1-16 mg per	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 (1-1.3 g active ingredient per litre of dip) containing a wetting agent for 15-30 minutes with agitation. The dip solution must be used no more than twice or as per manufacturer's recommendations. The thiabendazole dip may be incorporated in the hot water treatment:

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

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

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

#### 2.2.1.10 Measures for Phymatotrichopsis omnivora

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

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

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

#### 2.2.1.11 Measures for Phytophthora ramorum

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

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

		_	
•	1	hies	

Acer

• Aesculus • Arbutus

Berberis

• Carpinus

Castanea

• Corylus

Cotoneaster

• Eucalyptus

Fagus

• Fuchsia

• Gaultheria

• Kalmia

• Lithocarpus

• Olea

• Photinia

Populus

• Prunus

Pseudotsuga

**Ouercus** 

Rhododendron

Rubus

Salix

Ulmus

• Vaccinium

Viburnum

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

Alnus

Annona

Betula

• Buddleja

• Celtis

• Cercis

• Ceratonia

• Chamaecyparis

• Chimaphila

• Choisya

Cistus

• Citrus

• Clematis

Cornus

Corylopsis

Distylium

**Empetrum** 

• Erica

• Garrya

• Gevuina

• Grevillea

• Ilex

Hedera

• Hydrangea

• Larix

• Liriodendron

• Loropetalum

• Mahonia

Malus

• Manglietia

Nerium

• Picea

• Pistacia

• Ribes

• Robinia

• Rosa cultivar Pink Meidiland

• Rosa cultivar Pink Sevillana

• Rosa cultivar Royal Bonica

• Rosa gymnocarpa

Rosa rugosa

Rosa sempervirens

Sambucus

Tilia

Zenobia

• Tsuga

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

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

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

Australia, Israel, Japan, and South Africa.

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

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

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

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

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

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

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

### 2.2.1.12 Measures for Xylella fastidiosa

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

### **Guidance:**

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

Also,

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

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

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

"The plants in this consignment have only been grown in, and exported from, the

#### country of origin [insert country name], which is free from Xylella fastidiosa"

## ii) For all other countries

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

#### 1. Additional declaration:

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

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

## 2. Pre-determined testing in post entry quarantine:

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

**Minimum period:** 6 months

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

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

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

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

## **Guidance:**

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

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

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

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

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

## OR, for areas approved by MPI

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

#### **Guidance:**

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

- <u>Africa:</u> Angola, Benin, Burkina, Cameroon, Central African Republic, Cote d'Ivoire Democratic Republic of Congo, Faso, Gabon, Ghana, Kenya, Liberia, Nigeria, Sierra Leone, Tanzania, Togo, Uganda
- <u>Asia:</u> Andaman Islands, China, Islands of China, East Indies, India, Indonesia, Islands of Japan, Malay Peninsula, Malaysia, Myanmar, Nicobar Islands, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan, Vietnam
- 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: Post Entry Quarantine for Plants (MPI.STD.PEQ). The nursery stock must be actively growing throughout the quarantine period. The quarantine period:

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

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

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

www.mpi.govt.nz/news-an	<u>a-resources/resou</u>	rces/registers-and	-nsts/post-entry/

## 2.2.2 ENTRY CONDITIONS FOR TISSUE CULTURE

## 2.2.2.1 Labelling

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

#### 2.2.2.2 Cleanliness & Tissue Culture Media

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

## 2.2.2.3 Phytosanitary Certificate

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

For **plantlets recently removed from** *in-vitro* **tissue culture**, the following additional declaration must be identified upon the phytosanitary certificate:

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

## 2.2.2.4 Import Permit

An import permit is required when the schedule of special conditions states that:

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

## 2.2.2.5 Measures for *Xylella fastidiosa* on tissue culture

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

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

**OPTION 1:** Both the tissue cultures AND the mother plants have only been grown in the country of origin, AND this can be certified by the exporting NPPO. All phytosanitary certificates must be endorsed with the following additional declaration:

"The tissue cultures/plants in-vitro in this consignment, and the plants they were derived from, have only been grown in the country of origin, [insert country name], which is free from *Xylella fastidiosa*".

**Note:** PEQ is not required for tissue cultures imported under this option, unless PEQ is a requirement of the schedule of special entry conditions.

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

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

## ii) For all other countries

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

## 1. Additional declaration:

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

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

## 2. Pre-determined testing in post entry quarantine:

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

**Minimum period:** 6 months (in the PEQ greenhouse)

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

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

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

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

#### **Guidance:**

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

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

The full list of countries which are not recognised by MPI as free from *Xylella fastidiosa* can be viewed on the website: <a href="https://www.biosecurity.govt.nz/dmsdocument/15655">https://www.biosecurity.govt.nz/dmsdocument/15655</a>

## 2.2.2.6 Post-Entry Quarantine for tissue cultures

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

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

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

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

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

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

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

## 2.2.3 IMPORTATION OF POLLEN

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

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

#### 2.2.4 IMPORTATION OF NEW ORGANISMS

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

## 2.3 COMPLIANCE PROCEDURES

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

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

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

#### 2.3.1 VALIDATION OF OVERSEAS MEASURES

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

## 2.3.2 TREATMENT AND TESTING OF THE CONSIGNMENT

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

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

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

## 2.3.2.1 Pre-determined testing

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

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

## Polymerase chain reaction (PCR)

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

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

### Enzyme-linked immunosorbent assay (ELISA)

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

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

## **Graft** (woody) indexing

Where prior permission is received from MPI, samples taken from up to five plants being grown in post entry quarantine can be combined to form a single composite sample for 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, may be given when the nursery stock meets the requirements of this standard. There are other restrictions in section 27 and 28 of the Biosecurity Act on the giving of biosecurity clearances i.e. compliance with an import health standard or import permit does not guarantee biosecurity clearance will be given. As per Section 27 of the Biosecurity Act, biosecurity clearance will not be given if an inspector considers that the nursery stock is infected, or is showing signs of being infected, with organisms that may be unwanted organisms, or the inspector considers there has been a change in circumstances, or in the state of knowledge, that makes it unwise to give biosecurity clearance.

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

## 2.4 NEW ZEALAND NURSERY STOCK RETURNING FROM OVERSEAS

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

## (i) Nursery stock "unopened" offshore

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

## (ii) Nursery stock "opened" offshore

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

- (a) verification that the nursery stock was either returned to its original pest-proof container and resealed immediately after inspection or stored in pest-proof facilities prior to 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.). Differences may involve:

- special isolation requirements
- special treatment requirements
- minimum quarantine period
- a requirement for a specified Level of PEQ (e.g. L1, L2, L3, L3A, L3B)
- special phytosanitary certificate additional declarations

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

## 3.2 ACCREDITATION OF OFFSHORE PLANT QUARANTINE FACILITIES

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

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

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

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

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

# **GENERAL CONDITIONS:**

**Approved Countries:** All

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

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

## A. For Whole Plants

**PEO**: Level 3B

**Minimum Period:** 6 months

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

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

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

#### <sup>1</sup>Implementation of measures:

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora capsici* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora capsici* are not mandatory.

**Note:** The entry conditions in 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

**PEO:** 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*<sup>1</sup>

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*".

#### ΩR

- 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*<sup>1</sup>

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*<sup>1</sup>

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<sup>1</sup>

**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  $\underline{6}$  months for nursery stock sourced from countries  $\underline{not}$  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 PEO:** Level 2

LEQ. LEVEL 2

**Minimum Period:** 3 months

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

#### b. Conditions for *Phytophthora capsici*<sup>1</sup>

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<sup>1</sup>

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*<sup>1</sup>

**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*<sup>1</sup>

**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

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*<sup>1</sup>

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</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.

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

#### 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

**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 *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 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 *Pelargonium* and *Vinca minor*

ORGANISM	MPI ACCEPTABLE METHODS	Comments
Insects	Visual inspection AND approved	Applies to whole plants and
	insecticide treatments as described in	cuttings only
	section 2.2.1.6 of the Basic conditions	
Mites	Visual inspection AND approved	Applies to whole plants and
	miticide treatments as described in the	cuttings only
	section 2.2.1.6 of the Basic conditions	
Bacterium		
Ralstonia	Growing season inspection in PEQ for	Applies to Pelargonium
pseudosolanacearum	symptom expression AND plating on	whole plants, cuttings, and
	selective media OR PCR	tissue culture imported into a
		level 3A PEQ facility
Xylella fastidiosa	Refer to section 2.2.1.12 "Measures for	Applies to whole plants and
	Xylella fastidiosa"	cuttings only. Testing
		requirements for Xylella
		fastidiosa are identified in
		section 2.2.1.12.
	Refer to section 2.2.2.5 "Measures for	Applies to tissue culture only.
	Xylella fastidiosa on tissue culture"	Testing requirements for
		Xylella fastidiosa are
		identified in section 2.2.2.5.
Viroid		
Tomato chlorotic	PCR based methods	Only applies to Vinca minor
dwarf viroid		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.

Measures for Tomato chlorotic dwarf viroid will come into force on 22 August 2020

<sup>&</sup>lt;sup>1</sup>Implementation of measures:

**Note:** The entry conditions in 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*<sup>1</sup>

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

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

#### OR

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

#### OR

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

- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11), and
- c. Conditions for *Xylella fastidiosa* (section 2.2.1.12), and **Guidance for importers**: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- d. Conditions for *Cryphonectria parasitica*<u>Additional Declaration</u>: "*Cryphonectria parasitica* is not known to occur in \_\_\_\_\_ (the country or state where the plants/cuttings were produced)".

### OR

**PEQ:** Level 3B

**Minimum Period:** 6 months

a. Conditions for Xylella fastidiosa (section 2.2.1.12)

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

# <sup>1</sup>Implementation of measures:

For consignments with a phytosanitary certificate issued <u>on or after 25 May 2018</u> the requirements for *Phytophthora palmivora* <u>must</u> be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora palmivora* are not mandatory.

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

# **GENERAL CONDITIONS:**

Approved Countries: Australia, Hawaii, mainland USA

Quarantine Pests: Ceratocystis fimbriata, Lethal yellowing; cadang-cadang, Phytophthora

palmivora, Phellinus noxius, Xylella fastidiosa

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

# A. For Whole Plants and Cuttings

PEQ: Level 2

**Minimum Period**: 3 months

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

a. Conditions for Ceratocystis fimbriata (section 2.2.1.8)

Note: Only applies to members of the Metroxylon genus

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

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

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

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

**Note:** Only applies to the following species: *Areca catechu; Areca triandra; Chrysalidocarpus lutescens; Coco nucifera; Elaeis guineensis; Roystonea regia* 

a. Conditions for Phytophthora palmivora<sup>1</sup>

**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:

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

#### OR

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

# OR

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

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А	Additional	1)20	laration•
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"Cadang cadang and	lethal yellov	wing are not	known to occur	r in	(the country or state
	**				
where the plants were grown) _	<u> </u>				

# **A. For Tissue Cultures**

**PEQ**: Level 2

**Minimum Period**: 3 months

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

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

#### <sup>1</sup>Implementation of measures:

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora palmivora* must be met.

For consignments with a phytosanitary certificate issued no later than  $\underline{24 \text{ May } 2018}$ , the requirements for *Phytophthora palmivora* are not mandatory.

# Actinidia

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

Guidance: *Actinidia* nursery stock (plants for planting) is no longer eligible for import under this schedule.

Import requirements for *Actinidia* plants for planting are now set out in: Import Health Standard: *Actinidia* Plants for Planting, available on the plant imports website at: <a href="https://www.biosecurity.govt.nz/importing/plants/nursery-stock/">https://www.biosecurity.govt.nz/importing/plants/nursery-stock/</a>

**Note:** The entry conditions in 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

**PEO:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Phytophthora palmivora*<sup>1</sup> **Note:** Only applies to the following genus: *Syringa* 

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

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

#### OR

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

#### OR

- "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*<sup>1</sup>

Note: Only applies to the following genera: Heteromeles and Rhamnus

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

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

#### OR

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

#### OR

"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*<sup>2</sup>

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; Rhus succedanea

# **B.** For Cuttings

**PEQ:** Level 2

Minimum Period: 3 months

a. Conditions for Phytophthora palmivora<sup>1</sup>

**Note:** Only applies to the following genus: *Syringa* 

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

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

#### OR

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

# OR

"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*<sup>1</sup>

Note: Only applies to the following genera: Heteromeles and Rhamnus

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

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

#### **OR**

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

#### OR

"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*<sup>2</sup>

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

a. Conditions for *Tomato chlorotic dwarf viroid*<sup>2</sup>
 Note: Only applies to the following species: *Pittosporum tobira*

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

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

#### OR

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

#### OR

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

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

b. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5) **Guidance for importers:** There will be a minimum quarantine period of <u>6 months in a Level 2 PEQ 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 ACCEPTABLE METHODS	Comments
Insects	Visual inspection <b>AND</b> approved insecticide treatments as described in section 2.2.1.6 of the Basic conditions	Applies to whole plants and cuttings only
Mites  Visual inspection AND approved miticide treatments as described in the section 2.2.1.6 of the Basic conditions		Applies to whole plants and cuttings only
Bacterium		
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 <i>Xylella fastidiosa</i> are identified in section 2.2.2.5
Viroid		
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.

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora palmivora* and *P. tentaculata* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora palmivora* and *P. tentaculata* are not mandatory.

#### <sup>2</sup>Implementation of measures:

Measures for Tomato chlorotic dwarf viroid will come into force on 22 August 2020

<sup>&</sup>lt;sup>1</sup>Implementation of measures:

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

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

Dormant bulbs

Plants in tissue culture

#### 2. Pests of Allium

Refer to the pest list.

# 3. Entry conditions for:

# 3.1 Allium dormant bulbs from any country

#### (i) Documentation

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

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

# (ii) Phytosanitary requirements

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

The Allium dormant bulbs have been:

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

# AND

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

#### **AND**

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

#### **AND**

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

# • Phytoplasmas:

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

### • Viruses:

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

#### Bacteria:

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

#### AND

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

# (iii) Additional declarations to the phytosanitary certificate

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

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

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

#### **AND**

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

#### **AND**

One of the following Additional Declarations for *Phytophthora capsici* and *P. palmivora<sup>1</sup>*:

"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

"The [insert species name] plants in this consignment were produced in a "pest free area" for *Phytophthora capsici* and *P. palmivora*".

#### OR

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

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

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

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

# (vi) Assessment of Equivalent Phytosanitary Status

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

# 3.2 Allium plants in tissue culture from any country

#### (i) Documentation

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

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

#### (ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

# (iii) Phytosanitary requirements

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

The *Allium* plants in tissue culture have been:

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

#### **AND**

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

# • Phytoplasmas:

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

#### • Viruses:

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

# (iv) Additional declarations to the phytosanitary certificate

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

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

#### (v) Post-entry quarantine

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

# (vi) Assessment of Equivalent Phytosanitary Status

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

# <sup>1</sup>Implementation of measures:

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora capsici* and *P. palmivora* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora capsici* and *P. palmivora* are not mandatory.

# Pest List for Allium

# **REGULATED PESTS (actionable)**

Insect

Insecta

Coleoptera

Curculionidae

Brachycerus muricatus weevil Brachycerus undatus weevil onion weevil

Ceutorhynchus jakovlevi

Nitidulidae

Carpophilus obsoletus dried fruit beetle

Diptera

Anthomyiidae

Delia antiqua onion maggot Delia florilega onion fly

Heleomyzidae

Suillia lurida garlic fly

Suillia univittata

Syrphidae

Eumerus amoenus onion bulb fly

Lepidoptera Cossidae

Dyspessa ulula garlic moth

**Yponomeutidae** 

Acrolepia alliella

allium leafminer Acrolepia sapporensis Acrolepiopsis assectella leek moth

**Thysanoptera** Thripidae

Thrips tabaci [vector] onion thrips

Mite

Arachnida Acarina

Acaridae

Rhizoglyphus setosus bulb mite

Eriophyidae

Aceria tulipae [vector] wheat curl mite

Nematode

Adenophorea

Dorylaimida Longidoridae

Paralongidorus maximus

Trichodoridae

Paratrichodorus allius stubby root nematode stubby root nematode Paratrichodorus minor [vector] Paratrichodorus teres stubby root nematode

Secernentea **Tylenchida** 

Aphelenchoididae

Aphelenchoides besseyi rice white-tip nematode

Aphelenchoides parietinus

Belonolaimidae

Belonolaimus gracilis sting nematode

Hoplolaimidae

Helicotylenchus indicus sprial nematode spiral nematode Helicotylenchus microlobus Helicotylenchus multicinctus spiral nematode Hoplolaimus seinhorsti lance nematode Rotylenchulus reniformis reniform nematode

Meloidogynidae

Meloidogyne arenaria peanut root knot nematode

Meloidogyne chitwoodi root knot nematode

Tylenchidae

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

Fungus Ascomycota

Dothideales

Mycosphaerellaceae

Mycosphaerella allii-cepae (anamorph Cladosporium 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

Peronosporaceae Peronosporaceae

Phytophthora capsici fruit rot of peppers

Phytophthora palmivora black rot

mitosporic fungi (Coelomycetes)

Sphaeropsidales Sphaerioidaceae

Phyllosticta allii leaf blight

Septoria viridi-tingens --

**Bacterium** 

Enterobacteriaceae

Erwinia chrysanthemi pv. chrysanthemi bacterial soft rot

Pseudomonadaceae

Burkholderia cepacia sour skin

Pseudomonas xanthochlora -

Virus

Garlic dwarf virus Garlic mite-borne latent virus Garlic virus X Onion mite-borne latent virus Shallot yellow stripe virus Sint-Jan's onion latent virus -

Tobacco rattle virus [strains not in New Zealand]

Phytoplasma

Aster yellows phytoplasma Garlic decline phytoplasma Onion yellows phytoplasma -

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

## **GENERAL CONDITIONS:**

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

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

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

#### A. For Whole Plants

**PEO:** Level 2

**Minimum Period:** 3 months

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

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

#### **OPTION 1:**

No import permit is required.

PEQ: None

# **Additional Declaration(s):**

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

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

#### OR

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

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

# **OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

#### **C. For Tissue Cultures**

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

# **GENERAL CONDITIONS:**

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

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

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

# A. For Whole Plants

**PEQ:** Level 2

**Minimum Period:** 3 months

#### a. Additional Declarations:

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

#### OR

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

#### **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

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

# **GENERAL CONDITIONS:**

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

**Quarantine Pests**: Uredinales

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

A. For Whole Plants

PEO: Level 2

**Minimum Period**: 3 months

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

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

#### **OPTION 1:**

No import permit is required.

PEQ: None

# **Additional Declaration(s):**

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

# **OPTION 2:**

**PEQ:** Level 1

Minimum Period: 3 months

#### **C. For Tissue Cultures**

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

# **GENERAL CONDITIONS:**

**Approved Countries:** All

Quarantine Pests: Phytophthora capsici, Ralstonia pseudosolanacearum

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

# A. Whole Plants and Cuttings

PEQ: Level 2

**Minimum Period:** 3 months

a. Conditions for Phytophthora capsici

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

"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*".

#### 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:

The (insert plant species) plants were sourced from a pest free area, free from *Ralstonia pseudosolanacearum*)'.

#### OR

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

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

#### **B.** For Tissue Culture

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

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:

'The (insert plant species) plants were sourced from a pest free area, free from *Ralstonia pseudosolanacearum*)'

#### OR

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

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

# C. For Whole Plants, Cuttings or Tissue cultures imported into a level 3A PEQ facility

Note: Only applies to the following genera: Anthurium

**PEQ:** Level 3A

**Minimum Period:** 3 months

i) Conditions for Ralstonia pseduosolanacearum
 Pre-determined testing in PEQ; refer to "Inspection, Testing and Treatment Requirements for Anthurium"

Inspection, Testing and Treatment Requirements for Anthurium

ORGANISM	MPI ACCEPTABLE METHODS	Comments	
Insects	Visual inspection <b>AND</b> approved	Applies to whole plants and	
	insecticide treatments as described in	cuttings only	
	section 2.2.1.6 of the Basic conditions		
Mites	Visual inspection AND approved	Applies to whole plants and	
	miticide treatments as described in the	cuttings only	
	section 2.2.1.6 of the Basic conditions		
Bacterium			
Ralstonia	Growing season inspection in PEQ for	Applies to Anthurium whole	
pseudosolanacearum	symptom expression AND plating on	plants, cuttings, and tissue	
	selective media OR PCR	culture imported into a level	
		3A PEQ facility	

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

# **GENERAL CONDITIONS:**

**Approved Countries:** All

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

**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 immediately prior to export and no

snails, snail eggs, worms or leeches were detected in a 600 unit sample".

# **Special Conditions:**

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

#### **QUARANTINE AQUARIUM**

MPI Registration Number: Name of Quarantine Operator:

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

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

**Note:** The entry conditions in 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<sup>1</sup>

**Note:** Only applies to the following genus: *Piper* 

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

"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*".

c. Conditions for Phytophthora palmivora<sup>1</sup>

**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:

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

#### OR

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

#### OR

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

#### AND

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<sup>1</sup>

**Note:** Only applies to the following genus: *Piper* 

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

"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*".

b. Conditions for *Phytophthora palmivora*<sup>1</sup>

**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:

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

# OR

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

#### OR

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

#### AND

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**

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

#### <sup>1</sup>Implementation of measures:

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora capsici* and *P. palmivora* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora capsici* and *P. palmivora* are not mandatory.

**Note:** The entry conditions in 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

PEQ: Level 2

**Minimum Period:** 3 months

a. Conditions for *Phytophthora palmivora*<sup>1</sup> **Note:** Only applies to the following genus: *Magnolia* 

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

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

#### OR

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

# OR

"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*<sup>1</sup>

Note: Only applies to the following genus: Ceanothus

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

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

#### OR

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

#### OR

"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<sup>1</sup>

Note: Only applies to the following genus: Magnolia

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

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

#### OR

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

#### OR

"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<sup>1</sup>

Note: Only applies to the following genus: Ceanothus

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

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

#### OR

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

#### OR

"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 not recognised by MPI as free from *Xylella fastidiosa* 

#### **C. For Tissue Cultures**

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

#### <sup>1</sup>Implementation of measures:

For consignments with a phytosanitary certificate issued <u>on or after 25 May 2018</u> the requirements for *Phytophthora palmivora* and *P. tentaculata* <u>must</u> be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora palmivora* and *P. tentaculata* are not mandatory.

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

# **GENERAL CONDITIONS:**

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

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

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

For Whole Plants and Tissue Cultures:

# OPTION 1: PEQ: Level 2

Minimum Period: 6 months

#### **Additional Declarations:**

1.	"Gymnosporangium clavipes and Gymnosporangium globosum are not known to occu				
	on	(host species being imported)	in	(the country or state in which the plants were grown)	
	"				
		•			

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

# **OPTION 2: PEO:** Level 3B

**Minimum Period:** 3 months

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

# **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests**: Phellinus noxius

**Entry Conditions:** 

Basic; with variations and additional conditions as specified below:

# A. For Tissue Cultures

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

# **GENERAL CONDITIONS:**

**Approved Countries:** All

Virus diseases **Ouarantine Pests:** 

**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, USA:

#### **OPTION 1:**

No import permit is required.

PEQ: None

#### **Additional Declaration(s):**

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

# **OPTION 2: PEQ:** Level 1

**Minimum Period:** 3 months

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

# **OPTION 1:**

PEO: Level 1

**Minimum Period:** 3 months **Additional Declaration(s):** 

"The dormant bulbs in this consignment have been:

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

#### **AND**

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

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

**Minimum Period:** 3 months

# **D.** For Tissue Cultures

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

# **PLUS**

# **Additional Declaration:**

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

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

# **GENERAL CONDITIONS:**

**Approved Countries**: All

Quarantine Pests: Puccinia asparagi; virus diseases; Xylella fastidiosa

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

#### A. For Whole Plants

**PEQ**: Level 3B

Minimum Period: 3 months

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

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

**PEO**: 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 not recognised by MPI as free from *Xylella fastidiosa*.

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

# **GENERAL CONDITIONS:**

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

Quarantine Pests: Aster yellows phytoplasma, Uredinales

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

#### A. For Whole Plants

**PEO**: Level 2

**Minimum Period**: 3 months

**Additional Declarations:** "Aster yellows phytoplasma is not known to occur in \_\_\_\_ (the country or state where the plants were grown) \_\_\_\_".

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

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

#### **PLUS**

#### **Additional Declaration:**

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

# Beaucarnea

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

# **GENERAL CONDITIONS:**

**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 Plants in Tissue Cultures

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

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

**PEO:** Level 2

**Minimum Period:** 3 months

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

#### **OPTION 1:**

No import permit is required.

PEQ: None

**Additional Declaration(s):** 

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

"In addition to inspection of the dormant bulbs prior to shipment, the imported bulbs meet the requirements of the BKD Class 1 bulb certification scheme."

OR

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

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

**OPTION 2: 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, USA:

# **OPTION 1: PEQ:** Level 1

Minimum Period: 3 months Additional Declaration(s):

"The dormant bulbs in this consignment have been:

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

#### **AND**

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

# **OPTION 2:**

PEQ: Level 2

Minimum Period: 3 months

#### **D.** For Tissue Cultures

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

#### **PLUS**

#### **Additional Declaration:**

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

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

# **GENERAL CONDITIONS:**

**Approved Countries**: All

**Quarantine Pests**: Uredinales, *Phytophthora ramorum* 

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

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

PEQ: Level 2

**Minimum Period**: 3 months

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

#### **Additional Declarations:**

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

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

# **GENERAL CONDITIONS:**

**Approved Countries:** All

Quarantine Pests: Xylella fastidiosa

#### **Entry Conditions:**

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

#### A. For Cuttings and Whole Plants

**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. 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**

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*.

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

## **GENERAL CONDITIONS:**

**Approved Countries:** All except Australia and Italy

Quarantine Pests: Demyrsus meleoides

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

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

**PEQ:** Level 2

**Minimum Period:** 6 months

**Inspection Requirements:** A minimum of 600 plants are to be inspected during each

inspection in post-entry quarantine

## **B. For Tissue Cultures**

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

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

#### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Caladium virus X

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

A. For Whole Plants

**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, USA:

#### **OPTION 1:**

No import permit is required.

PEQ: None

#### **Additional Declaration(s):**

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

# **OPTION 2: PEQ:** Level 1

**Minimum Period:** 3 months

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

## **OPTION 1:**

**PEQ:** Level 1

Minimum Period: 3 months Additional Declaration(s):

"The dormant bulbs in this consignment have been:

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

#### **AND**

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

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

**Minimum Period:** 3 months

# **D.** For Tissue Cultures

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

# **Additional Declaration:**

"The cultures have been derived from parent stock 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:** Phytophthora capsici, Phytophthora palmivora, Uredinales, Tetranychus kanzawai

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

#### A. For Whole Plants

**PEO:** Level 2

Minimum Period: 1 year

#### a. Additional declarations

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

#### b. Conditions for *Phytophthora capsici*<sup>1</sup>

Note: Only applies to the following genus: Vanilla

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

"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*".

## c. Conditions for Phytophthora palmivora<sup>1</sup>

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

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

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

#### OR

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

#### OR

"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

<sup>1</sup> Implementation of measures: For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for <i>Phytophthora capsici</i>
and <i>P. palmivora</i> must be met.  For consignments with a phytosanitary certificate issued no later than 24 May 2018, the requirements for <i>Phytophthora capsici</i> and <i>P. palmivora</i> are not mandatory.

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

## **GENERAL CONDITIONS:**

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

**Quarantine Pests**: Phellinus noxius, Phytophthora ramorum, Tetranychus kanzawai;

## **Entry Conditions:**

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

#### A. For Whole Plants

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

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

# **B.** For Cuttings

PEQ: Level 2

**Minimum Period:** 3 months

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

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

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

#### C. For Tissue Cultures

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

**Note:** The entry conditions in 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	Tajkistan
	Bangladesh	Japan	North Korea	Thailand
	Bhutan	Jordan	Oman	Turkey
	Brunei	Kazakstan	Pakistan	Turkmenistan
	Cambodia	Kuwait	Philippines	<b>United Arab Emirates</b>
	China	Kyrgyzstan	Saudi Arabia	Uzbekistan
	Georgia	Lage	Singapore	Vietnam

Georgia Laos Singapore Vietnam
India Lebanon South Korea Yemen
Indonesia Malaysia Sri Lanka

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

**PEQ**: Level 3B

Minimum Period: 3 months

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

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

## **GENERAL CONDITIONS:**

**Approved Countries:** All

Quarantine Pests: Virus diseases; Xylella fastidiosa

#### **Entry Conditions:**

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

#### A. For Whole Plants

PEQ: Level 2

Minimum Period: 6 months

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

## B. For Dormant Bulbs from Australia and South Africa

#### **OPTION 1:**

No import permit is required.

PEQ: None

- a. Conditions for *Xylella fastidiosa* (see section 2.2.1.12) **Note:** Only nursery stock sourced from a country recognised by MPI as free from *Xylella fastidiosa* can be imported under this option.
- b. Additional declaration "In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests."

#### **OPTION 2:**

PEQ: Level 1

**Minimum Period: 3 months** 

a. Conditions for *Xylella fastidiosa* (see section 2.2.1.12) For countries recognised as free from Xylella fastidiosa only)

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

#### C. For Dormant Bulbs from Countries other than in B

#### **OPTION 1:**

**PEO:** Level 1

**Minimum Period:** 3 months

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

- b. Treatment; treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment, AND
- c. Additional declaration: "The dormant bulbs in this consignment have been "derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests."

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

**Minimum Period:** 3 months

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

## **D. For Tissue Cultures from All Countries**

- a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5) **Guidance for importers:** There will be a minimum quarantine period of <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. Additional Declaration: "The cultures have been derived from parent stock tested and found free of virus diseases."

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

## **GENERAL CONDITIONS:**

**Approved Countries**: All

**Quarantine Pests**: Papaya mosaic virus, Papaya ringspot virus, 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*<sup>1</sup>

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

"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*".

c. Conditions for *Phytophthora palmivora*<sup>1</sup>

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

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

#### OR

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

#### OR

"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**

# **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

#### <sup>1</sup>Implementation of measures:

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora capsici* and *P. palmivora* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora capsici* and *P. palmivora* are not mandatory.

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

## **GENERAL CONDITIONS:**

**Approved Countries**: All

Quarantine Pests: Phytophthora ramorum

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

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

PEQ: Level 2

Minimum Period: 3 months

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

#### **Additional Declaration:**

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

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

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

# **GENERAL CONDITIONS:**

Approved Countries: Australia, USA

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

fastidiosa

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

A. For Whole Plants

**PEO**: 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.	Addition	al declaration:	"Fusicladium	effusum	and :	Pecan	bunch	are no	t known	to	occur
	in	(the country or state v	where the plants were	e grown)		<b>'</b> .					

# **B.** For Tissue Cultures

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

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

## **GENERAL CONDITIONS:**

**Approved Countries:** All

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

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

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

# **OPTION 1: PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8) **Note:** Only applies to members of the *Carya and Ostrya genera*
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Note: Only applies to the members of the *Liriodendron* genus
   Guidance for importers: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- c. Additional declaration: "*Cryphonectria parasitica* is not known to occur in \_\_\_\_\_ (the country or state where the plants/cuttings were produced) \_\_\_\_\_\_".

#### **OPTION 2:**

**PEQ:** Level 3B

Minimum Period: 6 months

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

# **B.** For Tissue Cultures

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

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

## **GENERAL CONDITIONS:**

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

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

#### **Entry Conditions:**

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

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

PEQ: Level 3B

Minimum Period: 3 months

- a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Guidance for importers: The minimum quarantine period will be <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*: Additional declaration:
  - "Cryphonectria parasitica and Ceratocystis fagacearum are not known to occur in \_\_ (the country/ state where the plants were grown)\_\_\_\_",

# OR

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

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

PEO: 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*: Additional declaration:
  - "Cryphonectria parasitica and Ceratocystis fagacearum are not known to occur in
     \_\_ (the country/ state where the plants were grown) \_\_\_",

#### OR

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

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

## **GENERAL CONDITIONS:**

**Approved Countries:** All

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

Uredinales

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

A. For Whole Plants

**PEO**: Level 3B

**Minimum Period:** 6 months

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

Note: Only applies to the following species: Chamaecyparis formosensis; Cupressus lusitanica

## **B.** For Tissue Cultures

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

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

#### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Phytophthora tentaculata, Xylella fastidiosa

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

#### A. For Whole Plants or Cuttings

PEQ: Level 2

**Minimum Period:** 3 months

# a. Conditions for Phytophthora tentaculata<sup>1</sup>

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

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

#### OR

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

#### **OR**

"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

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

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

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

#### <sup>1</sup>Implementation of measures:

For consignments with a phytosanitary certificate issued <u>on or after 25 May 2018</u> the requirements for *Phytophthora tentaculata* <u>must</u> be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora tentaculata* are not mandatory.

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

## **GENERAL CONDITIONS:**

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

**Quarantine Pests**: *Phytophthora tentaculata, Potato spindle tuber 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 Coleosporium and Cronatium

Rust diseases of genus <i>Coleosp</i>	<i>orium</i> and	Cronartium are not known to occur on	
	in		"
(the host species being imported)	111	(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*<sup>1</sup>

**Note:** Only applies to the following genus: *Argyranthemum* 

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

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

#### OR

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

OR

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

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

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

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

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

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

#### **PLUS**

a. Conditions for Potato spindle tuber viroid

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

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

#### OR

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

#### OR

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

**Guidance for importers:** Tissue culture imported under this option must be imported into a <u>level 2 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 ACCEPTABLE METHODS	Comments	
Insects	Visual inspection <b>AND</b> approved	Applies to whole plants and	
	insecticide treatments as described in	cuttings only	
	section 2.2.1.6 of the Basic conditions		
Mites	Visual inspection <b>AND</b> approved	Applies to whole plants and	
	miticide treatments as described in the	cuttings only	
	section 2.2.1.6 of the Basic conditions		
Viroid			
Potato spindle tuber	PCR based methods	Applies to whole plants,	
viroid		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.

For consignments with a phytosanitary certificate issued <u>on or after 25 May 2018</u> the requirements for *Phytophthora tentaculata* <u>must</u> be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora tentaculata* are not mandatory.

<sup>&</sup>lt;sup>1</sup>Implementation of measures:

# Chrysanthemum morifolium

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

## **GENERAL CONDITIONS:**

**Approved Countries**: All

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

fastidiosa

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

#### A. For Whole Plants

PEQ: Level 2
Minimum Period: 3 months
Additional Declaration:

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

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  $\underline{6}$  months for nursery stock sourced from countries  $\underline{not}$  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

#### **Additional Declaration:**

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

a. 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*.

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

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

Cuttings (dormant); Plants in tissue culture

#### 2. Pests of Citrus

Refer to the pest list.

## 3. Entry conditions for:

## 3.1 Citrus cuttings from offshore MPI-accredited facilities (quarantine stations)

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

## (i) **Documentation**

# Import permit is required

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

# (ii) <u>Inspection, Testing and Treatments of the consignment</u>

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

#### (iii) Phytosanitary requirements

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

#### The *Citrus* cuttings have been:

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

#### **AND**

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

## AND

 held and tested for/classified free from specified regulated pests at a MPIaccredited facility

#### **AND**

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

## (iv) Additional declarations to the phytosanitary certificate

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

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

"The Citrus cuttings in this consignment have been:

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

#### **AND**

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

#### **AND**

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

#### AND

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

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

**PEQ**: Level 2. Plants must be held at 18-25°C throughout the quarantine period. **Quarantine Period**: This is the time required to complete inspections and/or indexing to detect regulated pathogens. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required. Indicative minimum quarantine periods are:

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

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

#### (i) Documentation

#### Import permit is required

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

#### (ii) Phytosanitary requirements

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

The Citrus cuttings have been:

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

## (iii) Additional declarations to the phytosanitary certificate

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

"The Citrus cuttings in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free

of any visually detectable regulated pests specified by MPI, and to conform with the current phytosanitary requirements of MPI."

# (iv) Inspection, Testing and Treatments of the consignment

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

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

## (v) Post-entry quarantine

**PEQ**: Level 3B

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

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

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

## (i) Documentation

## Import permit is required

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

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

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

## (iii) Inspection, Testing and Treatments of the consignment

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

## (iv) *Phytosanitary requirements*

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

The *Citrus* tissue culture have been:

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

#### **AND**

 held and tested for/classified free from specified regulated pests at a MPIaccredited facility

#### **AND**

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

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

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

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

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

#### **AND**

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

#### **AND**

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

#### (vi) Post-entry quarantine

**PEO**: Level 2

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

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

## (i) **Documentation**

## Import permit is required

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

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

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

#### (iii) *Phytosanitary requirements*

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

The *Citrus* tissue culture have been:

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

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

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

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

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

## (v) Inspection, Testing and Treatments of the consignment

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

## (vi) Post-entry quarantine

**PEO**: Level 3B

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

# Pest List for Citrus

## **REGULATED PESTS (actionable)**

Insect
Insecta
Coleoptera
Bostrichidae

Apate indistincta shot-hole borer
Apate terebrans shot-hole borer

Buprestidae

Agrilus alesiflatheaded citrus borerAgrilus auriventriscitrus flatheaded borer

Cerambycidae

Anoplophora malasiaca white-spotted longicorn beetle

Chelidonium gibbicolle

Dihammus vastator fig longhorn

Melanauster chinensis -

Paradisterna plumifera speckled longicorn

Promeces linearis

Skeletodes tetropslonghorn beetleStrongylurus thoracicuspittosporum longicornUracanthus cryptophaguscitrus branch borer

Chrysomelidae

Colasposoma fulgidum bluegreen citrus nibbler

Colasposoma scutellare

Geloptera porosapitted apple beetleLuperomorpha funestamulberry flea beetleMonolepta australisred-shouldered leaf beetle

Sebaethe fulvipennis flea beetle

Coccinellidae

Cheilomenes lunata [Animals Biosecurity] Chilocorus cacti [Animals Biosecurity] Chilocorus distigma [Animals Biosecurity] Chilocorus nigrita [Animals Biosecurity] Exochomus flavipes [Animals Biosecurity] Pentilia castanea [Animals Biosecurity] Rhyzobius lophanthae [Animals Biosecurity] Scymnus nanus [Animals Biosecurity] -

Serangium parcesetosum [Animals Biosecurity] Stethorus aethiops [Animals Biosecurity] Stethorus histrio [Animals Biosecurity] -

Stethorus punctata picipes [Animals Biosecurity]

Curculionidae

Amystax fasciatus [Animals Biosecurity] - Artipus sp. -

Brachycerus citriperda -

Callirhopalus bifasciatus two-banded Japanese weevil

Dereodus recticollis

Diaprepes abbreviatus citrus weevil

Diaprepes spp.

Eutinophaea bicristatacitrus leaf-eating weevilLeptopius squalidusfruit tree root weevilNaupactus xanthographusfruit tree weevilOtiorhynchus cribricolliscribrate weevil

Pachnaeus citri -

Pachnaeus litus citrus root weevil
Perperus lateralis white-striped weevil

Prepodes spp.

Protostrophus avidus weevil

Sciobius marshalli citrus snout beetle

Sympiezomias lewisi -

Lucanidae

Prosopocoilus spencei -

Scarabaeidae

Hypopholis indistinctascarab beetleMaladera matridascarab beetle

Scolytidae

Salagena sp. -

Xylosandrus germanus alnus ambrosia beetle

Diptera

Cecidomyiidae

Contarinia citri leafcurling midge
Contarinia okadai leafcurling midge
citrus flower gall midge

Trisopsis sp. -

Chamaemviidae

Leucopis alticeps [Animals Biosecurity] -

Drosophilidae

Drosophila paulistorum Drosophila pseudoobscura Drosophila simulans Drosophila willistoni -

Tephritidae

Dirioxa pornia island fruit fly

Hemiptera

Anthocoridae

Orius thripoborus [Animals Biosecurity] Thriphleps thripoborus [Animals Biosecurity] -

Coreidae

Acanthocoris striicornislarger squash bugAnoplocnemis curvipescoreid bugLeptoglossus membranaceuscoreid bugMictis profanacrusader bugParadasynus spinosussquash bugVeneza phyllopusleaf-footed bug

Lvgaeidae

Nysius vinitor Rutherglen bug

Miridae

Austropeplus sp. citrus blossom bug

Pentatomidae

Antestia variegata antestia bug

Antestiopsis orbitalis -

Antestiopsis variegata antestia bug
Biprorulus bibax spined citrus bug

Glaucias subpunctatus polished green stink bug
Halyomorpha mista brown-marmorated stink bug

Musgraveia sulciventrisbronze orange bugPlautia stalioriental stink bugRhynchocoris humeralispentatomid bug

Unknown Hemiptera

Holopterna vulga bug

Homoptera Aleyrodidae

Aleurocanthus citriperdus whitefly

Aleurocanthus spiniferus orange spiny whitefly

Aleurocanthus spp.whitefliesAleurocanthus woglumicitrus blackflyAleurodicus dispersusspiralling whiteflyAleurolobus marlattiMarlatt whitefly

Aleuroplatus sp. Aleurothrixus floccosus

Aleurotuba jelinekii

Aleurotuberculatus aucubae

Bemisia citricola Dialeurodes citri

Dialeurodes citrifolii Dialeurolonga sp.

Parabemisia myricae Siphoninus phillyreae

Aphididae Aphis fabae

Aulacorthum magnoliae

Cicadellidae

Asymmetrasca decedens

Circulifer opacipennis Circulifer tenellus Cuerna costalis

Edwardsiana flavescens Empoasca bodenheimeri

Empoasca citrusa Empoasca decipiens Empoasca distinguenda

Empoasca fabae Empoasca onukii Homalodisca coagulata Homalodisca lacerta Jacobiasca lybica Neoaliturus haematoceps

Penthimiola bella Scaphytopius nitridus

Cicadidae

Cryptotympana facialis Meimuna opalifera

Coccidae

Ceroplastes floridensis Ceroplastes japonicus Ceroplastes rubens Ceroplastes rusci Coccus celatus

Coccus pseudomagnoliarum

Coccus viridis

Cribrolecanium andersoni Gascardia brevicauda Protopulvinaria pyriformis Pulvinaria aethiopica Pulvinaria aurantii Pulvinaria cellulosa Saissetia citricola

Saissetia somereni

**Dactylopiidae** 

Dactylopius filamentosis Dactylopius vastator

Ischnaspis longirostris

Diaspididae

Aonidiella citrina Chrysomphalus aonidum Chrysomphalus bifasciculatus Chrysomphalus dictyospermi Chrysomphalus pinnulifera

whitefly woolly whitefly

aucuba whitefly

citrus whitefly

cloudywinged whitefly

Japanese bayberry whitefly

phillyrea whitefly

bean aphid

Japanese elder aphid

leafhopper

beet leafhopper leafhopper leafhopper

green citrus leafhopper green leafhopper

potato leafhopper tea green leafhopper glassy-winged sharpshooter

cotton jassid leafhopper citrus leafhopper leafhopper

black cicada elongate cicada

Florida wax scale pink wax scale red wax scale fig wax scale

citricola scale green scale white powdery scale

white waxy scale pyriform scale soft green scale citrus cottony scale pulvinaria scale citrus string cottony scale

yellow scale Florida red scale brown scale

dictyospermum scale false purple scale black thread scale

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

Encarsia opulenta [Animals Biosecurity] Encarsia smithi [Animals Biosecurity] Eretmocerus serius [Animals Biosecurity]

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

Trichogramma platneri [Animals Biosecurity]

Vespidae

Polistes spp. [Animals Biosecurity] paper wasps

Isoptera

Termitidae

Odontotermes lokanandi termite

Lepidoptera Arctiidae

Lemyra imparilis mulberry tiger moth

Blastobasidae

Holcocera iceryaeella -

Cosmopterigidae

Pyroderces rileyi pink scavenger caterpillar

Geometridae

Anacamptodes fragilariakoa haole looperAscotis selenaria reciprocariacitrus looperGymnoscelis rufifasciatageometrid moth

Hyposidra talaca -

Gracillariidae

Phyllocnistis citrella citrus leafminer

Hepialidae

Endoclita excrescens Japanese swift moth

Endoclita sinensis -

Lycaenidae

Virachola isocrates pomegranate butterfly

Lymantriidae

Orgyia vetusta western tussock moth

Metarbelidae

Indarbela tetraonis stem borer

Noctuidae

Arcte coerula fruit-piercing moth
Eudocima fullonia fruit-piercing moth

Helicoverpa assultacape gooseberry budwormHelicoverpa punctigeraoriental tobacco budwormTiracola plagiatabanana fruit caterpillar

Xylomyges curialis noctuid moth

Nymphalidae

Charaxes jasius nymphalid butterfly

Oecophoridae

Psorosticha melanocrepidacitrus leafrollerPsorosticha zizyphicitrus leafrollerStathmopoda auriferellaapple heliodinid

Papilionidae

Papilio aegeus aegeus -

Papilio anactus small citrus butterfly

Papilio cresphontes orange dog

Papilio dardanus cenea -

Papilio demodocus orange dog

Papilio demoleus demoleus Papilio helenus nicconicolens Papilio machaon asiatica -

Papilio memnon citrus swallowtail

Papilio memnon thunbergii Papilio nireus lyaeus Papilio polytes polytes Papilio protenor demetrius -

Papilio xuthuscitrus swallowtailPapilio zelicaonanise swallowtail

Psvchidae

Eumeta hardenbergi -

Eumeta japonica -

Eumeta minuscula tea bagworm

Eumeta moddermanni -

Hyalarcta huebneri leaf case moth

Pyralidae

Apomyelois ceratoniae date pyralid

Tortricidae

Adoxophyes sp. -

Amorbia cuneana leafroller

Archips argyrospilus fruit tree leafroller

Archips machlopisleafrollerArchips occidentalisleafrollerArchips rosanusrose leafrollerArgyrotaenia citranaorange tortrixCacoecimorpha pronubanacarnation leafroller

Cryptophlebia batrachopa -

Cryptophlebia leucotretafalse codling mothHomona magnanimaoriental tea tortrixIsotenes miseranaorange fruitborerPlatynota stultanaomnivorous leafroller

Tortrix capensana tortricid moth

Yponomeutidae

Prays citri citrus flower moth Prays parilis citrus flower moth

Neuroptera Chrysopidae

Chrysopa oculata [Animals Biosecurity] -

Conioptervgidae

Coniopteryx vicina [Animals Biosecurity] Conwentzia barretti [Animals Biosecurity] -

Orthoptera Acrididae

Zonocerus elegans elegant grasshopper

Gryllidae

Ornebius kanetataki cricket

Tettigoniidae

Caedicia sp. -

Holochlora japonicaJapanese broadwinged katydidMicrocentrum retinervesmaller angular-winged katydid

Scudderia furcata fork-tailed bush katydid

**Psocoptera** 

Archipsocidae

Archipsocus sp. bark louse

Thysanoptera Aeolothripidae

Franklinothrips vespiformis [Animals Biosecurity]

Thripidae

Chaetanaphothrips orchidiibanana rust thripsLeptothrips maliblack hunter thripsScirtothrips aurantiicitrus thripsScirtothrips citricitrus thrips

Scirtothrips dorsalis chilli thrips Scirtothrips mangiferae mango thrips

Scolothrips sexmaculatus [Animals Biosecurity] Taeniothrips kellyanus Taeniothrips sp. Thrips coloratus thrips
Thrips flavus flower thrips
Thrips palmi palm thrips

Unknown Insecta

#### Unknown Insecta

Cosmophyllum pallidulum

#### Mite

#### Arachnida

#### Acarina

## Acaridae

Thyreophagus entomophagus italicus [Animals

Biosecurity]

Anystidae

Anystis agilis [Animals Biosecurity]

Eriophyidae

Aculops pelekassi eriophyid mite
Tegolophus australis brown citrus mite

Phytoseiidae

Amblyseius addoensis [Animals Biosecurity] Amblyseius citri [Animals Biosecurity] Amblyseius swirskii [Animals Biosecurity] Euseius hibisci [Animals Biosecurity] Euseius scutalis [Animals Biosecurity] Euseius stipulatus [Animals Biosecurity] Euseius tularensis [Animals Biosecurity] -

Iphiseius degenerans [Animals Biosecurity] predatory mite

Typhlodromus athiasae [Animals Biosecurity]

Stigmaeidae

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

Tarsonemidae

Tarsonemus cryptocephalus [Animals Biosecurity]

Tenuipalpidae

Brevipalpus chilensisfalse spider miteBrevipalpus lewisibunch miteBrevipalpus obovatusprivet miteTenuipalpus emeticae [Animals Biosecurity]-

Tuckerella ornata -

Ultratenuipalpus gonianaensis tenuipalpid mite

Tetranychidae

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

Tuckerellidae

Tuckerella knorri hawthorn spider mite

#### **Spider**

# Arachnida

Araneae

Clubionidae

Cheiracanthium mildei [Animals Biosecurity]

Theridiidae

Theridion sp. [Animals Biosecurity]

# Mollusc

## Gastropoda

Stylommatophora Achatinidae Achatina immaculata Lissachatina immaculata snail Bradybaenidae Acusta despecta sieboldiana snail Subulinidae Rumina decollata snail Urocyclidae Urocyclus flavescens Urocyclus kirkii **Fungus** Ascomycota **Diaporthales** Valsaceae Diaporthe rudis (anamorph Phomopsis rudis) phomopsis canker **Dothideales** Elsinoaceae Elsinoe australis sweet orange scab Capnodiaceae Capnodium citri sooty mould Didymosphaeriaceae Didymosphaeria sp. **Microascales** Ceratocysticaceae Ceratocystis fimbriata Mycosphaerellaceae Guignardia citricarpa (anamorph Phyllosticta citrus black spot citricarpa) [black spot strain] Mycosphaerella citri (anamorph Stenella citri-grisea) rind blotch Mycosphaerella horii greasy spot **Patellariales** Patellariaceae Rhytidhysteron rufulum Saccharomycetales Saccharomycetaceae Debaryomyces hansenii Galactomyces citri-aurantii (anamorph Geotrichum sour rot citri-aurantii) **Basidiomycota: Agaricomycetes** Hymenochaetales Hymenochaetaceae Phellinus noxius brown root rot **Basidiomycota: Basidiomycetes Boletales** Coniophoraceae Coniophora eremophila brown wood rot **Basidiomycota: Teliomycetes** Septobasidiales Septobasidiaceae Septobasidium pseudopedicellatum felt fungus Mitosporic Fungi **Unknown Mitosporic Fungi** Unknown Mitosporic Fungi Sphaceloma fawcettii var. scabiosa Mitosporic Fungi (Coelomycetes) **Sphaeropsidales** Sphaerioidaceae

Macrophoma mantegazziana

Phoma erratica var. mikan ---

Phoma tracheiphilamal seccoPhomopsis sp.rotSeptoria spp.-

Sphaeropsis tumefaciens stem gall

**Unknown Coelomycetes** 

**Unknown Coelomycetes** 

Aschersonia placenta [Animals Biosecurity] --Gloeosporium foliicolum fruit rot

Mitosporic Fungi (Hyphomycetes)

Hyphomycetales Dematiaceae

Alternaria limicola Alternaria pellucida -Cercospora microsora --

Phaeoramularia angolensis cercospora spot

Stemphylium rosarium --

Ulocladium obovoideum ulocladium rot

**Unknown Hyphomycetes** 

**Unknown Hyphomycetes** 

Aureobasidium sp. Hirsutella thompsonii [Animals Biosecurity] -Isaria sp. [Animals Biosecurity] -

Oidium tingitaninum powdery mildew

Sporobolomyces roseus --Stenella sp. --

Oomycota: Oomycete Peronosporales Peronosporaceae

Phytophthora capsici fruit rot of peppers

Phytophthora palmivora black rot

**Zygomycota: Zygomycetes** 

Glomales Glomaceae

Glomus etunicatum [Animals Biosecurity] ---

Mucorales

Syncephalastraceae

Syncephalastrum racemosum --

**Bacterium** 

**Bacterium family unknown** 

Liberobacter africanumcitrus greening bacteriumLiberobacter asiaticumcitrus greening bacteriumLiberobacter sp.citrus greening bacterium

Spiroplasma citri citrus stubborn

Pseudomonadaceae

Burkholderia cepacia sour skin Xanthomonas axonopodis pv. citri citrus canker

Xanthomonas campestris pv. aurantifolii -

Xanthomonas campestris pv. citrumelo citrus bacterial spot Xylella fastidiosa Pierce's disease

Xylella fastidiosa pv. citri variegated chlorosis of citrus

Virus

Indian citrus mosaic badnavirus citrus cachexia viroid citrus chlorotic dwarf -

citrus infectious variegation ilarvirus [crinkly leaf

strain]

citrus infectious variegation ilarvirus

citrus leaf rugose ilarvirus citrus leathery leaf virus citrus leprosis rhabdovirus citrus mosaic virus citrus ringspot virus citrus tatter leaf capillovirus citrus tristeza closterovirus [strains not in New Zealand] citrus variable viroid citrus viroids (groups I-IV) citrus yellow mosaic badnavirus citrus yellow mottle virus dwarfing factor viroid navel orange infectious mottling virus satsuma dwarf nepovirus satsuma dwarf nepovirus [Natsudaidai dwarf strain] xyloporosis viroid yellow vein clearing of lemon

# Phytoplasma

Candidatus Phytoplasma aurantifolia witches' broom phytoplasma rubbery wood -

# Disease of unknown aetiology

# Inspection, Testing and Treatment Requirements for Citrus\*

ORGANISM TYPES	MPI ACCEPTABLE METHODS	
Insects	Visual inspection AND approved insecticide treatments (Refer to section 2.2.1.6 of	
	the basic conditions).	
Mites	Visual inspection AND approved miticide treatments (Refer to section 2.2.1.6 of the	
	basic conditions).	
Fungus	Country freedom OR growing season inspection for symptom expression.	
Oomycete	Growing season inspection for symptom expression.	
Bacterium		
Burkholderia cepacia	Growing season inspection for symptom expression.	
Liberobacter africanum	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.	
Liberobacter asiaticum	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.	
Spiroplasma citri	Country freedom/shoot tip grafting. Graft inoculated sweet orange, 27 to 32°C.	
	Bioassay = culture petiole new flush tissue. Collect tissue after several days at hot	
	temperature (> 30°C) and incubate cultures at 32°C.	
Xanthomonas	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR	
axonopodis pv. citri	suitable citrus indicator.	
Xanthomonas	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR	
campestris pv.	suitable citrus indicator.	
aurantifolii		
Xanthomonas	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR	
campestris pv. citrumelo	suitable citrus indicator.	
Xylella fastidiosa	Country freedom/shoot tip grafting bioassay/ PCR/ELISA OR suitable citrus	
	indicator.	
Xylella fastidiosa pv.	Country freedom/shoot tip grafting bioassay PCR/ELISA OR suitable citrus	
citri	indicator.	
Virus		
citrus chlorotic dwarf	Country freedom OR graft inoculated rough lemon at cool temperatures temperatures 18 to 25°C.	
citrus infectious	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow	
variegation ilarvirus	indicators at cool temperatures 18 to 25°C.	
citrus infectious	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow	
variegation ilarvirus	indicators at cool temperatures 18 to 25°C.	
[crinkly leaf strain]		
citrus leaf rugose	Country freedom OR graft inoculated Mexican lime or sour orange. Grow	
ilarvirus	indicators at cool temperatures 18 to 25°C.	
citrus leathery leaf virus	Country freedom OR Rangpur lime. Grow indicators at cool temperatures 18 to 25°C.	
citrus leprosis	Country freedom OR graft inoculated sweet orange. Grow indicators at cool	
rhabdovirus	temperatures 18 to 25°C.	
citrus mosaic virus	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures	
	18 to 25°C.	
citrus ringspot virus	Country freedom OR graft inoculated dweet tangor, sweet orange, mandarin	
	(Parson's Special). Grow indicators at cool temperatures 18 to 25°C.	
citrus tatter leaf	Country freedom OR graft inoculated Rusk citrange, rough lemon, Citrus excelsa,	
capillovirus	citrange (Troyer). Grow indicators at cool temperatures 18 to 25°C.	
citrus tristeza	Country freedom OR ELISA, graft inoculated Mexican lime, sour orange and Citrus	
closterovirus [strains not	excelsa. Grow indicators at cool temperatures 18 to 25°C.	
in New Zealand]	Country freedom OD greeft inequilated award arong a company of the control of the	
citrus yellow mosaic badnavirus	Country freedom OR graft inoculated sweet orange, sour orange and citron.	
citrus yellow mottle	Country freedom OR other suitable test.	
virus	Country rections of other suitable test.	
Indian citrus mosaic	Country freedom OR graft inoculated sweet orange at hot temperature 27 to 32°C.	
badnavirus	Country freedom of grant moculated sweet orange at not temperature 27 to 32 C.	
navel orange infectious	Country freedom OR graft inoculated Satsums. Grow indicators at cool	
mottling virus	temperatures 18 to 25°C.	
mouning virus	temperatures 10 to 20 °C.	

ORGANISM TYPES	MPI ACCEPTABLE METHODS		
satsuma dwarf	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures		
nepovirus	18 to 25°C.		
satsuma dwarf	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures		
nepovirus [Natsudaidai	18 to 25°C.		
dwarf strain]			
yellow vein clearing of	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators		
lemon	at cool temperatures 18 to 25°C.		
Viroid			
citrus cachexia viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow		
	citron at hot temperature 27 to 32°C.		
citrus variable viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow		
	citron at hot temperature 27 to 32°C.		
citrus viroids (groups I-	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow		
IV)	citron at hot temperature 27 to 32°C.		
dwarfing factor viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow		
	citron at hot temperature 27 to 32°C.		
xyloporosis viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract or		
7 1	mandarin (Parson's Special). Grow Citron at hot temperature 27 to 32°C.		
Disease of unknown aeti			
Australian citrus	Country freedom OR other suitable test		
dieback	·		
blind pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> .		
1	Grow indicators at cool temperatures 18 to 25°C.		
bud union disease	Country freedom OR other suitable test		
citrus blight disease	None (cuttings collected from blight free area). Inspect source tree after 2 years		
	before releasing from quarantine.		
citrus fatal yellows	Country freedom OR graft inoculated Citrus macrophylla.		
citrus impietratura	Country freedom OR graft inoculated dweet tangor or sweet orange. Growth		
disease	indicators at cool temperatures 18 to 25°C.		
citrus sunken vein	Country freedom OR other suitable test.		
disease	·		
concave gum	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa.		
	Grow indicators at cool temperatures 18 to 25°C.		
cristacortis	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa.		
	Grow indicators at cool temperatures 18 to 25°C.		
gum pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa.		
	Grow indicators at cool temperatures 18 to 25°C.		
Gummy bark	Country freedom OR SPAGE of graft inoculated citron extract. Grow citron at hot		
-	temperature 27 to 32°C.		
Kassala disease	Country freedom, cuttings collected from kassala free area.		
lemon sieve tube	Country freedom OR other suitable test.		
necrosis			
shell bark of lemons	Country freedom OR other suitable test.		
zonate chlorosis	Country freedom, cuttings collected from kassala free area.		
Phytoplasma			
Candidatus phytoplasma	Country freedom OR graft inoculated lime. Grow indicators at cool temperatures 18		
aurantifolia	to 25°C.		
rubbery wood	Country freedom OR graft inoculated sweet orange or lemon. Grow citron at hot		
,	temperature 27 to 32°C.		
	L.		

<sup>\*</sup> Country freedom is accepted as equivalence to a treatment.

## **Notes:**

- The unit for testing is defined in section 2.3.2.1.
   With prior notification, MPI will accept other internationally recognised testing methods.

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

# **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Virus diseases

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

A. For Whole Plants

**PEQ:** Level 2

**Minimum Period:** 6 months

## **B. For Tissue Cultures**

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

**PLUS** 

# **Additional Declaration:**

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

# Convallaria

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

# **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Pratylenchus convallariae

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

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

# **Additional Declaration:**

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

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

# **GENERAL CONDITIONS:**

**Approved Countries**: All

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

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

A. For Whole Plants

**PEQ**: Level 3B

**Minimum Period**: 3 months

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

**B.** For Tissue Cultures

**PEQ**: Level 3B

**Minimum Period**: 3 months

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

# **GENERAL CONDITIONS:**

**Approved Countries**: All

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

# **Entry Conditions:**

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

# A. For Cuttings and Whole Plants

PEQ: Level 2

Minimum Period: 3 months

- a. Conditions for *Phytophthora ramorum* (see section 2.2.1.11)
- b. Conditions for *Xylella fastidiosa* (see section 2.2.1.12) **Guidance for importers**: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries not recognised by MPI as free from Xylella fastidiosa
- c. Conditions for *Gymnosporangium* rusts, additional declaration:
  - "Gymnosporangium spp. are not known to occur on \_\_(name of plant species) \_\_ in \_\_(the country or state where the plants were produced)\_\_ ".

#### OR

- "The plants were from a crop inspected during the growing season and no rust diseases were detected".
- d. Additional declaration: "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water, prior to export".

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

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

# **GENERAL CONDITIONS:**

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

Gymnosporangium clavipes, Gymnosporangium globosum; Phellinus **Ouarantine Pests**:

noxius, Phytophthora capsici

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

## A. For Whole Plants

## **OPTION 1**

**PEO:** Level 2

**Minimum Period**: 6 months

Additional declarations

"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**

"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*<sup>1</sup>

Note: Only applies to members of the Crataegus genus

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

"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".

# **OPTION 2**

**PEQ:** Level 3B

**Minimum Period:** 3 months

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

# **B.** For Tissue Cultures

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

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora capsici* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora capsici* are not mandatory.

<sup>&</sup>lt;sup>1</sup>Implementation of measures:

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

# **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Frankliniella occidentalis; virus diseases

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

A. For Whole Plants

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, USA:

#### **OPTION 1:**

No import permit is required.

PEQ: None

# **Additional Declaration(s):**

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

# **OPTION 2: PEQ:** Level 1

**Minimum Period:** 3 months

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

# **OPTION 1:**

**PEQ:** Level 1

**Minimum Period:** 3 months **Additional Declaration(s):** 

"The dormant bulbs in this consignment have been:

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

# **AND**

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

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

**Minimum Period:** 3 months

# **D.** For Tissue Cultures

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

# **PLUS:**

# **Additional Declaration:**

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

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

# **GENERAL CONDITIONS:**

**Approved Countries:** All

Quarantine Pests: Frankliniella occidentalis; virus diseases

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

A. For Whole Plants

PEQ: Level 2

Minimum Period: 6 months

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

#### **OPTION 1:**

No import permit is required.

PEQ: None

**Additional Declaration(s):** 

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

"In addition to inspection of the dormant bulbs prior to shipment, the imported bulbs meet the requirements of the BKD Class 1 bulb certification scheme."

OR

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

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

**OPTION 2: 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, USA:

# **OPTION 1: PEQ:** Level 1

Minimum Period: 3 months Additional Declaration(s):

"The dormant bulbs in this consignment have been:

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

#### **AND**

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

# **OPTION 2:**

**PEQ:** Level 2

Minimum Period: 3 months

#### **D. For Tissue Cultures**

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

### **PLUS:**

#### **Additional Declaration:**

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

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

# **GENERAL CONDITIONS:**

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

Quarantine Pests: Aulacaspis yasumatsui, Demyrsus meleoides, Phellinus noxius

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

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

**PEO:** Level 2

**Minimum Period:** 6 months

**Inspection Requirements:** A minimum of 600 plants are to be inspected during each

inspection in post-entry quarantine

**Additional Declaration:** 

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

# **B.** For Tissue Cultures

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

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

# **GENERAL CONDITIONS:**

**Approved Countries**: All

**Quarantine Pests**: Phymatotrichopsis omnivore, Phytophthora capsici, Potato spindle tuber viroid, Tetranychus kanzawai, Uredinales

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

#### A. For Whole Plants

PEQ: Level 2

**Minimum Period**: 3 months

a. 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*<sup>1</sup>

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

"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*".

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 a MPI-approved Dutch bulb propagation scheme

## a. Additional Declarations

"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 capsici1

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

"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*".

# 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 a 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*<sup>1</sup>

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

"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*".

# 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 capsici1

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

"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*".

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 USA

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 omnivore* 

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

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

# OR

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

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

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

#### **AND**

- Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine
- c. Conditions for *Phytophthora capsici*<sup>1</sup>

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

"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*".

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".

#### 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 *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, USA:

**PEO:** Level 1 or Level 2 (see below)

Minimum Period: 3 months

- a. Additional Declarations
  - "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 omnivore*

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

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

#### OR

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

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

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

#### **AND**

- Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine
- c. Conditions for Phytophthora capsici<sup>1</sup>

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

"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*".

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:

# **Additional Declaration:**

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

# Inspection, Testing and Treatment Requirements for Dahlia

ORGANISM	MPI ACCEPTABLE METHODS	Comments
Insects	Visual inspection <b>AND</b> approved	Applies to whole plants and
	insecticide treatments as described in	cuttings only
	section 2.2.1.6 of the Basic conditions	
Mites	Visual inspection <b>AND</b> approved	Applies to whole plants and
	miticide treatments as described in the	cuttings only
	section 2.2.1.6 of the Basic conditions	
Viroid		
Potato spindle tuber	PCR based methods	Applies to whole plants,
viroid		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.

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora capsici* must be met

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora capsici* are not mandatory.

<sup>&</sup>quot;The cultures have been derived from parent stock tested and found free of virus diseases."

<sup>&</sup>lt;sup>1</sup>Implementation of measures:

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

# **GENERAL CONDITIONS:**

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

**Quarantine Pests**: Ceratocystis fimbriata, Phellinus noxius, Phytophthora capsici, Phytophthora palmivora, Phytophthora tentaculata, Xylella fastidiosa, 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 *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  $Phytophthora\ capsici^1$

Note: Only applies to the following genus: Carolinianum

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

"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*".

d. Conditions for *Phytophthora palmivora*<sup>1</sup>

Note: Only applies to the following genus: Erythrina

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

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

# OR

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

# OR

"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*<sup>1</sup>

Note: Only applies to the following genera: Delphinium and Salvia

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

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

#### OR

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

#### OR

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

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

**Note:** Only applies to the members of the *Convolvulus, Crepis, Erigeron, Euryops, Geranium, Phyllanthus, Salvia* and *Senecio* genera

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

## g. Additional declaration

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

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

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

**Note:** Only applies to the members of the *Convolvulus*, *Crepis*, *Erigeron*, *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*.

#### <sup>1</sup>Implementation of measures:

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora capsici*, *P. palmivora* and *P. tentaculata* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora capsici*, *P. palmivora* and *P. tentaculata* are not mandatory.

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

# **GENERAL CONDITIONS:**

**Approved Countries**: All

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

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

#### A. For Whole Plants

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

## a. Additional declaration

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

#### **AND**

"The plants were inspected during the growing season and no rust diseases were found"

b. Conditions for *Phytophthora capsici*<sup>1</sup>

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

"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*".

c. Conditions for Phytophthora palmivora<sup>1</sup>

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

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

#### OR

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

## OR

"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.		
<sup>1</sup> Implementation of measures:		
For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for <i>Phytophthora capsici</i> and <i>Phytophthora palmivora</i> must be met.		
For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u> , the requirements for <i>Phytophthora capsici</i> and <i>Phytophthora palmivora</i> are not mandatory.		

# Dianthus caryophyllus

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

# **GENERAL CONDITIONS:**

**Approved Countries**: All

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

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

#### A. For Whole Plants

**OPTION 1: PEO:** Level 2

Minimum Period: 3 months

a. Additional declaration

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

b. Conditions for Phytophthora capsici1

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

"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*".

d. Conditions for Phytophthora palmivora<sup>1</sup>

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

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

#### OR

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

## OR

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

# **OPTION 2: (For Netherlands only)**

**PEQ:** Level 2

## Minimum Period: 4 weeks

## a. Additional declaration

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

## **AND**

"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."

# b. Conditions for Phytophthora capsici1

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

"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*".

# c. Conditions for Phytophthora palmivora<sup>1</sup>

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

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

#### OR

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

#### **OR**

"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.

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora capsici* and *Phytophthora palmivora* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora capsici* and *Phytophthora palmivora* are not mandatory.

<sup>&</sup>lt;sup>1</sup>Implementation of measures:

**Note:** The entry conditions in 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<sup>1</sup>

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

## A. For Whole Plants and Cuttings

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

a. Conditions for Potato spindle tuber viroid

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

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

#### OR

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

#### OR

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

## **B.** For Tissue Cultures

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

# **PLUS**

a. Conditions for Potato spindle tuber viroid

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

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

#### OR

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

#### ΛR

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

<sup>&</sup>lt;sup>1</sup> Requirements for *Potato spindle tuber viroid* will commence on 1 September 2014: All phytosanitary certificates issued on or after 1 September 2014 must be endorsed with the correct additional declarations for *Potato spindle tuber viroid*.

**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 ACCEPTABLE METHODS	Comments
Insects	Visual inspection <b>AND</b> approved	Applies to whole plants and
	insecticide treatments as described in	cuttings only
	section 2.2.1.6 of the Basic conditions	
Mites	Visual inspection <b>AND</b> approved	Applies to whole plants and
	miticide treatments as described in the	cuttings only
	section 2.2.1.6 of the Basic conditions	
Viroid		
Potato spindle tuber	PCR based methods	Applies to whole plants,
viroid		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

**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:

**OPTION 1:** 

No import permit is required.

PEQ: None

# **Additional Declaration(s):**

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

**OPTION 2: PEQ:** Level 1

Minimum Period: 3 months

#### C. For Dormant Bulbs from the USA

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

**PEQ:** None or Level 2 (see below)

# **Additional Declaration(s):**

- 1. "In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests".
- **2.** "The dormant tubers have been sourced from a "Pest free area", free from *Phymatotrichopsis omnivora*".

#### OR

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

## AND

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

## AND

- (iii) Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine.
- D. For Dormant Bulbs from Countries <u>other than</u> Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA

**PEQ:** Level 1 or Level 2 (see below)

**Minimum Period:** 3 months **Additional Declaration(s):** 

- 1. "The dormant bulbs in this consignment have been:
- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

# AND

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."
- **2.** "The dormant tubers have been sourced from a "Pest free area", free from *Phymatotrichopsis omnivora*".

#### OR

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

#### **AND**

- (ii) the consignment must be treated for fungi as described in Section 2.2.1.7 "Pesticide treatments for dormant bulbs". If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section of the phytosanitary certificate. AND
- (iii) Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine.

# E. For Tissue Cultures

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

# **PLUS**

#### **Additional Declaration:**

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

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

# **GENERAL CONDITIONS:**

**Approved Countries**: All

**Quarantine Pests**: Cephalosporium diospyri, Phellinus noxius, Phytophthora capsici,

Xylella fastidiosa

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

#### A. For Whole Plants

PEQ: Level 3B

**Minimum Period**: 3 months

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

- b. Conditions for *Phellinus noxius* (section 2.2.1.13)
- c. Conditions for *Phytophthora capsici*<sup>1</sup>

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

"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*".

# **B.** For Tissue Cultures

**PEO**: 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* 

## <sup>1</sup>Implementation of measures:

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora capsici* must be met.

For consignments with a phytosanitary certificate issued no later than 24 May 2018, the requirements for *Phytophthora capsici* are not mandatory.

**Note:** The entry conditions in 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 truncatus and Xyleborus saxeseni)

**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:

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

## AND

- sourced from a "Pest free area" or "Pest free place of production" [choose one], free from *Chrysomphalus aonidum*
- or
- inspected in accordance with appropriate official procedures and found to be free of *Chrysomphalus aonidum*."
- b. Conditions for *Phytophthora palmivora*<sup>1</sup>

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

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

#### OR

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

#### OR

"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, 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**

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

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora palmivora* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora palmivora* are not mandatory.

<sup>&</sup>lt;sup>1</sup>Implementation of measures:

**Note:** The entry conditions in 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*<sup>1</sup>

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*<sup>1</sup>

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

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

#### OR

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

#### OR

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

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

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

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

OR

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

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

## **B.** For Tissue Cultures

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

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, Cuttings or Tissue cultures imported into a level 3A PEQ facility

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

**PEQ:** Level 3A

**Minimum Period:** 3 months

a. Conditions for *Phytophthora capsici* 

Note: Only applies to the following genera: Epipremnum

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<sup>1</sup>

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

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

## OR

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

#### OR

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

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

Inspection, Testing and Treatment Requirements for Epipremnum

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ORGANISM	MPI ACCEPTABLE METHODS	Comments
Insects	Visual inspection <b>AND</b> approved	Applies to whole plants and
	insecticide treatments as described in	cuttings only
	section 2.2.1.6 of the Basic conditions	
Mites	Visual inspection <b>AND</b> approved	Applies to whole plants and
	miticide treatments as described in the	cuttings only
	section 2.2.1.6 of the Basic conditions	
Bacterium		
Ralstonia	Growing season inspection in PEQ for	Applies to <i>Epipremnum</i>
pseudosolanacearum	symptom expression AND plating on	whole plants, cuttings, and
	selective media OR PCR	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, USA.

**Quarantine Pests**: Ceratocystis fimbriata, Phellinus noxius; Pseudomonas syringae pv.

eriobotryae

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

## A. For Whole Plants

**PEO**: Level 2

**Minimum Period**: 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)

Note: Only applies to the following species: Eriobotrya japonica

c. Additional declaration:

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

## OR

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

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

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

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

## **GENERAL CONDITIONS:**

**Approved Countries:** All

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

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

#### A. For Whole Plants

PEQ: Level 3B

Minimum Period: 6 months

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

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

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

#### **OPTION 1:**

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

#### OR

- "The tissue cultures in this consignment have been actively growing in the culture container for at least four weeks at temperatures between 15-23°C (59-73.4°F)".
- ii) The tissue cultures are subject to examination at a MPI-registered laboratory at the importers expense, prior to release to the importer.

## **OPTION 2:**

**PEQ**: Level 2 Tissue culture laboratory

Minimum Period: 4 weeks

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

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

## **GENERAL CONDITIONS:**

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

**Quarantine Pests:** *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:**

**PEO**: 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*<sup>1</sup>

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

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

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

#### OR

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

#### OR

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

d. Additional declaration for *Puccinia psidii* s.l. complex

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

#### **OPTION 2:**

**PEO**: Level 3B

**Minimum Period**: 6 months

- a. Conditions for *Xylella fastidiosa* (see section 2.2.1.12)
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)

**Note**: Only applies to the following species: Syzygium samarangense

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

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

**Guidance for importers**: There will be a minimum quarantine period of <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*.

**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:**

**PEO**: Level 2 Tissue culture laboratory

Minimum Period: 4 weeks

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

#### <sup>1</sup>Implementation of measures:

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora palmivora* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora palmivora* are not mandatory.

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

## **GENERAL CONDITIONS:**

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

**Quarantine Pests**: Uredinales; *Xylella fastidiosa* 

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

#### A. For Whole Plants

PEQ: Level 2

**Minimum Period**: 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*
- b. Additional declaration: "Rust diseases of genus *Coleosporium* and *Cronatium* are not known to occur on \_\_(the host species being imported) \_\_ in \_\_(the country in which the plants were grown)\_\_".

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

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

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

## **GENERAL CONDITIONS:**

**Approved Countries**: Japan

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

alliariae; Septoria wasabiae

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

## A. For Nursery Stock excluding Tissue Cultures

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

#### **Additional Declaration:**

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

## **Special Condition:**

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

## **B.** For Tissue cultures

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

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

## **GENERAL CONDITIONS:**

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

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

#### **Entry Conditions:**

**Basic:** with variations and additional conditions as specified below:

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

## **OPTION 1:**

**PEO:** Level 2

Minimum Period: 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8) **Note:** Only applies to members of the *Fagus* genus
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- c. Conditions for *Xylella fastidiosa* (section 2.2.1.12) **Note:** Only applies to the members of the *Fagus* genus
- d. Additional declaration: "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water."

#### **OPTION 2:**

**PEQ:** Level 3B

**Minimum Period:** 6 months

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

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

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

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

**Guidance for importers**: There will be a minimum quarantine period of <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:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Fagus sylvatica*", and are additional to those specified in sections 1,2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

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

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

## **Entry Conditions:**

Basic; with variations and additional conditions as specified below:

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

## **OPTION 1:**

PEQ: Level 2

**Minimum Period:** 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8) **Note:** Only applies to members of the *Fagus* genus
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
- d. Additional declaration for Cryphonectria parasitica:
  - "Cryphonectria parasitica is not known to occur in \_\_\_ (the country or state where the plants/cuttings were grown) \_\_\_".

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

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

#### OR, for young plants:

- "The plants were inspected during the previous growing season and no *Cryphonectria* parasitica was detected".
- e. Additional declaration: "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water."

## **OPTION 2:**

**PEO:** Level 3B

**Minimum Period:** 6 months

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

## **B.** For Tissue Cultures

- a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5) **Guidance for importers**: There will be a minimum quarantine period of <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 MPI-registered laboratory at the importers expense, prior to release to the importer.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *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*<sup>1</sup>

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

"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*".

d. Conditions for Phytophthora palmivora<sup>1</sup>

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

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

#### OR

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

#### OR

"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. Additional declaration:
  - "Uredo ficina is not known to occur in \_\_(the country or state where the plants were grown)\_\_".
     OR
  - "The *Ficus* spp. has been sourced from a pest free place of production, free from *Uredo ficina*"

## **B.** For Tissue Cultures

PEQ: Level 2

Minimum Period: 3 months

- a. Conditions for *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. Additional declaration:
  - "Uredo ficina is not known to occur in \_\_(the country or state where the plants were grown)\_\_". OR
  - "The Ficus spp. has been sourced from a pest free place of production, free from Uredo ficina"

## C. For Whole Plants, Cuttings or 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* 

PEQ: Level 3A

**Minimum Period**: 3 months

## a. 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

#### <sup>1</sup>Implementation of measures:

For consignments with a phytosanitary certificate issued <u>on or after 25 May 2018</u> the requirements for *Phytophthora capsici* and *P. palmivora* <u>must</u> be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora capsici* and *P. palmivora* are not mandatory.

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

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

Cuttings (dormant); Plants in tissue culture

#### 2. Pests of Fortunella

Refer to the pest list.

## 3. Entry conditions for:

## 3.1 Fortunella cuttings from offshore MPI-accredited facilities (quarantine stations)

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

#### (i) Documentation

## Import permit is required

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

## (ii) Inspection, Testing and Treatments of the consignment

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

#### (iii) Phytosanitary requirements

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

#### The *Fortunella* cuttings have been:

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

## AND

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

## **AND**

held and tested for/classified free from specified regulated pests at a MPIaccredited facility

#### **AND**

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

## (iv) Additional declarations to the phytosanitary certificate

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

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

"The Fortunella cuttings in this consignment have been:

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

#### **AND**

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

#### **AND**

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

#### **AND**

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

## (v) Post-entry quarantine

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

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

Indicative minimum quarantine periods are:

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

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

## (i) Documentation

## Import permit is required

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

## (ii) *Phytosanitary requirements*

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

The Fortunella cuttings have been:

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

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

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

"The Fortunella cuttings in this consignment have been:

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

## (iv) Inspection, Testing and Treatments of the consignment

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

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

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

**PEQ**: Level 3B

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

## 3.3 Fortunella plants in tissue culture from offshore MPI-accredited facilities

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

## (i) Documentation

## Import permit is required

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

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

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

## (iii) Inspection, Testing and Treatments of the consignment

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

## (iv) Phytosanitary requirements

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

The Fortunella tissue culture have been:

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

#### **AND**

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

#### **AND**

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

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

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

"The Fortunella tissue culture in this consignment have been:

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

#### **AND**

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

#### **AND**

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

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

**PEO**: Level 2

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

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

## (i) <u>Documentation</u>

## Import permit is required

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

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

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

#### (iii) *Phytosanitary requirements*

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

The *Fortunella* tissue culture have been:

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

## (iv) Additional declarations to the phytosanitary certificate

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

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

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

## (v) Inspection, Testing and Treatments of the consignment

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

## (vi) Post-entry quarantine

**PEQ**: Level 3B

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

## Pest List for Fortunella

## **REGULATED PESTS (actionable)**

Insecta Insecta

Coleoptera

Bostrichidae

Apate indistinctashot-hole borerApate terebransshot-hole borer

Buprestidae

Agrilus alesiflatheaded citrus borerAgrilus auriventriscitrus flatheaded borer

Cerambycidae

Anoplophora malasiaca white-spotted longicorn beetle

Chelidonium gibbicolle -

Dihammus vastator fig longhorn

Melanauster chinensis

Paradisterna plumifera speckled longicorn

Promeces linearis

Skeletodes tetrops longhorn beetle
Strongylurus thoracicus pittosporum longicorn
Uracanthus cryptophagus citrus branch borer

Chrysomelidae

Colasposoma fulgidum bluegreen citrus nibbler

Colasposoma scutellare

Geloptera porosapitted apple beetleLuperomorpha funestamulberry flea beetleMonolepta australisred-shouldered leaf beetle

Sebaethe fulvipennis flea beetle

Coccinellidae

Cheilomenes lunata [Animals Biosecurity] Chilocorus cacti [Animals Biosecurity] Chilocorus distigma [Animals Biosecurity] Chilocorus nigrita [Animals Biosecurity] Exochomus flavipes [Animals Biosecurity] Pentilia castanea [Animals Biosecurity] Rhyzobius lophanthae [Animals Biosecurity] Scymnus nanus [Animals Biosecurity] Serangium parcesetosum [Animals Biosecurity] -

Stethorus aethiops [Animals Biosecurity] Stethorus histrio [Animals Biosecurity] Stethorus punctata picipes [Animals Biosecurity] -

Curculionidae

Amystax fasciatus [Animals Biosecurity] - Artipus sp. -

Brachycerus citriperda -

Callirhopalus bifasciatus two-banded Japanese weevil

Dereodus recticollis

Diaprepes abbreviatus citrus weevil

Diaprepes spp.

Eutinophaea bicristatacitrus leaf-eating weevilLeptopius squalidusfruit tree root weevilNaupactus xanthographusfruit tree weevilOtiorhynchus cribricolliscribrate weevil

Pachnaeus citri -

Pachnaeus litus citrus root weevil
Perperus lateralis white-striped weevil

Prepodes spp. -

Protostrophus avidus weevil

Sciobius marshalli citrus snout beetle

Sympiezomias lewisi -

Lucanidae

Prosopocoilus spencei -

Scarabaeidae

Hypopholis indistinctascarab beetleMaladera matridascarab beetle

Scolytidae

Salagena sp. -

Xylosandrus germanus alnus ambrosia beetle

Diptera

Cecidomyiidae

Contarinia citri leafcurling midge
Contarinia okadai leafcurling midge
citrus flower gall midge

Trisopsis sp. -

Chamaemyiidae

Leucopis alticeps [Animals Biosecurity] -

Drosophilidae

Drosophila paulistorum Drosophila pseudoobscura Drosophila simulans Drosophila willistoni -

Tephritidae

Dirioxa pornia island fruit fly

Hemiptera

Anthocoridae

Orius thripoborus [Animals Biosecurity] Thriphleps thripoborus [Animals Biosecurity] -

Coreidae

Acanthocoris striicornislarger squash bugAnoplocnemis curvipescoreid bugLeptoglossus membranaceuscoreid bugMictis profanacrusader bugParadasynus spinosussquash bugVeneza phyllopusleaf-footed bug

Lygaeidae

Nysius vinitor Rutherglen bug

Miridae

Austropeplus sp. citrus blossom bug

Pentatomidae

Antestia variegata antestia bug

Antestiopsis orbitalis -

Antestiopsis variegataantestia bugBiprorulus bibaxspined citrus bugGlaucias subpunctatuspolished green stink bugHalyomorpha mistabrown-marmorated stink bug

Musgraveia sulciventrisbronze orange bugPlautia stalioriental stink bugRhynchocoris humeralispentatomid bug

Rhynchocoris humeralis Unknown Hemiptera

Holopterna vulga bug

Homoptera Aleyrodidae

Aleurocanthus citriperdus whitefly

Aleurocanthus spiniferus orange spiny whitefly

Aleurocanthus spp.whitefliesAleurocanthus woglumicitrus blackflyAleurodicus dispersusspiralling whiteflyAleurolobus marlattiMarlatt whitefly

Aleuroplatus sp. whitefly
Aleurothrixus floccosus woolly whitefly

Aleurotuba jelinekii

Aleurotuberculatus aucubae aucuba whitefly

Bemisia citricola

Dialeurodes citri citrus whitefly

Dialeurodes citrifolii cloudywinged whitefly
Dialeurolonga sp. -

Parabemisia myricae
Japanese bayberry whitefly
Siphoninus phillyreae
phillyrea whitefly

Siphoninus phillyreae
Aphididae

Aphis fabae bean aphid
Aulacorthum magnoliae Japanese elder aphid

Cicadellidae

Asymmetrasca decedens leafhopper

Circulifer opacipennis

Circulifer tenellusbeet leafhopperCuerna costalisleafhopperEdwardsiana flavescensleafhopper

Empoasca bodenheimeri - green citrus leafhopper

Empoasca decipiens green leafhopper

Empoasca distinguenda-Empoasca fabaepotato leafhopperEmpoasca onukiitea green leafhopperHomalodisca coagulataglassy-winged sharpshooter

Homalodisca lacerta - cotton jassid
Neoaliturus haematoceps leafhopper

Penthimiola bella citrus leafhopper Scaphytopius nitridus leafhopper

Cicadidae

Cryptotympana facialis black cicada
Meimuna opalifera elongate cicada

Coccidae

Ceroplastes floridensisFlorida wax scaleCeroplastes japonicuspink wax scaleCeroplastes rubensred wax scaleCeroplastes ruscifig wax scale

Coccus celatus -

Coccus pseudomagnoliarum citricola scale Coccus viridis green scale

Cribrolecanium andersoniwhite powdery scaleGascardia brevicaudawhite waxy scaleProtopulvinaria pyriformispyriform scalePulvinaria aethiopicasoft green scalePulvinaria aurantiicitrus cottony scalePulvinaria cellulosapulvinaria scale

Saissetia citricola citrus string cottony scale

Saissetia somereni

**Dactylopiidae** 

Dactylopius filamentosis Dactylopius vastator -

Diaspididae

Aonidiella citrina yellow scale
Chrysomphalus aonidum Florida red scale
Chrysomphalus bifasciculatus brown scale

Chrysomphalus dictyospermi dictyospermum scale
Chrysomphalus pinnulifera false purple scale
Ischnaspis longirostris black thread scale

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

Encarsia opulenta [Animals Biosecurity]
Encarsia smithi [Animals Biosecurity]
Eretmocerus serius [Animals Biosecurity]

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

Trichogramma platneri [Animals Biosecurity]

Vespidae

Polistes spp. [Animals Biosecurity] paper wasps

Isoptera

Termitidae

Odontotermes lokanandi termite

Lepidoptera Arctiidae

Lemyra imparilis mulberry tiger moth

Blastobasidae

Holcocera iceryaeella -

Cosmopterigidae

Pyroderces rileyi pink scavenger caterpillar

Geometridae

Anacamptodes fragilariakoa haole looperAscotis selenaria reciprocariacitrus looperGymnoscelis rufifasciatageometrid moth

Hyposidra talaca -

Gracillariidae

Phyllocnistis citrella citrus leafminer

Hepialidae

Endoclita excrescens Japanese swift moth

Endoclita sinensis -

Lycaenidae

Virachola isocrates pomegranate butterfly

Lymantriidae

Orgyia vetusta western tussock moth

Metarbelidae

Indarbela tetraonis stem borer

Noctuidae

Arcte coerulafruit-piercing mothEudocima fulloniafruit-piercing moth

Helicoverpa assultacape gooseberry budwormHelicoverpa punctigeraoriental tobacco budwormTiracola plagiatabanana fruit caterpillar

Xylomyges curialis noctuid moth

Nymphalidae

Charaxes jasius nymphalid butterfly

Oecophoridae

Psorosticha melanocrepidacitrus leafrollerPsorosticha zizyphicitrus leafrollerStathmopoda auriferellaapple heliodinid

Papilionidae

Papilio aegeus aegeus -

Papilio anactus small citrus butterfly

Papilio cresphontes orange dog

Papilio dardanus cenea -

Papilio demodocus orange dog

Papilio demoleus demoleus Papilio helenus nicconicolens Papilio machaon asiatica -

Papilio memnon citrus swallowtail

Papilio memnon thunbergii Papilio nireus lyaeus Papilio polytes polytes Papilio protenor demetrius -

Papilio xuthuscitrus swallowtailPapilio zelicaonanise swallowtail

Psvchidae

Eumeta hardenbergi -

Eumeta japonica

Eumeta minuscula tea bagworm

Eumeta moddermanni

leaf case moth Hyalarcta huebneri

Pvralidae

Apomyelois ceratoniae date pyralid

Tortricidae

Adoxophyes sp.

Amorbia cuneana leafroller

Archips argyrospilus fruit tree leafroller

Archips machlopis leafroller Archips occidentalis leafroller Archips rosanus rose leafroller Argyrotaenia citrana orange tortrix Cacoecimorpha pronubana carnation leafroller

Cryptophlebia batrachopa

Cryptophlebia leucotreta false codling moth Homona magnanima oriental tea tortrix Isotenes miserana orange fruitborer Platynota stultana omnivorous leafroller

tortricid moth Tortrix capensana

**Yponomeutidae** 

Prays citri citrus flower moth Prays parilis citrus flower moth

Neuroptera

Chrysopidae

Chrysopa oculata [Animals Biosecurity]

Coniopterygidae

Coniopteryx vicina [Animals Biosecurity] Conwentzia barretti [Animals Biosecurity]

**Orthoptera** Acrididae

> Zonocerus elegans elegant grasshopper

Gryllidae

Ornebius kanetataki cricket

Tettigoniidae

Caedicia sp.

Holochlora japonica Japanese broadwinged katydid Microcentrum retinerve smaller angular-winged katydid

fork-tailed bush katydid Scudderia furcata

**Psocoptera** 

Archipsocidae

Archipsocus sp. bark louse

**Thysanoptera** Aeolothripidae

Franklinothrips vespiformis [Animals Biosecurity]

**Thripidae** 

Chaetanaphothrips orchidii banana rust thrips Leptothrips mali black hunter thrips Scirtothrips aurantii citrus thrips Scirtothrips citri citrus thrips Scirtothrips dorsalis chilli thrips Scirtothrips mangiferae mango thrips

Scolothrips sexmaculatus [Animals Biosecurity]

Taeniothrips kellyanus Taeniothrips sp. Thrips coloratus thrips Thrips flavus flower thrips Thrips palmi palm thrips

Unknown Insecta

#### Unknown Insecta

Cosmophyllum pallidulum

#### Mite

#### Arachnida

#### Acarina

#### Acaridae

Thyreophagus entomophagus italicus [Animals

Biosecurity]

Anystidae

Anystis agilis [Animals Biosecurity]

Eriophyidae

Aculops pelekassi eriophyid mite
Tegolophus australis brown citrus mite

Phytoseiidae

Amblyseius addoensis [Animals Biosecurity] Amblyseius citri [Animals Biosecurity] Amblyseius swirskii [Animals Biosecurity] Euseius hibisci [Animals Biosecurity] Euseius scutalis [Animals Biosecurity] Euseius stipulatus [Animals Biosecurity] Euseius tularensis [Animals Biosecurity] -

Iphiseius degenerans [Animals Biosecurity] predatory mite

Typhlodromus athiasae [Animals Biosecurity]

Stigmaeidae

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

Tarsonemidae

Tarsonemus cryptocephalus [Animals Biosecurity]

**Tenuipalpidae** 

Brevipalpus chilensis false spider mite
Brevipalpus lewisi bunch mite
Brevipalpus obovatus privet mite
Tenuipalpus emeticae [Animals Biosecurity] -

Tuckerella ornata -

Ultratenuipalpus gonianaensis tenuipalpid mite

Tetranychidae

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

Tuckerellidae

Tuckerella knorri hawthorn spider mite

#### Spider

#### Arachnida

Araneae

Clubionidae

Cheiracanthium mildei [Animals Biosecurity]

Theridiidae

Theridion sp. [Animals Biosecurity]

## Mollusc

Gastropoda

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

Phomopsis sp.

rot

Septoria spp. -

Sphaeropsis tumefaciens stem gall

**Unknown Coelomycetes** 

**Unknown Coelomycetes** 

Aschersonia placenta [Animals Biosecurity] ---

Gloeosporium foliicolum fruit rot

Mitosporic Fungi (Hyphomycetes)

Hyphomycetales Dematiaceae

Alternaria limicola -Alternaria pellucida -Cercospora microsora --

Phaeoramularia angolensis cercospora spot

Stemphylium rosarium ---

Ulocladium obovoideum ulocladium rot

**Unknown Hyphomycetes** 

**Unknown Hyphomycetes** 

Aureobasidium sp. -Hirsutella thompsonii [Animals Biosecurity] -Isaria sp. [Animals Biosecurity] --

Oidium tingitaninum powdery mildew

Sporobolomyces roseus -- Stenella sp. --

Zygomycota: Zygomycetes

Glomales Glomaceae

Glomus etunicatum [Animals Biosecurity] --

Mucorales

Syncephalastraceae

Syncephalastrum racemosum --

Bacterium

**Bacterium family unknown** 

Liberobacter africanumcitrus greening bacteriumLiberobacter asiaticumcitrus greening bacteriumLiberobacter sp.citrus greening bacterium

Spiroplasma citri citrus stubborn

Pseudomonadaceae

Burkholderia cepacia sour skin Xanthomonas axonopodis pv. citri citrus canker

Xanthomonas campestris pv. aurantifolii

Xanthomonas campestris pv. citrumelo citrus bacterial spot Xylella fastidiosa Pierce's disease

Xylella fastidiosa pv. citri variegated chlorosis of citrus

Virus

Indian citrus mosaic badnavirus citrus cachexia viroid citrus chlorotic dwarf citrus infectious variegation ilarvirus -

citrus infectious variegation ilarvirus [crinkly leaf

strain]

citrus leaf rugose ilarvirus citrus leathery leaf virus citrus leprosis rhabdovirus citrus mosaic virus citrus ringspot virus -

citrus tatter leaf capillovirus - citrus tristeza closterovirus [strains not in New Zealand] - citrus variable viroid -

citrus viroids (groups I-IV) citrus yellow mosaic badnavirus citrus yellow mottle virus dwarfing factor viroid navel orange infectious mottling virus satsuma dwarf nepovirus satsuma dwarf nepovirus [Natsudaidai dwarf strain] xyloporosis viroid yellow vein clearing of lemon -

## Phytoplasma

Candidatus Phytoplasma aurantifolia witches' broom phytoplasma rubbery wood -

#### Disease of unknown aetiology

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

## Inspection, Testing and Treatment Requirements for Fortunella\*

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

ORGANISM TYPES	MPI ACCEPTABLE METHODS
satsuma dwarf nepovirus	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures
[Natsudaidai dwarf	18 to 25°C.
strain]	
yellow vein clearing of	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators
lemon	at cool temperatures 18 to 25°C.
Viroid	•
citrus cachexia viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron
11010	at hot temperature 27 to 32°C.
citrus variable viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron
	at hot temperature 27 to 32°C.
citrus viroids (groups I-	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron
IV)	at hot temperature 27 to 32°C.
dwarfing factor viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron
	at hot temperature 27 to 32°C.
xyloporosis viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract or mandarin
<b>J</b> 1	(Parson's Special). Grow Citron at hot temperature 27 to 32°C.
Disease of unknown aeti	
Australian citrus dieback	Country freedom OR other suitable test
blind pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa.
1	Grow indicators at cool temperatures 18 to 25°C.
bud union disease	Country freedom OR other suitable test
citrus blight disease	None (cuttings collected from blight free area). Inspect source tree after 2 years
Ü	before releasing from quarantine.
citrus fatal yellows	Country freedom OR graft inoculated Citrus macrophylla.
citrus impietratura	Country freedom OR graft inoculated dweet tangor or sweet orange. Growth
disease	indicators at cool temperatures 18 to 25°C.
citrus sunken vein	Country freedom OR other suitable test.
disease	
concave gum	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa.
_	Grow indicators at cool temperatures 18 to 25°C.
cristacortis	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa.
	Grow indicators at cool temperatures 18 to 25°C.
gum pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa.
	Grow indicators at cool temperatures 18 to 25°C.
Gummy bark	Country freedom OR SPAGE of graft inoculated citron extract. Grow citron at hot
	temperature 27 to 32°C.
Kassala disease	Country freedom, cuttings collected from kassala free area.
lemon sieve tube	Country freedom OR other suitable test.
necrosis	
shell bark of lemons	Country freedom OR other suitable test.
zonate chlorosis	Country freedom, cuttings collected from kassala free area.
Phytoplasma	
Candidatus phytoplasma	Country freedom OR graft inoculated lime. Grow indicators at cool temperatures 18
aurantifolia	to 25°C.
rubbery wood	Country freedom OR graft inoculated sweet orange or lemon. Grow citron at hot
rubbery wood	temperature 27 to 32°C.

<sup>\*</sup> Country freedom is accepted as equivalence to a treatment.

## **Notes:**

- 1. The unit for testing is defined in section 2.3.2.1.
- 2. With prior notification, MPI will accept other internationally recognised testing methods.

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

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

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

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

## 2. Pests of Fragaria

Refer to the pest list.

#### 3. Entry conditions for:

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

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

## (i) **Documentation**

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

## (ii) Phytosanitary requirements

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

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

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

## **AND**

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

## AND

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-accredited facility].

#### **AND**

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

## (iii) Additional declarations to the phytosanitary certificate

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

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

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-accredited facility].

#### AND

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

## (iv) Post-entry quarantine

**PEQ**: All *Fragaria* nursery stock must be imported under permit into post-entry quarantine in a Level 2 greenhouse facility accredited to the Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

**Quarantine Period and Inspection, Testing and Treatment Requirements**: The nursery stock will be grown for a minimum period of 6 months in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. These periods are indicative minimum quarantine periods and may be extended if material is slow growing, pests are detected, or treatments/testing are required.

## 3.2 Fragaria cuttings and tissue culture from non-accredited facilities in any country

## (i) **Documentation**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Fragaria* nursery stock exported to New Zealand. **Import permit:** an import permit is required.

## (ii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The *Fragaria* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

### **AND**

treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

#### **AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

## (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section. No additional declarations are required.

#### (iv) Post-entry quarantine

**PEQ**: All *Fragaria* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility accredited to the Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEO).

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 16 months in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. Sixteen months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

## Pest List for Fragaria

## **REGULATED PESTS (actionable)**

**Insect** 

Insecta

Coleoptera

Attelabidae

Rhynchites germanicus strawberry rhynchites

Bruchidae

Zabrotes arenarius strawberry weevil

Cantharidae

Chauliognathus lugubris soldier beetle

Carabidae

Calathus fuscipes ground beetle

Harpalus affinisstrawberry seed beetleHarpalus rufipesstrawberry seed beetleNebria brevicolliscommon black ground beetlePterostichus cupreusstrawberry ground beetlePterostichus madidusstrawberry ground beetlePterostichus melanariusstrawberry ground beetle

Chrysomelidae

Altica caerulescensleaf beetleChaetocnema concinnaleaf feeding beetleColaspis flavidagrape colaspis

Galeruca tanaceti strawberry leaf beetle
Galerucella grisescens strawberry leaf beetle
Galerucella tenella strawberry 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 weevil

Donus salviae strawberry weevil
Dyslobus decoratus decorated strawberry root weevil

Dyslobus ursinuswestern strawberry root weevilDyslobus wilcoxiLacomb strawberry root weevilGeoderces 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 armatus
 strawberry root weevil

 Otiorhynchus clavipes
 red-legged weevil

 Otiorhynchus cribricollis
 cribrate 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 melolonthacockchafer

Melolontha melolonthacockchaferMetanastes vulgivagusblack beetlePhyllopertha horticolagarden chaferPhyllophaga decimlineataten-lined June beetle

Phyllophaga perversa western ten-lined June beetle

Popillia japonica Japanese beetle Repsimus aeneus white grub

Rhopaea magnicornis large pasture scarab

Serica spp.white grubsSericesthis geminatapriunose scarabSericesthis nigrolineatadusky pasture scarab

Scolytidae

Poecilips cardamomi bark beetle

Silphidae

Heterosilpha aenescens carrion beetle

Collembola Sminthuridae

Bourletiella arvalis dorsobscura garden springtail
Sminthurus multidentatus garden springtail

Diptera

Âgromyzidae

Agromyza fragariaestrawberry leafminerAgromyza spiraeaerose leafminer

**Tipulidae** 

Tipula spp leatherjackets

Hemiptera

Anthocoridae

Orius laevigatus plant bug

Lygaeidae

Euander lacertosus lygaeid bug
Nysius clevelandensis grey cluster bug

Nysius spp. bugs

Nysius vinitor Rutherglen bug

Miridae

Calocoris hobartensis capsid

common green capsid Lygocoris pabulinus Lygus elisus pale legume bug Lygus hesperus tarnished plant bug Lygus lineolaris tarnished plant bug Lygus rugulipennis tarnished plant bug

Plagiognathus arbustorum stink bug Plagiognathus chrysanthemi stink bug Scolopostethus spp. plant bugs

Pentatomidae

Acrosternum hilare green stink bug Dolycoris baccarum stink bug

Pvrrhocoridae

Dindymus versicolor harlequin bug

Homoptera Alevrodidae

> strawberry whitefly Aleyrodes lonicerae

Trialeurodes fernaldi whitefly

Trialeurodes packardi strawberry whitefly

Trialeurodes ruborum whitefly

**Aphididae** 

Acyrthosiphon malvae rogersii strawberry aphid Amphorophora agathonica strawberry aphid Aphis fabae bean aphid

Aphis forbesi strawberry root aphid Aphis gossypii [vector] cotton aphid

Aphis rubifolii raspberry aphid foxglove aphid Aulacorthum solani [vector]

Chaetosiphon jacobi strawberry aphid lesser strawberry aphid Chaetosiphon minus

Chaetosiphon tetrarhodum [vector] strawberry aphid Chaetosiphon thomasi strawberry aphid Fimbriaphis fimbriata rose aphid Fimbriaphis wakibae rose aphid Macrosiphum pelargonii rose aphid Macrosiphum rosae [vector] rose aphid Myzaphis rosarum [vector] lesser rose aphid Myzus ascalonicus [vector] shallot aphid Myzus ornatus [vector] ornate aphid

green peach aphid Myzus persicae [vector] Rhodobium porosum aphid

**Aphrophoridae** 

Aphrophora alni spittlebug

Aphrophora permutata rhubarb spittlebug

Cercopidae

Cercopis vulnerata red and black froghopper

Emelyanoviana mollicula spittlebug Evacanthus interruptus spittlebug Philaenus leucophthalmus spittlebug

Cicadellidae

Aphrodes bicinctus strawberry leafhopper

Apogonalia grossa leafhopper leafhopper Coelidia olitoria Edwardsiana spp. leafhoppers Empoasca fabae potato 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

Hymenoptera

Tenthredinidae

Allantus calceatus sawfly

Allantus cinctus curled rose sawfly Cladius pectinicornis antler sawfly

Lepidoptera Gelechiidae

Aristotelia fragariae strawberry crown miner
Compsolechia fragariella western strawberry leafroller

Geometridae

Ascotis selenaria mugwort looper

Hepialidae

Hepialus lupulinus swift moth

Noctuidae

 Agrotis spp. (species not in New Zealand)
 cutworms

 Agrotis munda
 brown cutworm

 Agrotis segetum
 turnip moth

 Amphinoan intercognica
 strawborry outw

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 leafrollerPtycholoma 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 kanzawaikanzawaii miteTetranychus lobustusstrawberry spider miteTetranychus neocalendonicusMexican spider miteTetranychus pacificusPacific 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 curvatumring nematodeCriconemoides lobatumring 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

Hypocreaceae 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

Ceratobasidiales

Ceratobasidiaceae

Ceratobasidium anceps (anamorph Sclerotium leaf rot

deciduum)

Rhizoctonia fragariae black root rot

Chytridiomycota Chytridiales Olpidiaceae

Olpidium brassicae [vector] Black root

**Basidiomycota: Teliomycetes** 

Uredinales Pucciniaceae Phragmidium mexicana

Phragmidium potentiallae leaf rust

Chytridiomycota Chytridiales

Synchytriaceae

Synchytrium fragariae root gall

Mitosporic Fungi (Agonomycetes)

Agonomycetales

Unknown Agonomycetales

Rhizoctonia fragariae fruit and root rot

Mitosporic Fungi (Coelomycetes)

Sphaeropsidales Leptostromataceae

Kabatia fragariae leaf spot

Sphaerioidaceae

Coniella fragariae flower spot

Phyllosticta fragaricola phyllosticta leaf spot

Rhabdospora fragariaeleaf spotSeptoria 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)

Strawberry marginal chlorosis ['Candidatus

phlomobacter fragariae']

Strawberry rickettsia yellows

Xanthomonas arboricola pv. fragariae

Xanthomonas fragariae

Xylella fastidiosa\*

moko disease

bacterial leaf blight angular leaf spot

Pierce's disease

#### Viruses

Fragaria chiloensis latent virus [strains not in New

Zealand]

Raspberry ringspot virus

Strawberry chlorotic fleck virus

Strawberry latent C virus

Strawberry latent ringspot virus [strains not in New

Zealand/

Strawberry mild yellow edge-associated virus

Strawberry pallidosis associated virus

Strawberry pseudo mild yellow edge virus

Strawberry vein banding virus

Tobacco necrosis virus [strains not in New Zealand]

Tobacco streak virus [strains not in New Zealand]

Tomato bushy stunt virus

Tomato ringspot virus

#### **Phytoplasmas**

Aster yellows phytoplasma

Clover phyllody phytoplasma Clover proliferation phytoplasma

Clover yellow edge phytoplasma

Stolbur phytoplasma

STRAWB1 phytoplasma

STRAWB2 phytoplasma

Strawberry green petal phytoplasma

Strawberry leafy fruit phytoplasma

Strawberry multicipita phytoplasma

Strawberry multiplier phytoplasma

Strawberry phylloid fruit phytoplasma

Strawberry yellows phytoplasma

#### Diseases of unknown aetiology

Strawberry feather leaf disease

Strawberry lethal decline disease

*	For organisms intercepted that are not listed within this pest list refer to the <a href="http://mpi.govt.nz/news-and-resources/resources/registers-and-lists/biosecurity-organisms-register-for-imported-commodities">http://mpi.govt.nz/news-and-resources/resources/registers-and-lists/biosecurity-organisms-register-for-imported-commodities</a> to determine regulatory status.					

## Inspection, Testing and Treatment Requirements for Fragaria

ORGANISM TYPES	MPI-ACCEPTABLE METHODS			
Insects	Visual inspection AND approved insecticide treatments as described in			
	the <u>basic conditions</u> of the Import Health Standard Nursery Stock from			
	All countries [cuttings only]			
Mites	Visual inspection AND approved miticide treatments as described in			
	the <u>basic conditions</u> of the Import Health Standard Nursery Stock from			
	All countries. [cuttings only] or binocular microscope inspection in			
	PEQ [plants in vitro only]			
Nematodes	Growing season inspection in PEQ for symptoms of foliar nematodes			
Fungi	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes			
	upon arrival in the post entry quarantine facility.			
0 1	Growing season inspection in PEQ for symptom expression			
Oomycete	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes			
	upon arrival in the post entry quarantine facility.			
Doctorio (and disesses d.L.	Growing season inspection in PEQ for symptom expression			
<b>Bacteria</b> (and diseases caused by bacteria-like organisms)	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes upon arrival in the post entry quarantine facility.			
Erwinia pyrifoliae	Growing season inspection for symptom expression and PCR			
Ralstonia solanacearum (Race 2)	Growing season inspection for symptom expression and FCK  Growing season inspection for symptom expression.			
Strawberry marginal chlorosis	Growing season inspection for symptom expression.  Growing season inspection for symptom expression AND PCR			
('Candidatus phlomobacter fragariae')	Growing season hispection for symptom expression AND FCK			
Strawberry rickettsia yellows	Growing season inspection for symptom expression			
Xanthomonas arboricola pv. fragariae	Growing season inspection for symptom expression AND PCR			
Xanthomonas fragariae	Growing season inspection for symptom expression AND PCR			
Xylella fastidiosa	Growing season inspection in PEQ for disease symptom expression			
	AND PCR			
Viruses				
Fragaria chiloensis latent virus	Herbaceous indicators (Chenopodium quinoa and Cucumis sativus)			
[strains not in New Zealand]				
Raspberry ringspot virus	Herbaceous indicator (Chenopodium quinoa) AND ELISA or PCR			
Strawberry chlorotic fleck virus	Graft inoculation (Fragaria vesca cl. EMB or EMK)			
Strawberry latent C virus	Graft inoculation (Fragaria vesca cl. EMC or UC5)			
Strawberry latent ringspot virus	Herbaceous indicators (Chenopodium quinoa and Cucumis sativus)			
[strains not in New Zealand]	AND ELISA or PCR			
Strawberry mild yellow edge- associated virus	Graft inoculation (2 indicators; <i>Fragaria vesca</i> cl. UC4 or UC5, or cv. Alpine			
Strawberry pallidosis associated virus	Graft inoculation (Fragaria virginiana cl. UC10 or UC11)			
Strawberry pseudo mild yellow edge	Graft inoculation (Fragaria visginiana et. CC10 of CC11)  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			
	Fragaria virginiana cl. UC12) AND PCR			
Tobacco necrosis virus [strains not in	Herbaceous indicators (Chenopodium quinoa and Cucumis sativus)			
New Zealand]	AND ELISA or PCR			
Tobacco streak virus [strains not in	Herbaceous indicators (Chenopodium quinoa			
New Zealand]	and Cucumis sativus)			
Tomato bushy stunt virus	Herbaceous indicator (Chenopodium quinoa)			
Tomato ringspot virus	Herbaceous indicators (Chenopodium quinoa and Cucumis sativus)			
	AND ELISA or PCR			
Phytoplasmas	Growing season inspection AND nested PCR or real time PCR			
Diseases of unknown actiology				
Strawberry feather leaf disease	Graft inoculation (Fragaria vesca cl. UC1 or UC4, or cv. Alpine)			
Strawberry lethal decline disease	Graft inoculation (Fragaria vesca cv. Alpine)			

#### Notes:

- 1. The unit for testing is defined in section 2.3.2.1.
- 2. Plants *in vitro*: all tissue culture plantlets must go through a period of dormancy before virus testing to increase the virus titre. Plantlets must also be potted up and grown in a MPI approved greenhouse and only material from the greenhouse is to be selected for testing.
- 3. Virus testing is to be conducted on new spring growth.
- 4. Growing season is defined as an extended period of plant growth that includes environmental conditions equivalent to spring (longer wetter days and colder temperatures), summer (longer dryer days and warm temperatures), and autumn (shorter wetter days and warm but cooling temperatures).
- 5. Phytoplasma and bacteria testing is to be conducted at the end of the summer growth period. Plants must be sampled from at least two positions on the apical crown region.
- 6. Graft indexing hosts: Each Fragaria plant must be tested by leaf-grafting onto two replicate indicator cultivars. The indicator plants must be maintained in a vigorous state of growth before and after grafting. Grafted plants are to be inspected regularly for symptoms of disease for at least 3 months.
- 7. Herbaceous indicator hosts: *Chenopodium quinoa* and *Cucumis sativus*. Two plants of each herbaceous indicator species must be used in each test. Herbaceous indicator plants must be grown at 18-25°C before and after inoculation and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.
- 8. Enzyme linked immunosorbent assay (ELISA) tests. All ELISA tests must be validated using both positive and negative controls prior to use in quarantine testing. Positive, negative, and buffer controls must be used in all tests.
- 9. Polymerase chain reaction (PCR) tests. All PCR tests must be validated using positive controls prior to use in quarantine testing. Positive and no template controls must be used in all tests. Positive internal control primers and a negative plant control should also be used in PCR tests.
- 10. Inspection of the *Fragaria* plants by the operator of the PEQ facility for signs of pest and disease must be at least twice per week during periods of active growth.
- 11. Other internationally recognised testing methods may be accepted by MPI with prior notification.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Freesia*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries:** All

Quarantine Pests: Virus diseases

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

A. For Whole Plants

PEQ: Level 2

Minimum Period: 6 months

B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

#### **OPTION 1:**

No import permit is required.

PEQ: None

**Additional Declaration(s):** 

1) For bulbs produced under a MPI-approved Dutch bulb propagation scheme:

"In addition to inspection of the dormant bulbs prior to shipment, the imported bulbs meet the requirements of the NAKtuinbouw Elite (Class SEE or EE) or Select (Class A or E) [choose one] bulb certification scheme."

#### OR

## 2) For bulbs NOT produced under a MPI-approved bulb propagation scheme:

"In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests."

**OPTION 2: PEO:** Level 1

**Minimum Period:** 3 months

C. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

## **OPTION 1: PEQ:** Level 1

**Minimum Period:** 3 months **Additional Declaration(s):** 

"The dormant bulbs in this consignment have been:

derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

#### **AND**

treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

## **OPTION 2:**

**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:**

#### **Additional Declaration:**

"The cultures have been derived from parent stock tested and found free of virus diseases."

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Fuchsia*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: All

Quarantine Pests: Aculops fuchsiae (Fuchsia Gall Mite); Phytophthora ramorum; Xylella

fastidiosa

**Entry Conditions**: **Basic**; with variations and additional conditions as specified below:

### A. For Whole Plants or Cuttings

PEQ: Level 2

Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12) **Guidance for importers**: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa* 

- c. Additional declaration:
  - "Aculops fuchsiae is not known to occur in \_\_(the country or state where the plants were grown) \_\_".
     OR
  - "The plants have been dipped in Carbaryl at the rate of 0.5g a.i. per litre of water".

## **B.** For Tissue Cultures

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5) **Guidance for importers**: There will be a minimum quarantine period of <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 *Gaultheria*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

**Quarantine Pests**: Chrysomyxa ledi, Microsphaeria spp, Phytophthora ramorum.

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

A. For	<b>Whole Plants</b>
PEQ:	Level 2

**Minimum Period:** 3 months

a.	Additional Declarations: "Chrysomyxa ledi and Microsphaeria spp. are not known to
	OCCUr in (the country or state of where the plants were grown)".
	OR

"The plants were inspected during the growing season and no *Chrysomyxa ledi* or *Microsphaeria* spp. was detected".

- b. "The plants have been dipped prior to export in propiconazole at the rate of 0.5g a.i. per litre of water."
- c. Conditions for Phytophthora ramorum (section 2.2.1.11)

## **B.** For Tissue Cultures

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Gentiana*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: Japan

**Quarantine Pests**: Cronartium flaccidum; Tetranychus kanzawai

**Entry Conditions**: **Basic**; with variations and additional conditions as specified below:

## A. For Whole Plants

**PEQ**: Level 2

**Minimum Period**: 3 months

## **Additional Declarations:**

"The plants have been dipped in oxycarboxin at 1.5g a.i. per litre of water, prior to export".

## **B.** For Tissue Cultures

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Gerbera*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests**: Frankliniella occidentalis, Liriomyza spp., Phytophthora capsici, Phytophthora palmivora, Phytophthora tentaculata

**Entry Conditions**: **Basic**; with variations and additional conditions as specified below:

#### A. For Whole Plants

**PEO**: Level 2

Minimum Period: 3 months

a. Additional declaration

"The plants have been inspected in accordance with appropriate official procedures and found to be free of *Frankliniella occidentalis* and *Liriomyza* spp."

b. Conditions for *Phytophthora capsici*<sup>1</sup>

Note: Only applies to the following genus: Gypsophila

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

"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*".

c. Conditions for *Phytophthora palmivora*<sup>1</sup>

Note: Only applies to the following genus: Gerbera

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

"The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### ΩR

"The [insert species name] plants in this consignment were produced in a "pest free area" for *Phytophthora palmivora*".

#### OR

"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*<sup>1</sup>

Note: Only applies to the following genus: Gerbera

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

"The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".

#### OR

"The [insert species name] plants in this consignment were produced in a "pest free area" for *Phytophthora tentaculata*".

#### OR

"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.

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora capsici*, *P. palmivora* and *P. tentaculata* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora capsici*, *P. palmivora* and *P. tentaculata* are not mandatory.

<sup>&</sup>lt;sup>1</sup>Implementation of measures:

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Gladiolus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Puccinia gladioli

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

A. For Whole Plants

PEO: Level 2

**Minimum Period:** 6 months **Additional Declarations:** 

"Puccinia gladioli is not known to occur in \_\_\_\_\_ (the country or state where the plants were grown) \_\_\_\_\_".

OR

"The plants were inspected during the growing season and *Puccinia gladioli* was not detected".

B. For Dormant Bulbs (Corms) from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA

#### **OPTION 1:**

No import permit is required.

PEO: None

**Cleanliness:** Bulbs (corms) must be free of leafy coverings.

**Additional Declaration(s):** 

## 1) For bulbs produced under a MPI-approved Dutch bulb propagation scheme:

"In addition to inspection of the dormant bulbs prior to shipment, the imported bulbs meet the requirements of the BKD Class 1 bulb certification scheme."

OR

## 2) For bulbs NOT produced under a MPI-approved bulb propagation scheme:

"In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests."

**OPTION 2:** 

**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, USA

## **OPTION 1: PEQ:** Level 1

Minimum Period: 3 months

Cleanliness: Bulbs (corms) must be free of leafy coverings.

#### **Additional Declaration(s):**

"The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

## AND

treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

## **OPTION 2:**

**PEQ:** Level 2

**Minimum Period:** 3 months

**Cleanliness:** Bulbs (corms) must be free of leafy coverings.

#### **D. For Tissue Cultures**

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under Glycyrrhiza", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: All

**Quarantine Pests** *Uromyces* spp.

**Entry Conditions**: **Basic**; with variations and additional conditions as specified below:

#### A. For Whole Plants

**PEQ**: Level 2

**Minimum Period**: 3 months

**Additional Declaration:** 

"Uromyces spp. are not known to occur on Glycyrrhiza in \_\_\_\_\_ (the country or state where the plants were grown) \_\_\_\_\_\_".

OR

"The plants were inspected during the growing season and no *Uromyces* spp. were detected".

### **B.** For Tissue Cultures

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Guzmania*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries:** All

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants

**PEO:** Level 2

**Minimum Period:** 3 months

## **B. For Tissue Cultures**

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Hebe*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Phellinus noxius, Phytophthora capsici, Phytophthora palmivora, Phytophthora tentaculata, 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 not recognised by MPI as free from *Xylella fastidiosa* 

b. Conditions for *Phellinus noxius* (section 2.2.1.13)

**Note**: Only applies to members of the *Albizia* and *Cassia* genera AND the following species: *Agathis robusta*, *Celtis sinensis*, *Grevillea robusta*, *Hibiscus rosa-sinensis*, *Hibiscus schizopetalus*, *Hibiscus tiliaceus*, *Ilex rotunda*, *Lagerstroemia speciose*, *Lagerstroemia subcostata*, *Ligustrum japonicum*, *Liquidambar formosana* and *Pistacia chinensis* 

c. Conditions for *Phytophthora capsici*<sup>1</sup>

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:

"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*".

d. Conditions for *Phytophthora palmivora*<sup>1</sup>

**Note:** Only applies to the following genera: *Abelmoschus, Coronilla, Dodonaea, Euphorbia, Grevillea, Hibiscus, Lavandula, Pistacia* and *Catharanthus* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

"The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

"The [insert species name] plants in this consignment were produced in a "pest free area" for *Phytophthora palmivora*".

#### OR

"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*<sup>1</sup>

Note: Only applies to the following genera: Lavandula and Origanum

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

"The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".

#### OR

"The [insert species name] plants in this consignment were produced in a "pest free area" for *Phytophthora tentaculata*".

#### OR

"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*<sup>1</sup>

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:

"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*".

c. Conditions for *Phytophthora palmivora*<sup>1</sup>

**Note:** Only applies to the following genera: *Abelmoschus, Coronilla, Dodonaea, Euphorbia, Grevillea, Hibiscus, Lavandula, Pistacia* and *Catharanthus* 

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

"The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

"The [insert species name] plants in this consignment were produced in a "pest free area" for *Phytophthora palmivora*".

#### OR

"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<sup>1</sup>

**Note:** Only applies to the following genera: Lavandula and Origanum

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

"The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".

#### OR

"The [insert species name] plants in this consignment were produced in a "pest free area" for *Phytophthora tentaculata*".

### OR

"The [insert species name] plants in this consignment were produced in a "pest free place of production" for *Phytophthora tentaculata*".

## **C. For Tissue Cultures**

e. 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*.

For consignments with a phytosanitary certificate issued <u>on or after 25 May 2018</u> the requirements for *Phytophthora capsici*, *P. palmivora* and *P. tentaculata* <u>must</u> be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora capsici*, *P. palmivora* and *P. tentaculata* are not mandatory.

<sup>&</sup>lt;sup>1</sup>Implementation of measures:

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Helianthus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: All

**Quarantine Pests**: Alternaria helianthi; Septoria helianthi; Phymatotrichopsis omnivora; Plasmopara halstedii; Pseudomonas spp.; Uredinales; Xylella fastidiosa

**Entry Conditions**: **Basic**; with variations and additional conditions as specified below:

For Dormant Tubers Only:

**PEO**: Level 2

**Minimum Period**: 3 months **Additional Declaration(s)**:

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for *Phymatotrichopsis omnivora*

#### **OPTION 1**

i) Additional declaration: "The dormant bulbs have been sourced from a "Pest free area", free from *Phymatotrichopsis omnivora*".

#### **OPTION 2:**

i) Additional declaration: "The dormant bulbs have been sourced from a "Pest free place of production", free from *Phymatotrichopsis omnivora*".

#### **AND**

ii) the consignment must be treated for fungi as described in section 2.2.1.7 "Pesticide treatments for dormant bulbs". If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section of the phytosanitary certificate.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Hippeastrum*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## 1. Type of *Hippeastrum* nursery stock approved for entry into New Zealand

Dormant bulbs

Plants in tissue culture

## 2. Pests of Hippeastrum

Refer to the pest list.

## 3. Entry conditions for:

## 3.1 Hippeastrum dormant bulbs from any country

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** an import permit is required.

## (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

#### The *Hippeastrum* dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

#### AND

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

#### AND

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria.

#### **AND**

- treated for regulated mites as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

#### AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification

## (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section, and by providing the following additional declaration to the phytosanitary certificate:

"The *Hippeastrum* dormant bulbs in this consignment have been:

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi [if applicable].

#### **AND**

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria and phytoplasmas."

## (iv) Post-entry quarantine

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/testing are required.

## 3.2 Hippeastrum dormant bulbs from the Netherlands

## (i) **Documentation**

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

## (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Hippeastrum* dormant bulbs have been:

- produced in accordance with the requirements of the BKD Class 1 bulb certification scheme and inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pest.

AND

The bulbs are free from *Armillaria mellea* and *Pratylenchus scribneri*.

AND

- Sourced from a pest free production site for *Hippeastrum* free from regulated nematodes and fungi and held in a manner to ensure that infestation/reinfestation does not occur following certification.

## (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section, and by providing the following additional declaration to the phytosanitary certificate:

- "The Hippeastrum dormant bulbs have been produced in accordance with the requirements of the BKD Class 1 bulb certification scheme and inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pest.

**AND** 

- The bulbs are free from *Armillaria mellea* and *Pratylenchus scribneri*.

AND

- Sourced from a pest free production site for hippeastrum free from regulated nematodes and fungi and held in a manner to ensure that infestation/reinfestation does not occur following certification."

## (iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed.

## 3.3 Hippeastrum plants in tissue culture from any country

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

## (ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

## (iii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Hippeastrum* plants in tissue culture have been:

 inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

#### AND

 derived from parent stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

## (iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declaration to the phytosanitary certificate:

"The *Hippeastrum* plants in tissue culture have been derived from parent stock:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests

## (iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed overseas. Alternatively the inspection and testing may be completed in post-entry quarantine upon arrival in New Zealand according to the following conditions:

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** an import permit is required.

**PEO**: Level 3B

**Quarantine Period**: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required

## Pest List for Hippeastrum

## **REGULATED PESTS (actionable)**

Mite

Arachnida

Acarina

Tarsonemidae

Steneotarsonemus laticeps bulb scale mite

Nematode Secernentea Tylenchida Pratylenchidae

Pratylenchus coffeae coffee root lesion nematode
Pratylenchus scribneri Scribneri's root lesion nematode

**Fungus** 

**Basidiomycota: Basidiomycetes** 

Agaricales

Tricholomataceae

Armillaria mellea (anamorph Rhizomorpha

subcorticalis)

armillaria root rot

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under 'Hoya", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Hoya undetermined tobamoviruses

Entry Conditions: Basic; with variations and additional conditions as specified below:

## A. For Cuttings and Whole Plants:

PEQ: Level 2

**Minimum Period:** 3 months

a. Conditions for *Hoya* undetermined tobamoviruses Pre-determined testing in PEQ: refer to 'Inspection, Testing and Treatment Requirements for *Hoya*'

# **B. For Tissue Cultures: 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 ACCEPTABLE METHODS	Comments
Insects	Visual inspection <b>AND</b> approved	Applies to whole plants and
	insecticide treatments as described in	cuttings only
	section 2.2.1.6 of the Basic conditions	
Mites	Visual inspection <b>AND</b> approved	Applies to whole plants and
	miticide treatments as described in the	cuttings only
	section 2.2.1.6 of the Basic conditions	
Virus		
Hoya	Growing season inspection in PEQ for	Applies to whole plants,
undetermined	symptom expression AND RT-PCR	cuttings and tissue culture
tobamoviruses		plants

#### **Notes:**

- 1. All *Hoya* plants within a consignment will need to be tested for *Hoya* undetermined tobamoviruses.
- 2. Samples for the screening of *Hoya* undetermined tobamoviruses should be taken as close to the end of the PEQ period as practically possible.
- 3. Screening for *Hoya* undetermined tobamoviruses can be done on unbulked material or bulked samples of up to five plants.
- 4. If a single positive sample is detected within a consignment, the whole consignment must be either reshipped

or destroyed at the expense of the importer.									

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Humulus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: All

**Quarantine Pests**: Pseudoperonospora humuli; Tetranychus kanzawai; Verticillium alboatrum; Xylella fastidiosa

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

## A. For Whole Plants

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 not recognised by MPI as free from *Xylella fastidiosa* 

## **B. For Tissue Cultures**

PEQ: Level 3B

**Minimum Period**: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.2.5) **Guidance for importers:** The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa* 

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Hydrangea*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: All

Quarantine Pests: Tetranychus kanzawai; Phellinus noxius; Xylella fastidiosa

## **Entry Conditions:**

**Basic**; with variations and additional conditions as specified below:

#### A. For Whole Plants

PEQ: Level 2

**Minimum Period**: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12) **Guidance for importers:** The minimum quarantine period will be <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 PEO**: Level 2

TEQ. 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

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 *Ipomoea batatas*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: All

Quarantine pests: Helicobasidium mompa; Streptomyces ipomoea; virus diseases; Xylella

fastidiosa.

**Entry Conditions**: **Basic**; with variations and additional conditions as specified below:

A. For Whole Plants

**PEQ**: Level 3B

**Minimum Period**: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa* 

## **B.** For Tissue Cultures

PEQ: Level 3B

**Minimum Period**: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)

**Guidance for importers:** The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa* 

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Iris*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## 1. Type of Iris nursery stock approved for entry into New Zealand

Whole plants

Dormant bulbs

Plants in tissue culture

#### 2. Pests of Iris

Refer to the pest list.

#### 3. Entry conditions for:

## 3.1 Iris whole plants and dormant bulbs from any country

## (i) **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

**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/testing are required. Cut flowers may receive biosecurity clearance while the imported plants remain in post-entry quarantine following inspection of the parent plants and with prior approval from a MPI Inspector.

## 3.2 Iris whole plants and dormant bulbs from the Netherlands

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

## (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Iris* dormant bulbs or whole plants have been:

- produced in accordance with the requirements of the Bloembollenkeuringsdienst (BKD) Class 1 bulb certification scheme.

#### AND

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

#### **AND**

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section or section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

#### AND

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria and viruses.

## **AND**

- treated for regulated insects and mites as described in section 2.2.1.6 [whole plants] or section 2.2.1.7 [dormant bulbs] of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

#### **AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

#### (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section, and by providing the following additional declaration to the phytosanitary certificate:

"The *Iris* dormant bulbs or whole plants [choose one] in this consignment have been:

- produced in accordance with the requirements of the BKD Class 1 bulb certification scheme.

#### **AND**

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi [if applicable].

#### AND

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria and viruses."

## (iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed.

## 3.3 Iris plants in tissue culture from any country

#### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

## (ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

## (iii) *Phytosanitary requirements*

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Iris* plants in tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

#### **AND**

 derived from parent stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

#### **AND**

derived from parent stock tested using molecular/ serological methods [choose ONE option] and found free of *Tobacco rattle virus*.

#### (iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declaration to the phytosanitary certificate:

"The *Iris* plants in tissue culture have been derived from parent stock:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests

#### **AND**

tested using molecular/ serological methods [choose ONE option] and found free of Tobacco rattle virus."

## (iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed overseas. Alternatively the inspection and testing may be completed in post-entry quarantine upon arrival in New Zealand according to the following conditions:

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** an import permit is required.

**PEQ**: Level 3B

**Quarantine Period**: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

## Pest List for Iris

## **REGULATED PESTS (actionable)**

**Insect** 

Insecta

Coleoptera

Scarabaeidae

Popillia japonica Japanese beetle

Homoptera

Pseudococcidae

Aleyrodes spiraeoides [whole plants only] -

Pseudococcidae

Phenacoccus avenae -

Phenacoccus emansor

Pseudococcus jackbeardsleyi [whole plants only] Jack Beardsley mealybug

Rhizoecus palestineae root mealybug

Lepidoptera Hepialidae

Hepialus 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 armillaria root rot

subcorticalis)

Lachnocladiales

Lachnocladiaceae

Scytinostroma eurasiaticogalactinum white root rot

**Phallales** 

Hysterangiaceae

. Hysterangium boudieri

mitosporic fungi (Agonomycetes)

Agonomycetales

unknown Agonomycetales

Rhizoctonia tuliparum basal rot Sclerotium rolfsii var. delphinii sclerotium rot

Bacterium

Pseudomonadaceae

Burkholderia gladioli pv. gladioli bacterial rot

Virus

Broad bean wilt virus Iris fulva mosaic virus Iris germanica leaf stripe virus Japanese iris necrotic ring virus Tobacco rattle virus [strains not in New Zealand] **Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Juglans*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

**Quarantine Pests**: Ceratocystis fimbriata; Erwinia quercina pv. rubrifaciens; Erwinia nigrifluens; Gnomonia leptostyla; Walnut bunch/brooming disease; Walnut blackline; Xylella fastidiosa.

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

#### A. For Whole Plants

PEQ: Level 3B

**Minimum Period**: 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8) **Note:** Only applies to members of the *Juglans* genus
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

## **B.** For Tissue Cultures

PEQ: Level 3B

Minimum Period: 6 months

a. Conditions for *Xylella fastidiosa* (section 2.2.2.5) **Note:** Only applies to members of the *Juglans* genus

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under Juniperas", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries:** All

Quarantine Pests: Bursaphelenchus spp.; Lophodermium spp.; Uredinales; Xylella fastidiosa

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

**For Whole Plants:** PEQ: Level 3B

**Minimum Period:** 6 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12) **Note:** Only applies to the members of the *Juniperus* genus

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Kalmia*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

Quarantine Pests: Chrysomyxa ledi, Microsphaeria spp.; Phytophthora ramorum

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

# A. For Cuttings and Whole Plants from Australia (these commodities may not be imported from other countries):

**PEO:** Level 2

**Minimum Period:** 3 months **Additional Declarations:** 

1.	"Chrysomyxa ledi and Microsphaeria spp. are not known to occur in _	(the country or
	· · · · · · · · · · · · · · · · · · ·	
state of wh	ere the plants were grown) •	

#### OR

"The plants were inspected during the growing season and no *Chrysomyxa ledi* or *Microsphaeria* spp. was detected".

- **2.** "The plants have been dipped prior to export in propiconazole at the rate of 0.5g a.i. per litre of water."
- **3.** "The plants have been sourced from a "Pest free area", free from *Phytophthora ramorum*".

## **B. For Tissue Cultures:**

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Liatris*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries:** Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom, USA.

Quarantine Pests: Phymatotrichopsis omnivora; Uredinales

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

A. For Whole Plants	
PEQ: Level 2	
Minimum Period: 3 months	
Additional Declaration:	
"Rust diseases of genus Coleosporium and Cronatium are not known to occur on(the h	ost
species being imported)in(the country in which the plants were grown)".	

B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom:

## **OPTION 1:**

No import permit is required.

**PEQ:** None

## **Additional Declaration(s):**

"In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests."

## **OPTION 2:**

**PEQ:** Level 1

Minimum Period: 3 months

#### C. For Dormant Bulbs from the USA

No import permit is required unless the bulbs require post-entry quarantine.

**PEQ:** None or Level 2 (see below)

## **Additional Declaration(s):**

- **1.** "In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests".
- **2.** "The dormant tubers have been sourced from a "Pest free area", free from *Phymatotrichopsis omnivora*".

OR

(i) "The dormant bulbs have been sourced from a "Pest free place of production", free from *Phymatotrichopsis omnivora*".

## AND

(ii) the consignment must be treated for fungi as described in Section 2.2.1.7 "Pesticide treatments for dormant bulbs". If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section of the phytosanitary certificate.

#### AND

(iii) Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine.

## **D.** For Tissue Cultures

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Lilium*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## 1. Type of Lilium nursery stock approved for entry into New Zealand

Dormant bulbs

Plants in tissue culture

### 2. Pests of Lilium

Refer to the pest list.

## 3. Entry conditions for:

## 3.1 Lilium dormant bulbs from any country

## (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** an import permit is required.

## (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

#### The Lilium dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

#### **AND**

sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

#### **AND**

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria and viruses.

## **AND**

- treated for regulated insects and mites as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

#### **AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

#### (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section, and by providing the following additional declaration to the phytosanitary certificate:

"The *Lilium* dormant bulbs in this consignment have been:

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi [if applicable].

#### **AND**

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria and viruses."

#### **AND**

- One of the following Additional Declarations for *Phytophthora capsici*<sup>1</sup>:

"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/testing are required. Cut flowers may receive biosecurity clearance while the imported plants remain in post-entry quarantine following inspection of the parent plants (including inspection for bulbils) and with prior approval from a MPI Inspector.

#### 3.2 Lilium dormant bulbs from the Netherlands

## (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

#### (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

#### The *Lilium* dormant bulbs have been:

- produced in accordance with the requirements of the Bloembollenkeuringsdienst (BKD) Class 1 bulb certification scheme.

#### **AND**

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

#### AND

sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

#### AND

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria and viruses.

#### **AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

## (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section, and by providing the following additional declaration to the phytosanitary certificate:

"The *Lilium* dormant bulbs in this consignment have been:

 produced in accordance with the requirements of the BKD Class 1 bulb certification scheme.

#### **AND**

sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi [if applicable].

#### AND

sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria and viruses."

#### **AND**

- One of the following Additional Declarations for *Phytophthora capsici*<sup>1</sup>:

"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.

## 3.3 Lilium plants in tissue culture from any country

## (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

## (ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

#### (iii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Lilium* plants in tissue culture have been:

inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

#### AND

 derived from parent stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

#### AND

derived from parent stock tested using molecular/ serological methods [choose ONE option] and found free of Apple stem grooving virus and Tobacco rattle virus.

### (iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declaration to the phytosanitary certificate:

"The *Lilium* plants in tissue culture have been derived from parent stock:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests

#### **AND**

- tested using molecular/ serological methods [choose ONE option] and found free of *Apple stem grooving virus* and *Tobacco rattle virus*."

## (iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed overseas. Alternatively the inspection and testing may be completed in post-entry quarantine upon arrival in New Zealand according to the following conditions:

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** an import permit is required.

**PEQ**: Level 3B

**Quarantine Period**: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora capsici* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora capsici* are not mandatory.

<sup>&</sup>lt;sup>1</sup>Implementation of measures:

## **Pest List for Lilium**

## **REGULATED PESTS (actionable)**

Torrest	
Insect Insecta	
Collembola	
Entomobryidae	
Entomobrya multifasciata	Springtail
Lepidoptera	Springtan
Yponomeutidae	
Acrolepiopsis lilivora	_
πετοιεριορείε ιπινότα	
Mite	
Arachnida	
Acarina	
Acaridae	
Schwiebea cuncta	-
Schwiebea taiwanensis	-
Tenuipalpidae	
Brevipalpus lilium	false spider mite
Nematode	
Adenophorea	
Dorylaimida	
Longidoridae	
Xiphinema insigne	dagger nematode
Trichodoridae	augger nemate at
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
T.	
Fungus	
Ascomycota	
Dothideales Myoganhagaellagae	
Mycosphaerellaceae Didymellina intermedia	black rot
·	black blotch
Mycosphaerella martagonis  Pacidiomycotos Pacidiomycotos	DIACK DIOICH
Basidiomycota: Basidiomycetes Agaricales	
Tricholomataceae	
Armillaria mellea (anamorph Rhizomorpha	armillaria root rot
subcorticalis)	ariiiiiaria 100t 10t
Auriculariales	
Auriculariaceae	
Helicobasidium mompa	violet root rot
Basidiomycota: Teliomycetes	violet 100t 10t
Uredinales	
Pucciniaceae	
Puccinia sporoboli (anamorph Aecidium lilii)	Rust
Uromyces aecidiiformis	rust fungi
Stomyces accordings	1451 141151

Uromyces holwayi mitosporic fungi (Agonomycetes) Agonomycetales

unknown Agonomycetales

Rhizoctonia tuliparum basal rot Sclerotium rolfsii var. delphinii sclerotium rot Sclerotium wakkeri Blackleg

mitosporic fungi (Coelomycetes)

**Sphaeropsidales** Sphaerioidaceae

Macrophoma lilii black root rot Phyllosticta liliicola black rot

unknown Coelomycetes unknown Coelomycetes

Colletotrichum lilii

mitosporic fungi (Hyphomycetes)

Hyphomycetales Moniliaceae

> Botrytis hyacinthi hyacinth blight Ramularia vallisumbrosae white mould

**Oomycota** 

**Peronosporales** Peronosporaceae

> Phytophthora capsici Fruit rot of peppers

**Tuberculariales** Tuberculariaceae

> Fusarium oxysporum f. sp. lilii basal rot

unknown Hyphomycetes unknown Hyphomycetes

Aureobasidium microstictum

**Bacterium** 

Enterobacteriaceae

Erwinia lilii

Virus

Apple stem grooving virus [strains not in New Zealand] Lily rosette virus Tobacco rattle virus [strains not in New Zealand] Tomato ringspot virus

## Lithocarpus densiflorus

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Lithocarpus densiflorus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries:** Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

**Quarantine Pests:** Cronartium quercuum; Ceratocystis fagacearum; Tortricidae, Phytophthora ramorum

## **Entry Conditions:**

Basic; with variations and additional conditions as specified below:

### A. For Whole Plants (dormant) and Cuttings (dormant)

## **OPTION 1:**

**PEQ:** Level 2 **Minimum Period:** 6 months

a. Additional declaration: "*Ceratocystis fagacearum* is not known to occur in \_\_\_\_\_\_ (the country or state where the plants/cuttings were grown) \_\_\_\_\_\_".

## **OR** (for cuttings)

"The tree(s), from which this material was taken, was inspected during the previous growing season and no *Ceratocystis fagacearum* was detected". **OR** (for young plants)

"The plants were inspected during the previous growing season and no *Ceratocystis fagacearum* was detected".

- b. Additional declaration: "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water".
- c. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

## **OPTION 2:**

**PEQ:** Level 3B

Minimum Period: 6 months

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MPI-registered laboratory at the importers expense, prior to release to the importer.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Litchi*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: Australia

**Quarantine Pests**: Aceria litchii; Phellinus noxius; Xyloryctidae (Lepidoptera)

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

## A. For Whole Plants

**PEQ**: Level 2

Minimum Period: 6 months

a. Conditions for *Phellinus noxius* (section 2.2.1.13)

b. Additional declaration:

"The plants were grown on a nursery that has been inspected for the presence of *Aceria litchii* and members of the Xyloryctidae and none were found".

## **B.** For Tissue Cultures

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2

## Lophophora williamsii

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under Lophophora williamsii, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: All

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

**Import permit:** an import permit is required. Before applying for an import permit, the importer must obtain written approval to import from:

> **Director General of Health Ministry of Health** PO Box 5013 Wellington

**Attention: Advisor, Controlled Drug Licensing** 

Telephone: 04 496 2438

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Malus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## 1. Type of Malus nursery stock approved for entry into New Zealand

Cuttings (dormant); plants in tissue culture

*Malus* can be imported into Level 2 post entry quarantine from MPI-accredited facilities, or into Level 3B post entry quarantine from non-accredited facilities.

## 2. Pests of Malus

Refer to the pest list.

## 3. Entry conditions for:

# 3.1 *Malus* cuttings and tissue culture from offshore MPI-accredited facilities in any country

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Malus*, the accredited facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Malus*. Refer to the "Inspection, Testing and Treatment Requirements for *Malus*".

#### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Malus* nursery stock exported to New Zealand. **Import permit:** an import permit is required.

## (ii) *Phytosanitary requirements*

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Malus* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

#### **AND**

treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

#### AND

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-accredited facility].

#### **AND**

- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification.

## (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section [cuttings only] and by providing the following additional declarations to the phytosanitary certificate:

"The *Malus* cuttings / plants in tissue culture [choose ONE option] have been:

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-accredited facility].

#### AND

- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification."

## (iv) Post-entry quarantine

**PEQ**: All *Malus* nursery stock must be imported under permit into post-entry quarantine in a Level 2 greenhouse facility accredited to the Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 6 months (active continuous growth) in postentry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. For tissue cultures, the quarantine period begins when tissue cultures are deflasked into the PEQ greenhouse. Six months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

## 3.2 Malus cuttings and tissue culture from non-accredited facilities in any country

#### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Malus* nursery stock exported to New Zealand. **Import permit:** an import permit is required.

## (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Malus* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

#### **AND**

treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

## **AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

## (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section [cuttings only]. No additional declarations are required.

## (iv) Post-entry quarantine

**PEQ**: All *Malus* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility accredited to the Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 36 months in post-entry quarantine. For tissue cultures, the quarantine period begins when tissue cultures are deflasked into the PEQ greenhouse. During this time, imported material will be inspected, treated and/or tested for regulated pests as specified in the "Inspection, Testing and Treatment Requirements for *Malus*", at the expense of the importer. These times are indicative minimum quarantine periods and may be extended if material is slow growing, pests are detected, or treatments/testing are required.

## Pest List for Malus

For organisms intercepted that are not listed within this pest list refer to the <u>Biosecurity</u> <u>Organisms Register for Imported Commodities</u> to determine regulatory status.

## **REGULATED PESTS (actionable)**

Insect

Insecta

Coleoptera

Attelabidae

Rhynchites caeruleus apple twig cutter

Bostrichidae

Amphicerus bicaudatus apple twig borer
Apate monachus black borer

Buprestidae

Agrilus mali apple wood borer Agrilus spp. bark borers

Chrysobothris 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

Scolvtidae

Hypothenemus obscurusapple twig borerScolytus japonicusJapanese bark beetleScolytus rugulosusfruit bark borer

**Diptera** 

Cecidomviidae

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 eriophyid mite Phyllocoptes mali

Cenopalpus chitraliensis brvobia mite Cenopalpus haaii banana mite

Cenopalpus orakiensis Bailey's apple rust mite

flat scarlet mite Cenopalpus pulcher

Tenuipalpidae

Brevipalpus lilium false spider mite Brevipalpus obovatus privet mite Tenuipalpus taonicus Pacific mite Rhinotergum schestovici mite

Tetranychidae

Eotetranychus carpini false spider mite Eotetranychus uncatus Lewis spider mite hazel mite Eotetranychus willamettei Oligonychus gossypii tetranychid mite Oligonychus newcomeri spider mite Oligonychus yothersi avocado red mite Tetranychus canadensis four spotted spider mite Tetranychus kanzawai Kanzawa spider mite Tetranychus mcdanieli McDaniel spider mite Tetranychus schoenei Schoenei spider mite Amphitetranychus viennensis hawthorn spider mite

Tvdeidae

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** 

Ervsiphaceae

Pleochaeta mali powdery mildew

Heotiales

Dermateaceae

Diplocarpon mali black spot Pezicula perennans perennial canker

Sclerotiniaceae

Grovesinia pyramidalis (anamorph Cristulariella moricola) target spot Monilinia laxa f. sp. mali brown rot

monilinia leaf blight Monilinia mali Monilinia fructigena (anamorph Monilia fructigena) European brown rot

Sclerotinia spp. neck rot **Rhytismatales** Cryptomycetaceae Potebniamyces pyri (anamorph Phacidiopycnis piri) Phacidiopycnis rot **Sordariales** Chaetomiaceae Chaetomium spp. fruit rot **Taphrinales** Taphrinaceae leaf blister Taphrina bullata **Xvlariales** Xvlariaceae Biscogniauxia marginata nailhead canker Daldinia vernicosa wood rot Xvlaria mali black root rot **Ascomycota: Saccharomycetes** Saccharomycetales Endomycetaceae Endomycopsis mali rot **Basidiomycota: Basidiomycetes Agaricales** Coprinaceae Coprinus psychromorbidus coprinus rot Tricholomataceae armillaria root rot Armillaria mellea Armillaria ostoyae armillaria root rot Armillaria tabescens armillaria root rot Ceratobasidiales Ceratobasidiaceae thread blight Ceratobasidium stevensii Ganodermatales Ganodermataceae Ganoderma lucidum wood rot Hymenochaetales Hymenochaetaceae white heart rot Phellinus pomaceus Lachnocladiales Lachnocladiaceae white root rot Scytinostroma galactinum **Polyporales** Corticiaceae thread blight Corticium koleroga Cyphellaceae

Maireina marginata wood decay

Meripilaceae

Phlebia radiata wood decay Trametes ochracea wood decay

**Poriales** 

Coriolaceae

Ceriporia spissa wood rot Coriolopsis gallica white rot Fomes fomentarius wood decay Fomitopsis pinicola brown cubical rot Laetiporus sulphureus (anamorph Sporotrichum versisporum) brown cubical rot Lenzites betulina wood decay Oxyporus latemarginatus wood decay Oxyporus similis wood decay

**Stereales** 

Atheliaceae

Butlerelfia eustacei storage rot

Sistotremataceae

Phymatotrichopsis omnivorum Texas root rot

#### **Basidiomycota: Urediniomycetes**

#### **Uredinales**

#### Pucciniaceae

Gymnosporangium clavipes quince rust

Gymnosporangium cornutum rust

Gymnosporangium fuscumEuropean pear rustGymnosporangium globosumAmerican hawthorn rust

Gymnosporangium hemisphaericum rust

Gymnosporangium libocedri Pacific Coast pear rust Gymnosporangium nelsonii Rocky Mountain pear rust

Gymnosporangium nidus-avis rus

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 rotSphaeropsis pyriputrescensSphaeropsis 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 macrosporabellflower leaf spotVerticillium 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** 

**Pseudomonadales** 

Pseudomonadaceae

Pseudomonas syringae pv. papulans blister spot

Virus

Cherry rasp leaf virus Tomato bushy stunt virus Tomato ringspot virus

Viroid

Apple dimple fruit viroid Apple fruit crinkle viroid Apple scar skin viroid

Phytoplasma

'Candidatus Phytoplasma asteris' 'Candidatus Phytoplasma mali'

Apple sessile leaf phytoplasma Apple proliferation phytoplasma

Disease of unknown etiology

Apple blister bark agent Apple brown ringspot agent Apple bumpy fruit agent Apple bunchy top agent Apple dead spur agent

Apple decline

Apple freckle scurf agent

Apple green dimple and ring blotch agent Apple junction necrotic pitting agent Apple McIntosh depression agent

Apple narrow leaf agent Apple Newton wrinkle agent Apple pustule canker agent Apple red ring agent

Apple rosette agent Apple rough skin agent Apple russet wart agent Apple star crack agent

Apple transmissible internal bark necrosis agent

# Inspection, Testing and Treatment Requirements for Malus

Insects Mites	Visual inspection <b>AND</b> approved insecticide treatments as described in section 2.2.1.6 of the Basic conditions [cuttings only]
Mites	assertion in section 2.2.1.6 of the Busic conditions [cuttings only]
	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
Oomycete	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	Woody indexing ('Golden delicious') or herbaceous indexing (Chenopodium quinoa and Chenopodium amaranticolor) AND PCR
Tomato bushy stunt virus	Herbaceous indexing (Chenopodium quinoa and Chenopodium amaranticolor)
Tomato ringspot virus	Herbaceous indexing (Chenopodium quinoa and Chenopodium amaranticolor) AND ELISA or PCR
Viroids	
Apple dimple fruit viroid	Woody indexing ('Red delicious') AND PCR
Apple fruit crinkle viroid	Woody indexing ('Golden delicious') AND PCR
Apple scar skin viroid	Woody indexing ('Golden delicious' and 'Red delicious') <b>AND</b> PCR
Phytoplasmas	
'Candidatus Phytoplasma asteris' (Apple sessile leaf phytoplasma)	Nested PCR or real time PCR using universal phytoplasma primers
'Candidatus Phytoplasma mali'	Woody indexing ('Golden delicious') AND nested PCR or real
(Apple proliferation phytoplasma)	time PCR using universal phytoplasma primers
Diseases of unknown etiology	
Apple blister bark agent	Growing season inspection
Apple brown ringspot agent	Growing season inspection
Apple bumpy fruit agent	Growing season inspection
Apple bunchy top agent	Growing season inspection
Apple dead spur agent	Woody indexing ('Golden delicious' and 'Red delicious')
Apple decline	Growing season inspection
Apple freckle scurf agent	Growing season inspection
Apple green dimple and ring blotch agent	Growing season inspection
Apple junction necrotic pitting agent	Growing season inspection
Apple McIntosh depression agent	Growing season inspection
Apple narrow leaf agent	Growing season inspection
Apple Newton wrinkle agent	Growing season inspection
Apple pustule canker agent	Growing season inspection
Apple red ring agent	Growing season inspection
Apple rosette agent Apple rough skin agent	Growing season inspection  Woody indoving ('Golden deligious')
	Woody indexing ('Golden delicious') Woody indexing ('Golden delicious')

Apple star crack agent	Woody indexing ('Golden delicious' and 'Red delicious')
Apple transmissible internal bark necrosis agent	Growing season inspection

#### **Notes:**

- 1. Pest free area or Pest free place of production endorsements for regulated viruses, viroids, phytoplasmas, and diseases of unknown etiology must be assessed by MPI prior to permit issue. The exporting NPPO must endorse additional declarations on the phytosanitary certificate, to be considered equivalent to testing in post entry quarantine.
- **2.** The **unit for testing** is definied in section 2.3.2.1.
- **3. Tissue culture plantlets** must be deflasked and grown in a post entry quarantine greenhouse, only material from the greenhouse is to be selected for testing.
- **4. Growing season** is defined as an extended period of plant growth that includes environmental conditions equivalent to spring (longer wetter days and colder temperatures), summer (longer dryer days and warm temperatures), and autumn (shorter wetter days and warm but cooling temperatures).
- **5. Virus testing** is to be conducted on new spring growth.
- **6. Phytoplasma and bacteria testing** is to be conducted at the end of the summer growth period.
- 7. Woody indexing relies on the development of fruit and bark symptoms on susceptible *Malus* cultivars which would only be expressed under field conditions (ie. Level 1 post entry quarantine [PEQ]). Negative and positive control plants must be included; the positive control must develop the expected symptoms (eg. Apple green crinkle [non-regulated]). Indicator plants must be observed for at least two fruit crops whilst the plants are in Level 1 PEQ. All nursery stock plants must remain in Level 3B post entry quarantine for the completion of woody indicator testing.
  - **Option 1:** Woody indexing may be initiated in Level 1 PEQ after all the herbaceous indexing, molecular, and serological tests have been completed.
  - **Option 2:** Woody indexing may be initiated in Level 3B PEQ when the nursery stock arrives in New Zealand and transferred to Level 1 PEQ as soon as the herbaceous indexing, molecular, and serological tests have been completed. In this case, woody indicator plants must be held under appropriate environmental conditions (day time temperatures of 22-25 °C and night time temperatures of 12-18 °C) in a separate unit within the facility that does not contain any other plant material.
- **8. Testing protocols** for tests completed in New Zealand are described in the Malus (Apple) Post-Entry Quarantine Testing Manual, which can be viewed on the website:

  http://www.mpi.govt.nz/protection-and-response/laboratories/plant-health-and-environment-laboratory/publications/
- **9. Inspection** of the *Malus* plants by the operator of the PEQ facility for signs of pest and disease must be at least twice per week for the first three months of active growth, and during spring and autumn. All other times of active growth (summer), plants should be inspected once per week. A record of inspections carried out by the Operator is to be kept and made available to the MPI Inspector on request.
- 10. Other internationally recognised testing methods may be accepted by MPI with prior notification.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Mangifera*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

Approved Countries: Australia, India, Pakistan, Mexico, Philippines

Quarantine Pests: Ceratocystis fimbriata, Phellinus noxius, 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<sup>1</sup>

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

"The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

"The [insert species name] plants in this consignment were produced in a "pest free area" for *Phytophthora palmivora*".

#### ΛR

"The [insert species name] plants in this consignment were produced in a "pest free place of production" for *Phytophthora palmivora*".

d. Additional declaration:

"Xanthomonas campestris pv. mangiferae-indicae is not known to occur in (the
country or state where the plants were grown)
OR
"The plants were inspected during the growing season and no <i>Yanthomonas camposti</i>

"The plants were inspected during the growing season and no *Xanthomonas campestris* pv. *mangiferae-indicae* was detected".

## **B.** For Tissue Cultures

**PEO**: Level 2

Minimum Period: 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
- b. Additional declaration:

"Xanthomonas campestris pv. mangiferae-indicae is not known to occur in \_\_\_\_\_\_".

(the country or state where the plants were grown) \_\_\_\_\_\_".

OR

"The plants were inspected during the growing season and no <i>Xanthomonas campestris</i> pv. <i>mangiferae-indicae</i> was detected".		
<sup>1</sup> Implementation of measures: For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for <i>Phytophthora</i>		
palmivora must be met.		
For consignments with a phytosanitary certificate issued no later than 24 May 2018, the requirements for <i>Phytophthora</i> .		

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *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:**

**PEO**: Level 2

**Minimum Period**: 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8) **Note:** Only applies to members of the *Metrosideros* and *Pimenta* genera
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12) **Note:** Only applies to members of the *Leptospermum*, *Metrosideros* and *Myrtus* genera
- c. Conditions for *Phellinus noxius* (section 2.2.1.13) **Note:** Only applies to the following species: *Melaleuca leucadendra*
- d. Conditions for Phytophthora palmivora<sup>1</sup>

Note: Only applies to members of the Psidium genus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

"The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

"The [insert species name] plants in this consignment were produced in a "pest free area" for *Phytophthora palmivora*".

#### ΛR

"The [insert species name] plants in this consignment were produced in a "pest free place of production" for *Phytophthora palmivora*".

e. Additional declaration

"Puccinia psidii s.l. complex (including Uredo rangelii) is not known to occur in (the country of origin)".

## **OPTION 2:**

**PEO**: Level 3B

Minimum Period: 6 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8) **Note:** Only applies to members of the *Metrosideros* and *Pimenta* genera

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12) **Note:** Only applies to members of the *Leptospermum*, *Metrosideros* and *Myrtus* genus

#### **B. For Tissue Cultures**

- a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5) **Note:** Only applies to members of the *Leptospermum*, *Metrosideros* and *Myrtus* genus
- b. Conditions for Puccinia psidii s.l. complex:

#### **OPTION 1:**

- i) Additional declaration:
  - "Puccinia psidii s.l. complex (including Uredo rangelii) is not known to occur in \_\_(the country of origin)\_\_".

#### OR

- "The tissue cultures in this consignment have been actively growing in the culture container for at least four weeks at temperatures between 15-23°C (59-73.4°F)".

#### **OPTION 2:**

PEQ: Level 2 Tissue culture laboratory

Minimum Period: 4 weeks

i) The cultures containers are not to be opened during the quarantine period. **Guidance for importers**: Tissue cultures imported this option must complete the PEQ requirements for *Puccinia psidii* before being deflasked into the PEQ greenhouse.

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora palmivora* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora.* palmivora are not mandatory.

<sup>&</sup>lt;sup>1</sup>Implementation of measures:

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under Miscanthus x giganteus", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

- 1. **Approved Countries:** United Kingdom and United States of America
- 2. **Type of material permitted entry:** Plants *in-vitro*
- 3. **Pests of** *Miscanthus* **x** *giganteus* Refer to the enclosed pest list.

## 4. Entry conditions:

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Miscanthus* x *giganteus* nursery stock exported to New Zealand.

Import permit: an import permit is required.

### (ii) Phytosanitary requirements

The full botanical name of *Miscanthus* x *giganteus* must be identified upon the phytosanitary certificate.

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Miscanthus x giganteus* plants in tissue culture have been:

- derived from mother plants which were not expressing symptoms of infection by regulated pests prior to the excision of the in-vitro plantlets.

#### AND

- derived from explant material which has been surfaced sterilised in a solution of 0.5% sodium hypochorite and sterile water, or MPI approved alternative treatment.

#### **AND**

- propagated in culture media which is clear.

#### AND

- prepared by asexual reproduction (clonal techniques) under sterile conditions.

#### **AND**

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

#### AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

#### (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section. The following additional declarations must be identified on the phytosanitary certificate.

The *Miscanthus* x *giganteus* plants in-vitro in this consignment have been:

- derived from mother plants sourced from a "Pest free area"," Pest free place of production" or "Pest free production site", free from *Leifsonia xyli* subsp. *xyli*, Miscanthus streak virus, and Sugarcane mosaic virus

#### **AND**

- derived from mother plants sourced from a "Pest free area"," Pest free place of production" or "Pest free production site", free from *Ustilago scitaminea* **OR** derived from explants that have been subjected to two consecutive hot water treatments at a minimum temperature of 50°C for 3 hours per treatment **OR** two consecutive hot water treatments at a minimum temperature of 52°C for 1 hour per treatment

### (iv) Inspection, Testing and Treatment of the consignment

Where an additional declaration cannot be attested to on the phytosanitary certificate by the NPPO, testing of material shall be completed in post-entry quarantine upon arrival in New Zealand as specified within the testing and treatment requirements in this schedule.

For organisms intercepted that are not listed within this pest list refer to the <u>Biosecurity</u> <u>Organisms Register for Imported Commodities</u> to determine regulatory status.

## (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:**

#### Bacteria

Bacterial leaf blight Acidovorax avenae ssp. avenae

Leifsonia xyli subsp. Xyli Sugarcane ratoon stunting disease

**Fungi** 

Acremonium sp. Black bundle disease

Colletotrichum sp. Leaf spot Diaporthe sp. Canker Diplodia sp. Blight Drechslera gigantean Eyespot Fusarium miscanthi Rot Fusarium pallidoroseum Rot Glomerella sp. Leaf spot

Glomerella tucumanensis Leaf spot Helminthosporium sp. Eyespot Leptosphaeria sp. Canker Magnaporthe salvinii Stem rot Mycosphaerella recutita Leaf blight Mycosphaerella striatiformans Leaf spot Nigrospora sp. Stalk rot

Passalora koepkei Yellow spot Peronosclerospora sp. Downy mildew Canker Phlyctema sp. Phoma sp. Blight Phomopsis sp. Blight Phyllachora sp. Leaf spot Puccinia melanocephala Sugarcane rust Ramularia sp. Anthracnose

Rhizoctonia sp. Root rot Stagonospora sp. Scorch Thanatephorus cucumeris Blight

Ustilago scitaminea Sugarcane smut Verticillium wilt Verticillium sp.

Mites

Bamboo mite Schizotetranychus celarius

Viruses

Miscanthus streak virus Sugarcane mosaic virus

## Treatment and Testing Requirements during post entry quarantine:

Note: Treatment and testing requirements identified within this table are required to be undertaken when official assurances specified in this schedule cannot be provided by the exporting country's NPPO.

ORGANISM TYPE	MPI ACCEPTABLE MEASURES
Fungi	
Ustilago scitaminea	PCR/BIO-PCR, <b>OR</b> two consecutive hot water treatments at a minimum temperature of 50°C for 3 hours per treatment <b>OR</b> two consecutive hot water treatments at a minimum temperature of 52°C for 1 hour per treatment.
Bacteria	
Leifsonia xyli subsp. xyli	PCR/BIO-PCR, <b>OR</b> fluorescent-antibody staining of sap extracts, concentrated on membrane filters by filtration with observation by epifluorescence microscopy.
Viruses	
Miscanthus streak virus	PCR
Sugarcane mosaic virus	PCR or ELISA

#### **Notes:**

- 1. Unit for testing: The unit for testing is defined in section 2.3.2.1.
- **2. Sample size for testing:** Sample size required for testing will be determined by MPI based on the specific test to be undertaken.
- 3. Enzyme linked immunosorbent assay (ELISA) tests: All ELISA tests must be validated using positive controls prior to use in quarantine testing. Positive, negative, and buffer controls must be used in all tests unless indicated otherwise by MPI.
- **4. Polymerase chain reaction (PCR) tests:** All PCR tests must be validated using positive controls prior to use in quarantine testing. Positive and no template controls must be used in all tests. Internal control primers and a negative plant control shall be used in PCR tests unless indicated otherwise by MPI.
- **5. Inspection:** The operator of the PEQ facility must inspect the plants for signs of pest and disease at least twice per week during periods of active growth.
- 6. Other internationally recognised testing methods: May be accepted by MPI with prior notification.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Musa*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: All

**Quarantine Pests**: Cosmopolites sordidus; Fusarium oxysporum f.sp. cubense;

Mycosphaerella fijiensis; Pseudomonas solanacearum; Radopholus

similis; Bunchy top virus

**Entry Conditions**: **Basic**; with variations and additional conditions as specified below:

A. For Whole Plants

**PEQ**: Level 3B

Minimum Period: 3 months

#### **B.** For Tissue Cultures

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a MPI-registered laboratory at the importers expense, prior to release to the importer;

**PLUS** 

#### **Additional Declaration:**

"The cultures have been derived from parent stock tested and found free of Bunchy top virus".

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Nandina*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Alternanthera mosaic virus; Phellinus noxius; Plantago asiatica mosaic virus (synonym Nandina mosaic virus); Xylella fastidiosa

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

#### A. For Whole Plants

**PEQ:** Level 2

Minimum Period: 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)
- c. Additional declaration: "Alternanthera mosaic virus and Plantago asiatica mosaic virus are not known to occur in \_\_\_\_\_ (the country or state where the plants were grown) \_\_\_\_\_".

#### **B.** For Tissue Cultures

**PEO:** 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 not recognised by MPI as free from *Xylella fastidiosa*
- b. Additional declaration: "The cultures have been derived from parent stock tested and found free of *Alternanthera mosaic virus* and *Plantago asiatica mosaic virus* ".

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Nacissus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Frankliniella occidentalis; Hepialus lupulinus; Lilioceris lilii;

Pratylenchus scribneri; Ramularia vallisumbrosae; Sclerotinia

polyblastis; Steneotarsonemus laticeps; virus diseases.

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

A. For Whole Plants

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, USA:

#### **OPTION 1:**

No import permit is required.

PEQ: None

**Additional Declaration(s):** 

1) For bulbs produced under a MPI-approved Dutch bulb propagation scheme:

"In addition to inspection of the dormant bulbs prior to shipment, the imported bulbs meet the requirements of the BKD Class 1 bulb certification scheme."

OR

2) For bulbs NOT produced under a MPI-approved bulb propagation scheme:

"In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests."

**OPTION 2: 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, USA:

# **OPTION 1: PEO:** Level 1

**Minimum Period:** 3 months **Additional Declaration(s):** 

"The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

#### AND

treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

#### **OPTION 2:**

**PEQ:** Level 2

**Minimum Period:** 3 months

#### **D. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

#### **PLUS:**

#### **Additional Declaration:**

"The cultures have been derived from parent stock tested and found free of virus diseases."

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Olea*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## 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) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

#### (v) <u>Post-entry quarantine</u>

**PEQ**: All *Olea* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility accredited to the Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 12 months in post-entry quarantine and will be inspected, treated and/or tested for regulated pests as specified in the "Inspection, Testing and Treatment Requirements for *Olea*", at the expense of the importer. Twelve months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

## Pest List for Olea

## **REGULATED PESTS (actionable)**

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 ruscifig wax scaleLichtensia viburniscaleMetaceronema japonicascale insect

Diaspididae

Aonidomytilus espinosaiscaleHemiberlesia palmaepalm scaleLeucaspis riccaescaleLindingaspis ferrisiscaleParlatoria oleaeolive scalePseudaulacaspis pentagonawhite peach scaleSelenaspidus articulatusWest Indian red scale

Lepidoptera

Pyralidae

Euzophera pinguis bark borer

Mite

Arachnida

Acarina

**Eriophyidae** 

Aceria cretica mite
Aceria oleae olive mite

Aculops benakii olive yellow spot mite

Aculus oleariusolive miteDitrymacus athiasellusolive miteEriophyes oleaeolive bud miteEriophyes oliviolive mite

Oxycenus maxwelliolive leaf and flower miteOxycenus niloticusolive leaf and flower miteOxycenus noloticusolive leaf and flower mite

Tegonotus hassani olive rust mite

Tenuipalpidae

Brevipalpus chalkidicusfalse spider miteBrevipalpus macedonicusfalse spider miteBrevipalpus oleaefalse spider mite

Brevipalpus 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

Xylariales Xylariaceae

Xylaria sicula root rot

Basidiomycota Agaricales

Agaricaceae

Armillaria mellea (anamorph Rhizomorpha subcorticalis) armillaria root rot

Boletales Paxillaceae

Omphalotus olearius wood rot

Ganodermatales Ganodermataceae

Ganoderma lucidum (anamorph Polyporus lucidus) wood rot

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 Fomes torulosus

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 dalmaticabrown spotCytospora oleinacankerMacrophoma dalmaticafruit rotPhoma incomptastem blight

Phyllosticta oleae phyllosticta leaf spot

Septoria obesa leaf spot

Septoria oleaeleaf spotSeptoria oleaginaleaf spotSeptoria serpentarialeaf spotSphaeropsis dalmaticastem gallSphaeropsis oleaestem gallUnknown CoelomycetesUnknown CoelomycetesCylindrosporium olivaeleaf spot

#### **Bacterium**

#### Pseudomonadaceae

Pseudomonas syringae pv. garcae twig blight Xylella fastidiosa

#### Virus

Cherry leaf roll virus [strains not in New Zealand] Olive latent 1 virus Olive latent 2 virus Olive latent ringspot virus Olive leaf yellowing-associated virus Olive vein yellow virus Strawberry latent ringspot virus [strains not in New Zealand] -

#### Phytoplasma

Olive witches' broom phytoplasma

## Disease of unknown aetiology

Infectious yellows Leaf malformation Olive sickle leaf disease Olive yellow mosaic disease Olive yellow mottling and decline Partial paralysis -

## Inspection, Testing and Treatment Requirements for Olea

ORGANISM TYPES	MPI-ACCEPTED METHODS (See notes below)
Insects	Visual inspection AND approved insecticide treatments (Refer to section 2.2.1.6 of the basic conditions) [cuttings only].
Mites	Visual inspection AND approved miticide treatments (Refer to section 2.2.1.6 of the basic conditions) [cuttings only] or binocular microscope inspection in PEQ [plants in tissue culture only].
Fungi	
Fungi	Growing season inspection in PEQ for disease symptom expression.
Oomycete	Growing season inspection in PEQ for disease symptom expression.
Bacterium	
Pseudomonas syringae pv. garcae	Growing season inspection in PEQ for disease symptom expression.
Xylella fastidiosa	Growing season inspection in PEQ for disease symptom expression AND PCR
Virus	
Cherry leaf roll virus [strains not in New Zealand]	ELISA or PCR AND herbaceous indicators Ca, Cq and Nb.
Olive latent 1 virus	Herbaceous indicators Ca, Cq and Nb.
Olive latent 2 virus	Herbaceous indicators Ca, Cq and Nb.
Olive latent ringspot virus	Herbaceous indicators Ca and Cq.
Olive leaf yellowing-associated virus	Woody indicators (Olea europaea cv. Biancolilla)
Olive vein yellow virus	Herbaceous indicators Cq
Strawberry latent ringspot virus [strains not in New Zealand]	ELISA or PCR AND herbaceous indicators Ca and Cq.
Phytoplasmas	Woody indicators AND nested PCR or real time PCR using universal phytoplasma primers.
Diseases of unknown aetiology	Growing season inspection in PEQ for disease symptom expression.

#### Notes:

- 1. The unit for testing is defined in section 2.3.2.1.
- 2. Indicator hosts: *Chenopodium amaranticolor* (Ca), *Chenopodium quinoa* (Cq), and *Nicotiana benthamiana* (Nb). At least two plants of each indicator species must be used in mechanical inoculation tests.
- 3. Indicator plants must be grown under appropriate temperatures and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.
- 4. Enzyme linked immunosorbent assay (ELISA); Polymerase chain reaction (PCR).
- 5. Testing must be carried out on *Olea* plants while they are in active growth. For bioassay and ELISA, plants shall be sampled from at least two positions including a young, fully expanded leaf at the top of the plant and an older leaf from a midway position.
- 6. PCR and ELISA must be validated using positive controls/reference material prior to use in quarantine testing.
- 7. Positive and negative controls must be used in ELISA tests.
- 8. Positive and negative controls (including a blank water control) must be used in PCR. Ideally positive internal controls and a negative plant control should be used. Internal controls in PCR tests are important to avoid the risk of false negatives.
- 9. Inspect *Olea* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy.
- 10. With prior notification, MPI will accept other internationally recognised testing methods.

## Paeonia (herbaceous species)

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Paeonia* (herbaceous)".

#### **GENERAL CONDITIONS:**

**Approved Countries**: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom, United States of America

Quarantine Pests: Cronartium flaccidium; Phymatotrichopsis omnivora

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

#### **For Dormant Tubers:**

**PEO**: Level 1 or Level 2 (see below)

**Minimum Period**: 3 months

### **Additional Declaration(s):**

- **1.** "The dormant tubers have been sourced from a "Pest free area" or "Pest free place of production", free from *Cronartium flaccidium*".
- **2.** "The dormant tubers have been sourced from a "Pest free area", free from *Phymatotrichopsis omnivora*".

#### OR

(i) "The dormant bulbs have been sourced from a "Pest free place of production", free from *Phymatotrichopsis omnivora*".

#### AND

(ii) the consignment must be treated for fungi as described in Section 2.2.1.7 "Pesticide treatments for dormant bulbs". If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section of the phytosanitary certificate.

#### **AND**

(iii) Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine.

## Paeonia (tree species)

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Paeonia* (tree species)", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, United Kingdom, United States of America

**Quarantine Pests**: Cronartium flaccidum

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

#### A. For Whole Plants

**PEQ**: Level 1

Minimum Period: 3 months

**Isolation:** open ground - 400m from any *Pinus* tree

#### **Additional Declarations:**

- 1. "Cronartium flaccidium is not known to occur in \_\_\_ (the country or state where the plants were grown) \_\_\_".
- 2. "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water".

#### **B.** For Tissue Cultures

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2;

## Papaver somniferum

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under Papaver sonniferum", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: All

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

**Import permit:** an import permit is required. Before applying for an import permit, the importer must obtain written approval to import from:

> **Director General of Health Ministry of Health** PO Box 5013 Wellington

**Attention: Advisor, Controlled Drug Licensing** 

**Telephone: 04 496 2438** 

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Paulownia*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: Australia

Quarantine Pests: Phytophthora palmivora, Witches broom phytoplasma

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

### A. For Whole Plants

**PEQ**: Level 2

Minimum Period: 3 months

a. 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*<sup>1</sup>

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

"The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

"The [insert species name] plants in this consignment were produced in a "pest free area" for *Phytophthora palmivora*".

#### OR

"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**

#### **Additional Declaration:**

"The cultures have been derived from parent stock tested and found free of Witches broom phytoplasma".

For consignments with a phytosanitary certificate issued <u>on or after 25 May 2018</u> the requirements for *Phytophthora palmivora* <u>must</u> be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora*. *palmivora* are not mandatory.

<sup>&</sup>lt;sup>1</sup>Implementation of measures:

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Persea*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### 1. Type of Persea nursery stock approved for entry into New Zealand

Cuttings (dormant); Plants in tissue culture

#### 2. Pests of Persea

Refer to the pest list.

#### 3. Entry conditions for:

#### 3.1 Persea cuttings and tissue culture from any country

#### (i) <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**

treated for regulated insects and mites as described in section 2.2.1.6 within 7 days prior to shipment [cuttings only].

#### AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

#### (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section [cuttings only] and by providing the following additional declaration to the phytosanitary certificate:

"The *Persea* cuttings / plants in tissue culture [choose ONE option] have been:

sourced from a "Pest free area" and/or a "Pest free place of production", free from
 Avocado cryptic virus 3, Potato spindle tuber viroid and Avocado black streak disease."

## (iv) Post-entry quarantine

**PEQ**: All *Persea* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility accredited to the Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 12 months in post-entry quarantine and will be inspected, treated and/or tested for regulated pests as specified in the "Inspection, Testing and Treatment Requirements for *Persea*", at the expense of the importer. Twelve months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

## Pest List for Persea

### **REGULATED PESTS (actionable)**

n	S	e	c	t
	n	ns	<b>Inse</b>	nsec

#### 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

coreid bug

Lygaeidae

Pseudotheraptus wayi

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 scaleFiorinia fioriniaefiorinia 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

Trioza aguacate psyllid
Trioza anceps psyllid
Trioza godoyae psyllid
Trioza perseae psyllid

Hymenoptera Formicidae Atta cephalotes leaf-cutting ant

Lepidoptera

Geometridae

Ascotis selenaria mugwort looper Sabulodes aegrotata mugwort looper

Hesperiidae

Pyrrhopyge chalybea swift moth

Noctuidae

Peridroma margaritosa -Prodenia eridania -

Pseudoplusia includens soybean looper

Oecophoridae

Stenoma catenifer stenomid moth

Pyralidae

Cryptoblabes gnidiella Christmas berry webworm

Stericta albifasciata -

Tortricidae

Amorbia cuneana leafroller

Amorbia emigratella Mexican leafroller

Amorbia essigana leafroller
Argyrotaenia citrana orange tortrix
Cacoecimorpha pronubana carnation leafroller
Cryptophlebia leucotreta false codling moth
Homona spargotis avocado leafroller
Isotenes miserana orange fruitborer
Platynota stultana omnivorous leafroller

Thysanoptera Thripidae

Retithrips syriacus black vine thrips Selenothrips rubrocinctus red-banded thrips

Mite

Arachnida

Acarina

Tetranychidae

Oligonychus coffeae tea red spider mite
Oligonychus perseae spider mite

Oligonychus punicae avocado brown mite
Oligonychus yothersi avocado red mite

Fungus

Ascomycota

**Phyllachorales** 

Phyllachoraceae

Glomerella cingulata var. minor (anamorph anthracnose

Colletotrichum gloeosporioides var. minus)

Xylariales

Xylariaceae

Rosellinia bunodes Rosellinia pepo -

Basidiomycota

Hymenochaetales

Hymenochaetaceae

Phellinus noxius brown root rot

Oomycota

Pythiales

Pythiaceae

Phytophthora palmivora black rot

Dothideomycetes

**Myriangiales** 

Elsinoeaceae

Sphaceloma perseae Avocado scab

mitosporic fungi (Coelomycetes)

Sphaeropsidales

Sphaerioidaceae

Phomopsis perseae fruit rot

mitosporic fungi (Hyphomycetes)

Hyphomycetales Dematiaceae

Pseudocercospora purpurea cercospora spot blotch

unknown Hyphomycetes unknown Hyphomycetes

Stilbella cinnabarina -

**Bacteria** 

Pseudomonadaceae

Xylella fastidiosa Pierce's disease

Virus

Avocado cryptic virus 3

Viroid

Avocado sunblotch viroid [strains not in New Zealand]

Potato spindle tuber viroid

Disease of unknown aetiology

Avocado black streak -

## Inspection, Testing and Treatment Requirements for Persea

ORGANISM TYPES	MPI-ACCEPTED METHODS (See notes below)
Insects	Visual inspection AND approved insecticide treatments (Refer to section 2.2.1.6 of the basic conditions) [cuttings only].
Mites	Visual inspection AND approved miticide treatments (Refer to section 2.2.1.6 of the basic conditions) [cuttings only] or binocular microscope inspection in PEQ [plants in tissue culture only].
Fungi	Growing season inspection in PEQ for disease symptom expression.
Bacteria	
Xylella fastidiosa	Growing season inspection in PEQ for disease symptom expression AND PCR
Virus	
Avocado cryptic virus 3	Pest free area or Pest free place of production AND Growing season inspection in PEQ for disease symptom expression.
Viroid	<u> </u>
Avocado sunblotch viroid [strains not in New Zealand]	Hybridisation or PAGE or PCR (two sets).
Potato spindle tuber viroid	Pest free area or Pest free place of production AND Growing season inspection in PEQ for disease symptom expression.
Disease of unknown aetiology	
Avocado black streak	Pest free area or Pest free place of production AND Growing season inspection in PEQ for disease symptom expression.

#### **Notes:**

- 1. The unit for testing is defined in section 2.3.2.1.
- 2. Testing must be carried out on Persea plants while they are in active growth.
- 3. Polymerase chain reaction (PCR), Polyacrylamide gel electrophoresis (PAGE) and hybridisation must be validated using positive controls prior to use in quarantine testing. Positive and negative controls (including a blank water control) must be used in molecular tests. Ideally positive internal controls and a negative plant control should be used.
- 4. Inspect *Persea* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy.
- 5. With prior notification, MPI will accept other internationally recognised testing methods.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *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.

PEO: Level 2

Minimum Period: 3 months

a. Conditions for *Phytophthora palmivora*<sup>1</sup> **Note:** Only applies to members of the *Petunia* genus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

"The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

"The [insert species name] plants in this consignment were produced in a "pest free area" for *Phytophthora palmivora*".

#### OR

"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*<sup>2</sup>

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*<sup>2</sup>

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-modified-seeds/">http://mpi.govt.nz/importing/plants/seeds-for-sowing/genetically-modified-seeds/</a>

## Inspection, Testing and Treatment Requirements for Petunia

ORGANISM	MPI ACCEPTABLE METHODS	Comments
Insects	Visual inspection AND approved	Applies to whole plants and
	insecticide treatments as described in	cuttings only
	section 2.2.1.6 of the Basic conditions	
Mites	Visual inspection AND approved	Applies to whole plants and
	miticide treatments as described in the	cuttings only
	section 2.2.1.6 of the Basic conditions	
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.

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora palmivora* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora.* palmivora are not mandatory.

Measures for Tomato chlorotic dwarf viroid will come into force on 22 August 2020

<sup>&</sup>lt;sup>1</sup>Implementation of measures:

<sup>&</sup>lt;sup>2</sup>Implementation of measures:

## **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

from any genes of other genetic material which has been mounted 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,
other import documentation) was produced neither "from" nor "by" genetically modified crops.
I undertake to inform immediately the importer and the Ministry for Primary Industries, MPI, New Zealand of any information that can undermine the accuracy of this declaration.
Note that MPI may request evidence as to how production, handling and transport of the nursery stock is performed in the field, or require and audit as a way to provide quality to the production system.
I,
Signed by (exporter) and Company Name and details
(print name)
Date
Signed by (importer) and Company Name and details
(print name)
Warning: Any person who knowingly makes a statement of information or a declaration that is false or misleading in a material particular may on summary conviction, be sentenced to a term of imprisonment and/or fined not

exceeding \$500,000.00

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Phalaenopsis*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

#### **GENERAL CONDITIONS:**

**Approved Countries:** All

Quarantine Pests: Capsicum chlorosis virus, Basella rugose mosaic virus, Phytophthora

palmivora

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

#### A. For Whole Plants

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Phytophthora palmivora*<sup>1</sup>

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

"The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

"The [insert species name] plants in this consignment were produced in a "pest free area" for *Phytophthora palmivora*".

#### OR

"The [insert species name] plants in this consignment were produced in a "pest free place of production" for *Phytophthora palmivora*".

#### B. For Whole Plants in growing media from Taiwan

No import permit is required.

**PEO:** None

**Specific Requirements:** Sections 2.2.1.6 and 2.2.1.9 of the Basic Conditions are not required. **Additional Declarations:** 

- a. Additional declarations
  - "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*<sup>1</sup>

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

"The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

"The [insert species name] plants in this consignment were produced in a "pest free area" for *Phytophthora palmivora*".

#### OR

"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.

#### <sup>1</sup>Implementation of measures:

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora palmivora* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora.* palmivora are not mandatory.

## 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

**PEQ:** Level 2

**Minimum Period:** 3 months

#### **B.** For Tissue Cultures

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Phoenix*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

Approved Countries: Australia, Hawaii, mainland USA

**Quarantine Pests**: Fusarium wilt, Cadang-cadang, Lethal yellowing, *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 *Phytophthora palmivora*<sup>1</sup>

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

"The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

#### OR

"The [insert species name] plants in this consignment were produced in a "pest free area" for *Phytophthora palmivora*".

#### OR

"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. 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**

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. Additional Declaration: "Cadang cadang an	d lethal yellowing are not known to occur in
(the country or state where the plants were grown)	<u>"</u> .
nplementation of measures:	

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora palmivora* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora.* palmivora are not mandatory.

**Note:** The entry conditions in 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.:
  - i) Additional declaration:
    - "Gymnosporangium spp. are not known to occur on \_\_(name of plant species)\_\_ in \_\_(the country or state where the plants were produced)\_\_".

OR

 "The plants were from a crop inspected during the growing season and no rust diseases were detected".

### AND

ii) Additional declaration: "The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water, prior to export".

#### **B.** For Tissue Cultures

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5) **Guidance for importers**: There will be a minimum quarantine period of <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Planera*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries**: All

Quarantine Pests: Elm mosaic virus; Elm phloem necrosis; Phellinus noxius

**Entry Conditions**: **Basic**; with variations and additional conditions as specified below:

#### A. For Whole Plants

**PEQ**: Level 3B

**Minimum Period**: 3 months

a. Conditions for *Phellinus noxius* (section 2.2.1.13) **Note**: Only applies to the following species: *Zelkova serrata* 

### **B.** For Tissue Cultures

**PEQ**: Level 3B

**Minimum Period**: 3 months

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Platanus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

Quarantine Pests: Ceratocystis platani; Xylella fastidiosa

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

### A: For Cuttings and Whole Plants

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12) **Guidance for importers**: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for Ceratocystis platani:

#### **OPTION 1**

i) Additional declaration: "The plants have been sourced from a country free from *Ceratocystis platani*"

#### OPTION 2, For countries where *Ceretocystis platani* is known to be present

 Additional declaration: "The plants have been sourced from a state/province free from *Ceratocystis platani* or from a Pest Free Place of Production free from *Ceratocystis platani*"

#### **AND**

ii) The plants must be tested for *Ceratocystis platani* during the post entry quarantine period, at an MPI approved diagnostic facility.

**Note**: Countries where *Ceratocystis platani* is known to be present: Armenia, France, Greece, Italy, Switzerland, United States.

#### **B.** For Tissue Cultures

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5) **Guidance for importers**: There will be a minimum quarantine period of <u>6 months in a Level 2 PEQ</u> greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under Polyscias", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries:** All

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants

**PEQ:** Level 2

**Minimum Period:** 3 months

#### **B. For Tissue Cultures**

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Poncirus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### 1. Type of *Poncirus* nursery stock approved for entry into New Zealand

Cuttings (dormant); Plants in tissue culture

#### 2. Pests of *Poncirus*

Refer to the pest list.

## 3. Entry conditions for:

## 3.1 Poncirus cuttings from offshore MPI-accredited facilities (quarantine stations)

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Poncirus*, the accredited facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Poncirus*.

#### (i) Documentation

## Import permit is required

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Poncirus* cuttings exported to New Zealand.

## (ii) <u>Inspection, Testing and Treatments of the consignment</u>

The inspection, testing and treatment requirements for specified regulated pests must be undertaken at the accredited facility as specified in the agreement between MPI and the accredited facility operator. Refer to *Poncirus* Inspection, Testing and Treatment Requirements following the *Poncirus* pest list.

### (iii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The *Poncirus* cuttings have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI (refer to the pest list). AND
- sourced from either mother plants that have been kept in insect proof plant houses or from open ground mother plants
- held and tested for/classified free from specified regulated pests at a MPIaccredited facility
   AND
- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the accredited facilty.

### (iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Poncirus* cuttings in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI, and to conform with New Zealand's current phytosanitary requirements.

# AND

- sourced from mother plants that have been kept in insect proof plant houses/sourced from open ground mother plants [choose one].

#### **AND**

 held and tested for/classified free from specified regulated pests at the accredited facility as required in the agreement between MPI and the accredited facility operator.

#### **AND**

- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the accredited facility."

# (v) <u>Post-entry quarantine</u>

**PEQ**: Level 2. Plants must be held at 18-25°C throughout the quarantine period. **Quarantine Period**:

This is the time required to complete inspections and/or indexing to detect regulated pathogens. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

Indicative minimum quarantine periods are:

- 6 months for *Poncirus* cuttings sourced from mother plants that have been kept in insect proof plant houses, which may be extended to 12 months to allow for testing to be completed; or
- 16 months for *Poncirus* cuttings sourced directly from open ground mother plants.

# 3.2 Poncirus cuttings from non-accredited facilities in any country

# (i) Documentation

# Import permit is required

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Poncirus* cuttings exported to New Zealand.

### (ii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The *Poncirus* cuttings have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI (refer to the pest list).

# (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Poncirus* cuttings in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI, and to conform with

the current phytosanitary requirements of MPI."

# (iv) Inspection, Testing and Treatments of the consignment

Following inspection at the border, upon arrival, the *Poncirus* cuttings will be directed to a facility accredited to the standard BMG-STD-TREAT: *Approval of Suppliers Providing Treatment of Imported Risk Goods and Forestry/Plant Related Material for Export*, to be sprayed/dipped in MPI-approved miticide and insecticides as described in section 2.2.1.6 of the basic conditions.

Following treatment, testing for specified regulated pests must be undertaken at a New Zealand Level 3B MPI-accredited facility. Refer to *Poncirus* Inspection, Testing and Treatment Requirements following the *Poncirus* pest list.

# (v) Post-entry quarantine

**PEQ**: Level 3B

**Quarantine Period**: This is the time required to complete inspections and/or indexing to detect regulated pathogens. 16 months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments are required.

## 3.3 Poncirus plants in tissue culture from offshore MPI-accredited facilities

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Poncirus*, the accredited facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Poncirus*.

#### (i) Documentation

# Import permit is required

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Poncirus* tissue culture exported to New Zealand.

#### (ii) Pest proof container and growing media for tissue culture

Cultures imported in a growing media must have been grown in the vessel in which they are imported. The container must be rigid, and either clear plastic or clear glass. The tissue culture media must not contain charcoal.

# (iii) Inspection, Testing and Treatments of the consignment

The inspection, treatment and testing requirements for specified pests must be undertaken at the accredited facility as specified in the arrangement between MPI and the accredited facility operator. Refer to *Poncirus* Inspection, Testing and Treatment Requirements following the *Poncirus* pest list.

#### (iv) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The *Poncirus* tissue culture have been:

inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI (refer to the pest list).

#### AND

- held and tested for/classified free from specified regulated pests at a MPIaccredited facility and,

#### **AND**

- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the accredited facility.

#### (v) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Poncirus* tissue culture in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI, and to conform with New Zealand's current phytosanitary requirements.

#### **AND**

 held and tested for/classified free from specified regulated pests at the accredited facility as specified in the agreement between MPI and the accredited facility operator.

# AND

held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the accredited facility."

# (vi) Post-entry quarantine

**PEQ**: Level 2

**Quarantine Period**: This is the time required to complete inspections and/or indexing to detect regulated pests. Six months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments are required.

# 3.4 Poncirus plants in tissue culture from non-accredited facilities in any country

#### (i) Documentation

# Import permit is required

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Poncirus* nursery stock exported to New Zealand.

# (ii) <u>Pest proof container and growing media for tissue culture</u>

Cultures imported in a growing media must have been grown in the vessel in which they are imported. The container must be rigid, and either clear plastic or clear glass. The tissue culture media must not contain charcoal.

#### (iii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

#### The *Poncirus* tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI (refer to the pest list).

# (iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Poncirus* tissue culture in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI, and to conform with the current phytosanitary requirements of MPI."

# (v) Inspection, Testing and Treatments of the consignment

Upon arrival, the inspection, treatment and testing requirements for specified pests must be undertaken at a New Zealand Level 3B MPI-accredited facility. Refer to *Poncirus* Inspection, Testing and Treatment Requirements following the *Poncirus* pest list.

# (vi) *Post-entry quarantine*

**PEQ**: Level 3B

**Quarantine Period**: This is the time required to complete inspections and or indexing to detect regulated pests. 16 months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected or treatments required.

# **Pest List for** *Poncirus*

# **REGULATED PESTS (actionable)**

Insect Insecta

Coleoptera

Bostrichidae

shot-hole borer Apate indistincta Apate terebrans shot-hole borer

Buprestidae

Agrilus alesi flatheaded citrus borer Agrilus auriventris citrus flatheaded borer

Cerambycidae

Anoplophora malasiaca white-spotted longicorn beetle

Chelidonium gibbicolle

Dihammus vastator fig longhorn

Melanauster chinensis

Paradisterna plumifera speckled longicorn

Promeces linearis

Skeletodes tetrops longhorn beetle Strongylurus thoracicus pittosporum longicorn Uracanthus cryptophagus citrus branch borer

Chrysomelidae

Colasposoma fulgidum bluegreen citrus nibbler

Colasposoma scutellare

Geloptera porosa pitted apple beetle mulberry flea beetle Luperomorpha funesta red-shouldered leaf beetle Monolepta australis

Sebaethe fulvipennis flea beetle

Coccinellidae

Cheilomenes lunata [Animals Biosecurity] Chilocorus cacti [Animals Biosecurity] Chilocorus distigma [Animals Biosecurity] Chilocorus nigrita [Animals Biosecurity] Exochomus flavipes [Animals Biosecurity] Pentilia castanea [Animals Biosecurity] Rhyzobius lophanthae [Animals Biosecurity] Scymnus nanus [Animals Biosecurity]

Serangium parcesetosum [Animals Biosecurity] Stethorus aethiops [Animals Biosecurity] Stethorus histrio [Animals Biosecurity] Stethorus punctata picipes [Animals Biosecurity]

Curculionidae

Amystax fasciatus [Animals Biosecurity] Artipus sp.

Brachycerus citriperda

Callirhopalus bifasciatus two-banded Japanese weevil

Dereodus recticollis

Diaprepes abbreviatus citrus weevil

Diaprepes spp.

Eutinophaea bicristata citrus leaf-eating weevil Leptopius saualidus fruit tree root weevil Naupactus xanthographus fruit tree weevil Otiorhynchus cribricollis cribrate weevil

Pachnaeus citri

Pachnaeus litus citrus root weevil Perperus lateralis white-striped weevil

Prepodes spp.

Protostrophus avidus weevil

Sciobius marshalli citrus snout beetle Sympiezomias lewisi

Lucanidae

Prosopocoilus spencei

Scarabaeidae

Hypopholis indistincta scarab beetle Maladera matrida scarab beetle

Scolvtidae

Salagena sp.

alnus ambrosia beetle Xylosandrus germanus

**Diptera** 

Cecidomviidae

leafcurling midge Contarinia citri Contarinia okadai citrus flower gall midge

Trisopsis sp.

Chamaemyiidae

Leucopis alticeps [Animals Biosecurity]

Drosophilidae

Drosophila paulistorum Drosophila pseudoobscura Drosophila simulans Drosophila willistoni

**Tephritidae** 

Dirioxa pornia island fruit fly

Hemiptera

Anthocoridae

Orius thripoborus [Animals Biosecurity] Thriphleps thripoborus [Animals Biosecurity]

Coreidae

larger squash bug Acanthocoris striicornis

Anoplocnemis curvipes coreid bug Leptoglossus membranaceus coreid bug Mictis profana crusader bug Paradasynus spinosus squash bug leaf-footed bug

Veneza phyllopus

Lvgaeidae Nysius vinitor Rutherglen bug

Miridae

citrus blossom bug Austropeplus sp.

Pentatomidae

Antestia variegata antestia bug

Antestiopsis orbitalis

Antestiopsis variegata antestia bug Biprorulus bibax spined citrus bug

Glaucias subpunctatus polished green stink bug Halyomorpha mista brown-marmorated stink bug

Musgraveia sulciventris bronze orange bug Plautia stali oriental stink bug Rhynchocoris humeralis pentatomid bug

Unknown Hemiptera

Holopterna vulga bug

Homoptera

Alevrodidae

Aleurocanthus citriperdus whitefly

Aleurocanthus spiniferus orange spiny whitefly

Aleurocanthus spp. whiteflies Aleurocanthus woglumi citrus blackfly Aleurodicus dispersus spiralling whitefly Aleurolobus marlatti Marlatt whitefly

Aleuroplatus sp. whitefly

Aleurothrixus floccosus woolly whitefly

Aleurotuba jelinekii

Aleurotuberculatus aucubae aucuba whitefly Bemisia citricola

Dialeurodes citri

Dialeurodes citrifolii

 $Dialeurolong a~{\rm sp.}$ 

Parabemisia myricae

Siphoninus phillyreae

Aphididae

Aphis fabae

Aulacorthum magnoliae

Cicadellidae

Asymmetrasca decedens

Circulifer opacipennis

Circulifer tenellus Cuerna costalis

Edwardsiana flavescens

 $Empo asca\ boden heimeri$ 

Empoasca citrusa Empoasca decipiens

Empoasca distinguenda

Empoasca fabae

Empoasca onukii

Homalodisca coagulata

Homalodisca lacerta

Jacobiasca lybica

N. I. I

Neoaliturus haematoceps Penthimiola bella

Scaphytopius nitridus

Cicadidae

Cryptotympana facialis

Meimuna opalifera

Coccidae

Ceroplastes floridensis

Ceroplastes japonicus Ceroplastes rubens

Ceroplastes rusci

Coccus celatus

Coccus pseudomagnoliarum

Coccus viridis

Cribrolecanium andersoni

Gascardia brevicauda

Protopulvinaria pyriformis

Pulvinaria aethiopica

Pulvinaria aurantii

Pulvinaria cellulosa

Saissetia citricola

Saissetia somereni

Dactylopiidae

Dactylopius filamentosis

Dactylopius vastator

Diaspididae

Aonidiella citrina

Chrysomphalus aonidum

Chrysomphalus bifasciculatus

Chrysomphalus dictyospermi

Chrysomphalus pinnulifera

Ischnaspis longirostris

Lepidosaphes beckii

Lepidosaphes gloverii

Parlatoria ziziphi

Pseudaonidia duplex

Selenaspidus articulatus

Unaspis citri

citrus whitefly

cloudywinged whitefly

\_

Japanese bayberry whitefly

phillyrea whitefly

bean aphid

leafhopper

Japanese elder aphid

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beet leafhopper

leafhopper

leafhopper

green citrus leafhopper

green leafhopper

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potato leafhopper

tea green leafhopper

glassy-winged sharpshooter

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cotton jassid

leafhopper

citrus leafhopper

leafhopper

black cicada

elongate cicada

Florida wax scale

pink wax scale

red wax scale

fig wax scale

citricola scale

green scale

white powdery scale

white waxy scale

pyriform scale

soft green scale

citrus cottony scale

pulvinaria scale

purvinaria scare

citrus string cottony scale

-

-

-

yellow scale

Florida red scale

brown scale

dictyospermum scale

false purple scale black thread scale

purple scale Glover scale

black parlatoria scale

camphor scale

West Indian red scale

citrus snow scale

Unaspis yanonensis Japanese citrus scale Flatidae Colgar peracuta green broad-winged planthopper Geisha distinctissima Lawana conspersa green flatid planthopper Metcalfa pruinosa planthopper Fulgoridae Anzora unicolor Margarodidae persimmon mealybug Drosicha howardi Seychelles scale Icerya seychellarum Ortheziidae Nipponorthezia ardisiae ensign scale Pseudococcidae Allococcus spp. Ferrisia consobrina mealvbug Ferrisia virgata striped mealybug Nipaecoccus vastator nipa mealybug Nipaecoccus viridis hibiscus mealybug spherical mealybug Paracoccus burnerae Japanese wisteria mealybug Planococcus kraunhiae Planococcus lilacinus citrus mealybug Planococcus minor passionvine mealybug smaller citrus mealybug Pseudococcus citriculus Pseudococcus commonus Pseudococcus filamentosus mealybug mealybug Rastrococcus spinosus Rhizoecus kondonis Kondo mealybug Psyllidae Diaphorina citri citrus psyllid Trioza erytreae [vector] citrus psyllid Ricaniidae Scolypopa sp. Tropiduchidae Tambinia sp. Hymenoptera **Aphelinidae** Aphytis africanus [Animals Biosecurity] Aphytis holoxanthus [Animals Biosecurity] Aphytis lepidosaphes [Animals Biosecurity] Aphytis lingnanensis [Animals Biosecurity] Aphytis melinus [Animals Biosecurity] Azotus platensis [Animals Biosecurity] Cales noacki [Animals Biosecurity] Cales orchamoplati [Animals Biosecurity] Centrodora penthimiae [Animals Biosecurity] Coccophagus caridei [Animals Biosecurity] Coccophagus pulvinariae [Animals Biosecurity] Encarsia ectophaga [Animals Biosecurity] Encarsia lahorensis [Animals Biosecurity] Encarsia lounsburyi [Animals Biosecurity] Encarsia opulenta [Animals Biosecurity] Encarsia smithi [Animals Biosecurity] Eretmocerus serius [Animals Biosecurity] Marietta connecta [Animals Biosecurity] Marietta leopardina [Animals Biosecurity] Braconidae Apanteles aristotalilae [Animals Biosecurity] Biosteres longicaudatus [Animals Biosecurity] Pholetesor ornigis [Animals Biosecurity] Encyrtidae Anicetus beneficus [Animals Biosecurity]

Comperiella bifasciata [Animals Biosecurity] Habrolepis rouxi [Animals Biosecurity] Leptomastix dactylopii [Animals Biosecurity] parasitic wasp Metaphycus helvolus [Animals Biosecurity] Metaphycus luteolus [Animals Biosecurity] Metaphycus stanleyi [Animals Biosecurity] Metaphycus varius [Animals Biosecurity] Psyllaephagus pulvinatus [Animals Biosecurity] Eulophidae Aprostocetus ceroplastae [Animals Biosecurity] Elachertus fenestratus [Animals Biosecurity] Tamarixia radiatus [Animals Biosecurity] Eupelmidae Anastatus biproruli [Animals Biosecurity] Eurvtomidae Bruchophagus fellis citrus gall midge Formicidae Acromyrmex octospinosus leaf-cutting ant Anoplolepis braunsi [Animals Biosecurity] Anoplolepis custodiens ant Anoplolepis steingroeveri [Animals Biosecurity] black ant Atta cephalotes leaf-cutting ant Atta sexdens Atta texana Texas leaf-cutting ant Camponotus rufoglaucus Crematogaster castanea Crematogaster liengmei Crematogaster peringueyi [Animals Biosecurity] cocktail ant Lepisiota capensis [Animals Biosecurity] Myrmicaria natalensis Pheidole tenuinodis ant Polyrhachis schistaceus Solenopsis invicta [Animals Biosecurity] red imported fire ant Tapinoma arnoldi Technomyrmex albipes foreli [Animals Biosecurity] Mymaridae Chaetomymar gracile [Animals Biosecurity] Chaetomymar lepidum [Animals Biosecurity] Gonatocerus incomptus [Animals Biosecurity] Platygasteridae Amitus hesperidum [Animals Biosecurity] Amitus spiniferus [Animals Biosecurity] Fidiobia citri [Animals Biosecurity] Scelionidae Trissolcus oeneus [Animals Biosecurity] Trissolcus oenone [Animals Biosecurity] Trissolcus ogyges [Animals Biosecurity] Signiphoridae Signiphora fax [Animals Biosecurity] Signiphora flavella [Animals Biosecurity] Signiphora perpauca [Animals Biosecurity] Trichogrammatidae Trichogramma platneri [Animals Biosecurity] Vespidae Polistes spp. [Animals Biosecurity] paper wasps Isoptera Termitidae Odontotermes lokanandi termite Lepidoptera Arctiidae Lemyra imparilis mulberry tiger moth

Blastobasidae

Holcocera iceryaeella

Cosmopterigidae

Pyroderces rileyi pink scavenger caterpillar

Geometridae

Anacamptodes fragilariakoa haole looperAscotis selenaria reciprocariacitrus looperGymnoscelis rufifasciatageometrid moth

Hyposidra talaca -

Gracillariidae

Phyllocnistis citrella citrus leafminer

Hepialidae

Endoclita excrescens

Japanese swift moth

Endoclita sinensis -

Lycaenidae

Virachola isocrates pomegranate butterfly

Lymantriidae

Orgyia vetusta western tussock moth

Metarbelidae

Indarbela tetraonis stem borer

Noctuidae

Arcte coerulafruit-piercing mothEudocima fulloniafruit-piercing moth

Helicoverpa assultacape gooseberry budwormHelicoverpa punctigeraoriental tobacco budwormTiracola plagiatabanana fruit caterpillar

Xylomyges curialis noctuid moth

Nymphalidae

Charaxes jasius nymphalid butterfly

Oecophoridae

Psorosticha melanocrepidacitrus leafrollerPsorosticha zizyphicitrus leafrollerStathmopoda auriferellaapple heliodinid

Papilionidae

Papilio aegeus aegeus -

Papilio anactus small citrus butterfly

Papilio cresphontes orange dog

Papilio dardanus cenea

Papilio demodocus orange dog

Papilio demoleus demoleus Papilio helenus nicconicolens Papilio machaon asiatica -

Papilio memnon citrus swallowtail

Papilio memnon thunbergii Papilio nireus lyaeus Papilio polytes polytes Papilio protenor demetrius -

Papilio xuthuscitrus swallowtailPapilio zelicaonanise swallowtail

Psychidae

Eumeta hardenbergi -Eumeta japonica -

Eumeta minuscula tea bagworm

Eumeta moddermanni -

Hyalarcta huebneri leaf case moth

Pyralidae

Apomyelois ceratoniae date pyralid

Tortricidae

Adoxophyes sp. -

Amorbia cuneana leafroller

Archips argyrospilus fruit tree leafroller

Archips machlopis leafroller
Archips occidentalis leafroller

Archips rosanusrose leafrollerArgyrotaenia citranaorange tortrixCacoecimorpha pronubanacarnation leafroller

Cryptophlebia batrachopa -

Cryptophlebia leucotretafalse codling mothHomona magnanimaoriental tea tortrixIsotenes miseranaorange fruitborerPlatynota stultanaomnivorous leafrollerTortrix capensanatortricid moth

Tortrix capensana **Yponomeutidae** 

Prays citri citrus flower moth Prays parilis citrus flower moth

Neuroptera Chrysopidae

Chrysopa oculata [Animals Biosecurity] -

Coniopterygidae

Coniopteryx vicina [Animals Biosecurity] Conwentzia barretti [Animals Biosecurity] -

Orthoptera Acrididae

Zonocerus elegans elegant grasshopper

Gryllidae

Ornebius kanetataki cricket

Tettigoniidae

Caedicia sp. -

Holochlora japonicaJapanese broadwinged katydidMicrocentrum retinervesmaller angular-winged katydidScudderia furcatafork-tailed bush katydid

Psocoptera

Archipsocidae

Archipsocus sp. bark louse

Thysanoptera Aeolothripidae

Franklinothrips vespiformis [Animals Biosecurity] -

Thripidae

Chaetanaphothrips orchidiibanana rust thripsLeptothrips maliblack hunter thripsScirtothrips aurantiicitrus thripsScirtothrips citricitrus thripsScirtothrips dorsalischilli thripsScirtothrips mangiferaemango thrips

Scolothrips sexmaculatus [Animals Biosecurity] Taeniothrips kellyanus Taeniothrips sp. Thrips coloratus thrips
Thrips flavus flower thrips
Thrips palmi palm thrips

Unknown Insecta

**Unknown Insecta** 

Cosmophyllum pallidulum -

Mite

Arachnida

Acarina Acaridae

Thyreophagus entomophagus italicus [Animals

Biosecurity] **Anystidae** 

Anystis agilis [Animals Biosecurity] -

Eriophyidae

Aculops pelekassi eriophyid mite
Tegolophus australis brown citrus mite

Phytoseiidae

Amblyseius addoensis [Animals Biosecurity] Amblyseius citri [Animals Biosecurity] Amblyseius swirskii [Animals Biosecurity] Euseius hibisci [Animals Biosecurity] Euseius scutalis [Animals Biosecurity] Euseius stipulatus [Animals Biosecurity] Euseius tularensis [Animals Biosecurity] -

Iphiseius degenerans [Animals Biosecurity] predatory mite

Typhlodromus athiasae [Animals Biosecurity] -

Stigmaeidae

Agistemus africanus [Animals Biosecurity] Agistemus tranatalensis [Animals Biosecurity] Eryngiopus siculus [Animals Biosecurity] -

Tarsonemidae

Tarsonemus cryptocephalus [Animals Biosecurity]

Tenuipalpidae

Brevipalpus chilensisfalse spider miteBrevipalpus lewisibunch miteBrevipalpus obovatusprivet mite

Tenuipalpus emeticae [Animals Biosecurity] -

Tuckerella ornata -

Ultratenuipalpus gonianaensis tenuipalpid mite

Tetranychidae

Calacarus citrifolii clover mite Eotetranychus kankitus tetranychid mite Eotetranychus lewisi big beaked plum mite Eotetranychus yumensis Yumi spider mite tetranychid mite Eutetranychus africanus Eutetranychus banksi Texus citrus mite Eutetranychus orientalis pear leaf blister mite Oligonychus mangiferus mango spider mite Tetranychus kanzawai kanzawa mite

Tuckerellidae

Tuckerella knorri hawthorn spider mite

Spider

Arachnida

Araneae

Clubionidae

Cheiracanthium mildei [Animals Biosecurity]

Theridiidae

Theridion sp. [Animals Biosecurity]

Mollusc

Gastropoda

Stylommatophora

Achatinidae

Achatina immaculata - Lissachatina immaculata snail

Bradybaenidae

Acusta despecta sieboldiana snail

Subulinidae

Rumina decollata snail

Urocyclidae

Urocyclus flavescens -Urocyclus kirkii -

**Fungus** 

Ascomycota

**Diaporthales** 

Valsaceae

Diaporthe rudis (anamorph Phomopsis rudis) phomopsis canker **Dothideales** Elsinoaceae Elsinoe australis sweet orange scab Capnodiaceae Capnodium citri sooty mould Didymosphaeriaceae Didymosphaeria sp. Mycosphaerellaceae Guignardia citricarpa (anamorph Phyllosticta citrus black spot citricarpa) [black spot strain] Mycosphaerella citri (anamorph Stenella citri-grisea) rind blotch Mycosphaerella horii greasy spot **Patellariales** Patellariaceae Rhytidhysteron rufulum Saccharomycetales Saccharomycetaceae Debaryomyces hansenii Galactomyces citri-aurantii (anamorph Geotrichum sour rot citri-aurantii) **Basidiomycota: Agaricomycetes** Hymenochaetales Hymenochaetaceae Phellinus noxius brown root rot **Basidiomycota: Basidiomycetes Boletales** Coniophoraceae Coniophora eremophila brown wood rot **Basidiomycota: Teliomycetes** Septobasidiales Septobasidiaceae Septobasidium pseudopedicellatum felt fungus Mitosporic Fungi Unknown Mitosporic Fungi **Unknown Mitosporic Fungi** Sphaceloma fawcettii var. scabiosa Mitosporic Fungi (Coelomycetes) **Sphaeropsidales** Sphaerioidaceae Macrophoma mantegazziana Phoma erratica var. mikan Phoma tracheiphila mal secco Phomopsis sp. rot Septoria spp. Sphaeropsis tumefaciens stem gall **Unknown Coelomycetes Unknown Coelomycetes** Aschersonia placenta [Animals Biosecurity] Gloeosporium foliicolum fruit rot Mitosporic Fungi (Hyphomycetes) **Hyphomycetales** Dematiaceae Alternaria limicola Alternaria pellucida Cercospora microsora Phaeoramularia angolensis cercospora spot Stemphylium rosarium Ulocladium obovoideum ulocladium rot **Unknown Hyphomycetes** Unknown Hyphomycetes Aureobasidium sp.

Hirsutella thompsonii [Animals Biosecurity] --

Isaria sp. [Animals Biosecurity]

Oidium tingitaninum powdery mildew

Sporobolomyces roseus -- Stenella sp. --

Zygomycota: Zygomycetes

Glomales Glomaceae

Glomus etunicatum [Animals Biosecurity]

Mucorales

Syncephalastraceae

Syncephalastrum racemosum -

#### **Bacterium**

#### **Bacterium family unknown**

Liberobacter africanumcitrus greening bacteriumLiberobacter asiaticumcitrus greening bacteriumLiberobacter sp.citrus greening bacterium

Spiroplasma citri citrus stubborn

Pseudomonadaceae

Burkholderia cepacia sour skin Xanthomonas axonopodis pv. citri citrus canker

Xanthomonas campestris pv. aurantifolii -

Xanthomonas campestris pv. citrumelo citrus bacterial spot Xylella fastidiosa Pierce's disease

Xylella fastidiosa pv. citri variegated chlorosis of citrus

#### Virus

Indian citrus mosaic badnavirus citrus cachexia viroid citrus chlorotic dwarf citrus infectious variegation ilarvirus citrus infectious variegation ilarvirus [crinkly leaf strainl citrus leaf rugose ilarvirus citrus leathery leaf virus citrus leprosis rhabdovirus citrus mosaic virus citrus ringspot virus citrus tatter leaf capillovirus citrus tristeza closterovirus [strains not in New Zealand] citrus variable viroid citrus viroids (groups I-IV) citrus yellow mosaic badnavirus citrus yellow mottle virus dwarfing factor viroid navel orange infectious mottling virus satsuma dwarf nepovirus satsuma dwarf nepovirus [Natsudaidai dwarf strain] xyloporosis viroid yellow vein clearing of lemon

#### Phytoplasma

Candidatus Phytoplasma aurantifolia witches' broom phytoplasma

rubbery wood -

# Disease of unknown aetiology

Australian citrus dieback blind pocket bud union disease citrus blight disease citrus fatal yellows -

citrus impietratura disease citrus sunken vein disease concave gum cristacortis gum pocket gummy bark kassala disease lemon sieve tube necrosis shell bark of lemons zonate chlorosis

# Inspection, Testing and Treatment Requirements for *Poncirus\**

ORGANISM TYPES	MPI ACCEPTABLE METHODS
Insects	Visual inspection AND approved insecticide treatments (Refer to section 2.2.1.6 of
	the basic conditions).
Mites	Visual inspection AND approved miticide treatments (Refer to section 2.2.1.6 of the
	basic conditions).
Fungus	Country freedom OR growing season inspection for symptom expression.
Bacterium	
Burkholderia cepacia	Growing season inspection for symptom expression.
Liberobacter africanum	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
Liberobacter asiaticum	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
Spiroplasma citri	Country freedom/shoot tip grafting. Graft inoculated sweet orange, 27 to 32°C.
	Bioassay = culture petiole new flush tissue. Collect tissue after several days at hot
	temperature (> 30°C) and incubate cultures at 32°C.
Xanthomonas	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR
axonopodis pv. citri	suitable citrus indicator.
Xanthomonas	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR
campestris pv.	suitable citrus indicator.
aurantifolii	Country freedom/shoot time anofile - his accordance had a file of the control of
Xanthomonas	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
campestris pv. citrumelo	Country freedom/shoot tip grafting bioassay/ PCR/ELISA OR suitable citrus
Xylella fastidiosa	indicator.
Xylella fastidiosa pv.	Country freedom/shoot tip grafting bioassay PCR/ELISA OR suitable citrus
citri	indicator.
Virus	
citrus chlorotic dwarf	Country freedom OR graft inoculated rough lemon at cool temperatures
	temperatures 18 to 25°C.
citrus infectious	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow
variegation ilarvirus	indicators at cool temperatures 18 to 25°C.
citrus infectious	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow
variegation ilarvirus	indicators at cool temperatures 18 to 25°C.
[crinkly leaf strain] citrus leaf rugose	Country freedom OR graft inoculated Mexican lime or sour orange. Grow
ilarvirus	indicators at cool temperatures 18 to 25°C.
citrus leathery leaf virus	Country freedom OR Rangpur lime. Grow indicators at cool temperatures 18 to
-	25°C.
citrus leprosis	Country freedom OR graft inoculated sweet orange. Grow indicators at cool
rhabdovirus	temperatures 18 to 25°C.
citrus mosaic virus	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.
citrus ringspot virus	Country freedom OR graft inoculated dweet tangor, sweet orange, mandarin
0.1	(Parson's Special). Grow indicators at cool temperatures 18 to 25°C.
citrus tatter leaf	Country freedom OR graft inoculated Rusk citrange, rough lemon, Citrus excelsa,
capillovirus	citrange (Troyer). Grow indicators at cool temperatures 18 to 25°C.
citrus tristeza	Country freedom OR ELISA, graft inoculated Mexican lime, sour orange and Citrus
closterovirus [strains not	excelsa. Grow indicators at cool temperatures 18 to 25°C.
in New Zealand]	
citrus yellow mosaic	Country freedom OR graft inoculated sweet orange, sour orange and citron.
badnavirus	
citrus yellow mottle	Country freedom OR other suitable test.
virus	
Indian citrus mosaic	Country freedom OR graft inoculated sweet orange at hot temperature 27 to 32°C.
badnavirus	Country freedom OD and in a culated Setume Come 's l'action of the
navel orange infectious	Country freedom OR graft inoculated Satsums. Grow indicators at cool
mottling virus satsuma dwarf	temperatures 18 to 25°C.  Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures
nepovirus	18 to 25°C.
nepovirus	10 to 23 C.

ORGANISM TYPES	MPI ACCEPTABLE METHODS	
satsuma dwarf	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures	
nepovirus [Natsudaidai	18 to 25°C.	
dwarf strain]		
yellow vein clearing of	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators	
lemon	at cool temperatures 18 to 25°C.	
Viroid		
citrus cachexia viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow	
	citron at hot temperature 27 to 32°C.	
citrus variable viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow	
	citron at hot temperature 27 to 32°C.	
citrus viroids (groups I-	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow	
IV)	citron at hot temperature 27 to 32°C.	
dwarfing factor viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow	
	citron at hot temperature 27 to 32°C.	
xyloporosis viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract or	
	mandarin (Parson's Special). Grow Citron at hot temperature 27 to 32°C.	
Disease of unknown aeti		
Australian citrus	Country freedom OR other suitable test	
dieback		
blind pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa.	
	Grow indicators at cool temperatures 18 to 25°C.	
bud union disease	Country freedom OR other suitable test	
citrus blight disease	None (cuttings collected from blight free area). Inspect source tree after 2 years	
	before releasing from quarantine.	
citrus fatal yellows	Country freedom OR graft inoculated Citrus macrophylla.	
citrus impietratura	Country freedom OR graft inoculated dweet tangor or sweet orange. Growth	
disease	indicators at cool temperatures 18 to 25°C.	
citrus sunken vein	Country freedom OR other suitable test.	
disease		
concave gum	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa.	
	Grow indicators at cool temperatures 18 to 25°C.	
cristacortis	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa.	
	Grow indicators at cool temperatures 18 to 25°C.	
gum pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa.	
	Grow indicators at cool temperatures 18 to 25°C.	
gummy bark	Country freedom OR SPAGE of graft inoculated citron extract. Grow citron at hot	
	temperature 27 to 32°C.	
kassala disease	Country freedom, cuttings collected from kassala free area.	
lemon sieve tube	Country freedom OR other suitable test.	
necrosis		
shell bark of lemons	Country freedom OR other suitable test.	
zonate chlorosis	Country freedom, cuttings collected from kassala free area.	
Phytoplasma		
Candidatus phytoplasma	Country freedom OR graft inoculated lime. Grow indicators at cool temperatures 18	
aurantifolia	to 25°C.	
rubbery wood	Country freedom OR graft inoculated sweet orange or lemon. Grow citron at hot	
	temperature 27 to 32°C.	
* C . C . 1 . :	ntad as aquivalance to a treatment	

<sup>\*</sup> Country freedom is accepted as equivalence to a treatment.

# **Notes:**

- 1. The unit for testing is defined in section 2.3.2.1.
- 2. With prior notification, MPI will accept other internationally recognised testing methods.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Populus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

# **GENERAL CONDITIONS:**

**Approved Countries**: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA

**Quarantine Pests**: Ceratocystis fimbriata; Marssonina spp.; Phellinus noxius; Phytophthora ramorum; Uredinales; virus diseases; Xylella fastidiosa

**Entry Conditions**: **Basic**; with variations and additional conditions as specified below:

# A. For Whole Plants

PEQ: Level 3B

Minimum Period: 3 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- c. Conditions for Xylella fastidiosa (section 2.2.1.12)
   Guidance for importers: The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from Xylella fastidiosa
- d. Conditions for *Phellinus noxius* (section 2.2.1.13)

### **B.** For Tissue Cultures

- a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
   Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.
- b. Subject to examination at a MPI-registered laboratory at the importers expense, prior to release to the importer.

Note: The 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/importing/plants/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 Pseudotsuga", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

# **GENERAL CONDITIONS:**

**Approved Countries:** All

Quarantine Pests: Bursaphelenchus spp.; Lophodermium spp.; Uredinales; Xylella fastidiosa; Phytophthora ramorum

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

A. For Whole Plants

PEQ: Level 3B

**Minimum Period:** 6 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

#### **B.** For Tissue Cultures

- a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5) Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from Xylella fastidiosa.
- b. Subject to examination at a MPI-registered laboratory at the importers expense, prior to release to the importer.

# Pyrus

Scientific name	Commodity Sub-class	<b>Date Issued</b>
Pyrus communis	Cuttings (dormant)	12 June 1998

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Quercus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

# **GENERAL CONDITIONS:**

**Approved Countries**: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

**Quarantine Pests**: Ceratocystis fagacearum; Ceratocystis fimbriata; Cryphonectria parasitica; Cronatium quercuum; Phytophthora ramorum; Xylella fastidiosa

**Entry Conditions**: **Basic**; with variations and additional conditions as specified below:

# A. For Whole Plants

PEQ: Level 3B

Minimum Period: 3 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8) **Note:** Only applies to members of the *Quercus* genus
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
   Guidance for importers: The minimum quarantine period will be <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

- 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 MPI-registered laboratory at the importers expense, prior to release to the importer.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Ranunculus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard. These conditions do not apply to *Ranunculus arvensis*, *Ranunculus repens* and *Ranunculus sardous*, for which there is currently no import health standard.

# **GENERAL CONDITIONS:**

**Approved Countries:** All

Quarantine Pests: Phymatotrichopsis omnivora; Virus diseases; Xylella fastidiosa

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

#### B. For Dormant Bulbs from Australia and South Africa:

#### **OPTION 1:**

No import permit is required.

PEQ: None

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Note:** Only nursery stock sourced from a country recognised by MPI as free from *Xylella fastidiosa* can be imported under this option.

b. Additional Declaration: "In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests."

#### **OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Note:** Only nursery stock sourced from a country recognised by MPI as free from *Xylella fastidiosa* can be imported under this option

#### C. For Dormant Bulbs from the USA:

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 virus diseases: Additional Declaration: "In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and

considered free of quarantine pests, and practically free from other injurious pests."

c. Conditions for Phymatotrichopsis omnivora:

### **OPTION 1**

i) Additional declaration: "The dormant bulbs have been sourced from a "Pest free area", free from *Phymatotrichopsis omnivora*".

#### **OPTION 2**

i) Additional declaration: "The dormant bulbs have been sourced from a "Pest free place of production", free from *Phymatotrichopsis omnivora*".

#### AND

ii) the consignment must be treated for fungi as described in section 2.2.1.7 "Pesticide treatments for dormant bulbs". If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section of the phytosanitary certificate.

#### D. For Dormant Bulbs from all other Countries:

### **OPTION 1:**

PEQ: Level 1

**Minimum Period:** 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12) **Note:** Only nursery stock sourced from a country recognised by MPI as free from *Xylella fastidiosa* can

**Note:** Only nursery stock sourced from a country recognised by MPI as free from *Xylella fastidiosa* can be imported under this option.

- b. Conditions for *Phymatotrichopsis omnivora*: Additional declaration: "The dormant bulbs have been sourced from a "Pest free area", free from *Phymatotrichopsis omnivora*"
- c. Additional declaration: "The dormant bulbs in this consignment have been:
  - derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests;

#### **AND**

treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold storage or shipment".

# **OPTION 2:**

PEQ: Level 2

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
  - **Guidance for importers:** The minimum quarantine period will be <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) Additional declaration: "The dormant bulbs have been sourced from a "Pest free area", free from *Phymatotrichopsis omnivora*".

# **AND**

ii) the consignment must be treated for fungi as described in section 2.2.1.7 "Pesticide treatments for dormant bulbs". If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section of the phytosanitary certificate.

- c. Additional declaration: "The dormant bulbs in this consignment have been:
  - derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests
     AND
  - treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold storage or shipment".

# **E. For Tissue Cultures:**

- a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5) **Guidance for importers:** There will be a minimum quarantine period of <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. Additional Declaration: "The cultures have been derived from parent stock tested and found free of virus diseases."

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Rhododendron*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

# **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Microsphaera spp.; Ovulinia azaleae; Phellinus noxius; Pytophthora

ramorum; Uredinales

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

A. For Whole Plants:

**PEQ:** Level 2

Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Phellinus noxius* (section 2.2.1.13)

Note: Only applies to the following species: Rhododendron xobtusum

- c. Measures for Microsphaera spp. and rust diseases:
  - i. Additional declaration:

"Microsphaera spp., and the following rust diseases are not known to occur on Rhododendron spp. in \_ (the country or state where the plants were grown) \_"•

Note: Applies to the following rust diseases: Aecidium rhododendri; Aecidium sinorhododendri; Chrysomyxa ledi; Chrysomyxa ledicola; Chrysomyxa dieteli; Chrysomyxa expansa; Chrysomyxa himalensis; Chrysomyxa komarovii; Chrysomyxa piperiana; Chrysomyxa roanensis; Chrysomyxa succinea; Chrysomyxa taghishae; Puccinia rhododendri; Pucciniastrum vaccinii

#### OR

ii. All visible flower buds are to be removed prior to export;

#### and

On arrival in New Zealand the plant material is to be treated, under the supervision of an Inspector, at a MPI-registered transitional facility by dipping in Benomyl, Carbendazim or Thiophanate methyl [choose one] at a rate of 250mg a.i. per litre.

# **B. For Cuttings: PEO:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- b. Measures for *Microsphaera* spp. and rust diseases:
  - i. Additional declaration:

"Microsphaera spp., and the following rust diseases are not known to occur on Rhododendron spp. in \_ (the country or state where the plants were grown) \_"•

Note: Applies to the following rust diseases: Aecidium rhododendri; Aecidium sinorhododendri; Chrysomyxa ledi; Chrysomyxa ledicola; Chrysomyxa dieteli; Chrysomyxa

expansa; Chrysomyxa himalensis; Chrysomyxa komarovii; Chrysomyxa piperiana; Chrysomyxa roanensis; Chrysomyxa succinea; Chrysomyxa taghishae; Puccinia rhododendri; Pucciniastrum vaccinii

# OR

ii. All visible flower buds are to be removed prior to export;

On arrival in New Zealand the plant material is to be treated, under the supervision of an Inspector, at a MPI-registered transitional facility by dipping in Benomyl, Carbendazim or Thiophanate methyl [choose one] at a rate of 250mg a.i. per litre.

# **C. For Tissue Cultures:**

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2.

# 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; 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*'.
   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 2.2.1.12)
- 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
  - i) Additional declaration: "The Rosa plants in this consignment were produced in a

"pest free area" for Grapevine Pinot gris virus".

#### OR

- ii) Additional declaration: "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) 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 rugose, 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*'.

  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 2.2.1.12)
- 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
  - i) Additional declaration: "The *Rosa* plants in this consignment were produced in a "pest free area" for *Grapevine Pinot gris virus*".

#### OR

ii) Additional declaration: "The Rosa plants in this consignment were produced in a

"pest free place of production" for Grapevine Pinot gris virus".

- 1. 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 rugose, Rosa sempervirens, Rosa* cultivar Pink Meidiland, *Rosa* cultivar Pink Sevillana, *Rosa* cultivar Royal Bonica

#### C. For Dormant Cuttings:

PEQ: Level 2

Minimum Period: 6 months

- a. Conditions for *Ralstonia pseudosolanacearum*One of the following Additional Declarations must be endorsed on the phytosanitary certificate:
  - i) 'The (insert plant species) plants were sourced from a pest free area, free from *Ralstonia pseudosolanacearum*)'

#### OR

- ii) 'The (insert plant species) plants have been sourced from a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*'.
   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 2.2.1.12)
- 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
  - i) Additional declaration: "The *Rosa* plants in this consignment were produced in a "pest free area" for *Grapevine Pinot gris virus*".

#### OR

- ii) Additional declaration: "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 rugose, Rosa sempervirens, Rosa* cultivar Pink Meidiland, *Rosa* cultivar Pink Sevillana, *Rosa* cultivar Royal Bonica

### **D.** For Tissue Cultures:

**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*'.
   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* 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
  - i) Additional declaration: "The *Rosa* plants in this consignment were produced in a "pest free area" for *Grapevine Pinot gris virus*".

ΛR

ii) Additional declaration: "The *Rosa* plants in this consignment were produced in a "pest free place of production" for *Grapevine Pinot gris virus*".

# E. For Whole Plants, Cuttings or Tissue cultures imported into a level 3A PEQ facility 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*"

Inspection, Testing and Treatment Requirements for Rosa

	ig and Treatment Requirements to	
ORGANISM	MPI ACCEPTABLE METHODS	Comments
Insects	Visual inspection <b>AND</b> approved	Applies to whole plants and
	insecticide treatments as described in	cuttings only
	section 2.2.1.6 of the Basic conditions	
Mites	Visual inspection AND approved	Applies to whole plants and
	miticide treatments as described in the	cuttings only
	section 2.2.1.6 of the Basic conditions	
Fungus		
Phellinus noxius	Refer to section 2.2.1.13 "Measures for	Applies to whole plants only
	Phellinus noxius"	
Pucciniales	Treatment; refer to part A and B of the	Applies to whole plants and
	Rosa schedule	non-dormant cuttings only
Bacterium		
Ralstonia	Growing season inspection in PEQ for	Applies to <i>Rosa</i> whole plants,
pseudosolanacearum	symptom expression AND plating on	cuttings, and tissue culture
	selective media OR PCR	imported into a level 3A PEQ
		facility
Xylella fastidiosa	Refer to section 2.2.1.12 "Measures for	Applies to whole plants and
	Xylella fastidiosa"	cuttings only. Testing
		requirements for Xylella
		fastidiosa are identified in
		section 2.2.1.12.
	Refer to section 2.2.2.5 "Measures for	Applies to tissue culture only.
	Xylella fastidiosa on tissue culture"	Testing requirements for
		Xylella fastidiosa are
		identified in section 2.2.2.5.
Virus		
Blackberry chlorotic	PCR	Applies to whole plants,
ringspot virus		cuttings, and tissue culture
Raspberry ringspot	PCR	Applies to whole plants,
virus (strains not in		cuttings, and tissue culture
New Zealand)		
Rose rosette virus	PCR	Applies to whole plants,
		cuttings, and tissue culture
Phytoplasmas	Nested or real-time PCR using universal	Applies to whole plants,
	phytoplasma primers	cuttings, and tissue culture

# **Notes:**

- 1. The unit for testing is defined in section 2.3.2.1.
- 2. Sample collection: Plants shall be sampled from at least two positions on every stem including a young, fully expanded leaf at the top of each stem and an older leaf from a midway position.
- 3. **Time of testing:** Virus testing must be carried out using the new season's growth in the spring, or spring-like conditions. Bacteria and phytoplasmas testing must be carried out during late summer to early autumn, or during late summer-like conditions.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Rubus*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

# 1. Type of Rubus nursery stock approved for entry into New Zealand

Cuttings (runner tips and stem cuttings only); Plants in tissue culture

*Rubus* can be imported into Level 2 post entry quarantine from MPI-accredited facilities, or into Level 3B post entry quarantine from non-accredited facilities.

#### 2. Pests of Rubus

Refer to the pest list.

# 3. Entry conditions for:

# 3.1 *Rubus* cuttings and tissue culture from offshore MPI-accredited facilities in any country

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Rubus*, the accredited facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Rubus*.

# (i) **Documentation**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Rubus* nursery stock exported to New Zealand. **Import permit:** an import permit is required.

# (ii) *Phytosanitary requirements*

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Rubus* cuttings / plants in tissue culture [choose ONE option] have been:

inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

### **AND**

treated for regulated insects and mites as described in in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

#### AND

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-accredited facility].

#### **AND**

- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification.

# (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section [cuttings only] and by providing the following additional declarations to the phytosanitary certificate:

"The *Rubus* cuttings / plants in tissue culture [choose ONE option] have been:

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-accredited facility].

#### AND

- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification."

# (v) Post-entry quarantine

**PEQ**: All *Rubus* nursery stock must be imported under permit into post-entry quarantine in a Level 2 greenhouse facility accredited to Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 6 months (active continuous growth) in 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/testing are required.

# 3.2 Rubus cuttings and tissue culture from non-accredited facilities in any country

# (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Rubus* nursery stock exported to New Zealand. **Import permit:** an import permit is required.

# (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Rubus* cuttings / plants in tissue culture [choose ONE option] have been:

inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

#### AND

treated for regulated insects and mites as described in in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

#### **AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

# (iii) Additional declarations to the phytosanitary certificate

If satisfied that the preshipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section [cuttings only]. No additional declarations are required.

# (iv) Post-entry quarantine

**PEQ**: All *Rubus* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility accredited to Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 16 months (cuttings) in post-entry quarantine. Tissue cultures must be exflasked, and the exflasked plant material grown in a PEQ greenhouse during the quarantine period. During this time, imported material will be inspected, treated and/or tested for regulated pests as specified in the "Inspection, Testing and Treatment Requirements for *Rubus*", at the expense of the importer. These times are indicative minimum quarantine periods and may be extended if material is slow growing, pests are detected, or treatments/testing are required.

# Pest List for Rubus

### **REGULATED PESTS (actionable)**

Insects
Insecta

### Coleoptera

### Attelabidae

Rhynchites germanicus strawberry rhynchites

Buprestidae

Agrilus aurichalceus raspberry buprestid Agrilus rubicola raspberry buprestid Agrilus ruficollis red-necked cane borer

Byturidae

Byturus ochraceus raspberry beetle

Byturus rubi eastern raspberry fruitworm

Byturus tomentosus raspberry beetle Byturus unicolor raspberry fruitworm raspberry beetle Byturus urbanus

Cerambycidae

Coreus marginatus longhorn beetle Oberea bimaculata raspberry caneborer

Chrysomelidae

raspberry flea beetle Batophila aerata raspberry flea beetle Batophila rubi

Brachypnoea exilis grita flea beetle Nodonota margaretae leaf beetle

Curculionidae

apple blossom weevil Anthonomus rubi Anthonomus signatus blossom weevil Merhynchites bicolor rose curculio Merhynchites wickhami curculio

Nemocestes incomptus strawberry root weevil red-legged weevil Otiorhynchus clavipes Otiorhynchus singularis clay covered weevil Rhynchaenus fagi strawberry weevil

Scleropterus verecundus weevil

Nitidulidae

Meligethes hebes sap beetle

Scarabaeidae

scarabaeid beetle Cetonia aurata pisana Cotinis nitida green June beetle Macrodactylus subspinosus rose chafer Phyllopertha horticola garden chafer Japanese beetle

Popillia japonica

Diptera

Agromyzidae

rose leafminer Agromyza spiraeae

Anthomyiidae

Pegomya rubivora raspberry cane maggot

Cecidomviidae

Contarinia agrimoniae midge

Contarinia rubicola blackberry flower midge Dasineura plicatrix blackberry leaf midge raspberry gall midge Lasioptera rubi Resseliella theobaldi raspberry midge

Hemiptera

Anthocoridae

raspberry bug Orius vicinus

Miridae

Lygocoris pabulinus common green caspid Lygus lineolaris tarnished plant bug

Macrolophus rubi mirid
Psallus variabilis mirid

Pentatomidae

Dolycoris baccarumstink bugPentatoma rufipesforest bug

Homoptera

Aetalionidae

Aetalion reticulatum

Aphididae

Amphorophora agathonicastrawberry aphidAmphorophora idaeilarge 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 moth

Orgyia antiqua rusty tussock moth Megalopygidae Megalopyge lanata Nepticulidae Stigmella aurella Stigmella splendidissimella Noctuidae grey dagger moth Acronicta psi turnip moth Agrotis segetum Cosmia trapezina dun-bar moth Eudocima tyrannus Akebia leaf-like moth Graphiphora augur double dart moth Melanchra persicariae dot moth Oraesia emarginata fruit-piercing moth Papaipema nebris stalk borer Peridroma saucia variegated cutworm Spirama retorta fruit sucking moth Xestia c-nigrum spotted cutworm Notodontidae Phalera bucephala buff-tip moth Saturniidae Saturnia pavonia silk moth Sesiidae Pennisetia hylaeiformis raspberry crownborer raspberry crownborer Pennisetia marginata Synanthedon bibionipennis strawberry crown moth Tortricidae Acleris comariana leafroller broad barred button moth Acleris laterana Archips oporanus fruit tree tortix Argyrotaenia citrana orange tortix Choristoneura rosaceana obliquebanded leafroller Cnephasia longana omnivorous leaftier Epiblema uddmanniana bramble shoot borer Olethreutes concinnana leafroller Olethreutes furfuranum leafroller Pandemis cerasana leafroller Spilonota ocellana eye-spotted bud moth **Orthoptera** Gryllidae blackhorned tree cricket Oecanthus nigricornis blackhorned tree cricket Oecanthus pellucens Phasmida Phasmatidae Carausius morosus wingless stick insect Thysanoptera Thripidae Thrips flavus flower thrips

Mites

### Arachnida

### Acarina

### Eriophyidae

Cenopalpus pseudospinosus

Epitrimerus gibbosus

Eriophyes rubi

Phyllocoptes gibbosus

Phyllocoptes gracilis

Phyllocoptes rubi

Phyllocoptes rubi

Eriophyid mite

eriophyid mite

eriophyid mite

eriophyid mite

Eupodidae

Neotetranychus rubi raspberry mite

Tetranychidae

Nematodes

Adenophorea

Dorylaimida

Longidoridae

Xiphinema bakeridagger nematodeXiphinema barensedagger nematode

Secernentea

Tylenchida

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

Chamania vastallata

Gnomonia rostellata -

Gnomonia rubi (anamorph Gloeosporium sp.) cane canker, dieback Gnomonia setacea canker, dieback

**Dothideales** 

Leptosphaeriaceae

Leptosphaeria thomasiana cane blight

Melanconidaceae

Sydowiella depressula

Mycosphaerellaceae

Mycosphaerella confusa (anamorph Pseudocercospora rubi)cercospora leaf spotMycosphaerella ligeacane & leaf spotMycosphaerella rubi (anamorph Septoria rubi)cane & leaf spot

Sphaerulina rubi (anamorph Cylindrosporium rubi)

Helotiales

Dermateaceae

Pyrenopeziza rubi cane spot

Sclerotiniaceae

Monilinia fructigena (anamorph Monilia fructigena) brown rot

Meliolales

Meliolaceae

Appendiculella calstroma black mildew

**Unknown Ascomycetes** 

Hormotheca rubicola -

**Basidiomycota: Basidiomycetes** 

Agaricales

Tricholomataceae

Armillaria gallica armillaria root rot
Armillaria mellea (anamorph Rhizomorpha subcorticalis) shoestring root rot
Armillaria ostoyae armillaria root rot

Russulales

Lachnocladiaceae

Scytinostroma galactinum Scytinostroma galactinum **Unknown Basidiomycetes** Gerwasia epiphylla **Basidiomycota: Urediniomycetes Stereales** Sistotremataceae Phymatotrichopsis omnivora Texas root rot Uredinales Phragmidiaceae Arthuriomyces peckianus orange rust Gymnoconia nitens rust Hamaspora longissima sub-tropical rust Phragmidium alaskanum Phragmidium bulbosum rust Phragmidium occidentale Pucciniastraceae Pucciniastrum americanum late leaf rust Pucciniastrum arcticum Mitosporic Fungi (Coelomycetes) Hapalosphaeria deformans anther blight Macrophoma rubi leaf scorch Marssonina potentillae Phyllosticta carpogena Mitosporic Fungi (Hyphomycetes) Fusicladium grayianum Passalora monrosii Pseudocercospora heteromalla Pseudocercospora rubicola Verticillium albo-atrum [severe strain] verticillium wilt **Zygomycota: Zygomycetes** Mucorales Mucoraceae Rhizopus sexualis soft rot Chromista **Oomycota Pythiaceae** Phytophthora idaei Phytophthora ramorum sudden oak death Phytophthora rubi root rot **Bacteria** Enterobacteriaceae Erwinia amylovora f.sp. rubi Rhizobiaceae Agrobacterium rubi cane gall Xanthomonadaceae 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

### Disease of unknown etiology

Alpine mosaic agent Black raspberry streak disease Raspberry chlorotic net disease Raspberry yellow spot disease

<sup>\*</sup>For organisms intercepted that are not listed within this pest list refer to the Biosecurity Organisms Register for Imported Commodities to determine the regulatory status.

# Inspection, Testing and Treatment Requirements for Rubus

ORGANISM TYPES	MPI-ACCEPTABLE METHODS	
Insects	Visual inspection <b>AND</b> approved insecticide treatments as described in section 2.2.1.6 of the Basic conditions [cuttings only]	
Mites	Visual inspection <b>AND</b> approved miticide treatments as described in the <u>section</u> 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 or PCR	
Hawaiian rubus leaf curl virus	Country freedom <b>OR</b> Growing season inspection for symptom expression	
Raspberry latent virus	Country freedom <b>OR</b> PCR	
Raspberry leaf curl virus	Country freedom <b>OR</b> Graft indexing using <i>Rubus occidentalis</i>	
Raspberry ringspot virus	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa, Cucumis sativus</i> , and <i>Nicotiana clevelandii</i> ) <b>AND</b> ELISA or PCR	
Rubus Chinese seedborne virus	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa, Cucumis sativus</i> , and <i>Nicotiana clevelandii</i> )	
Rubus chlorotic mottle virus	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> )	
Rubus yellow net virus	Country freedom <b>OR</b> Graft indexing using <i>Rubus occidentalis</i> <b>AND</b> PCR	
Thimbleberry ringspot virus	Country freedom <b>OR</b> Graft indexing using <i>Rubus occidentalis</i>	
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 or PCR	
Wineberry latent virus	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> )	
Phytoplasmas		
Black raspberry witches'-broom phytoplasma	Country freedom <b>OR</b> Nested PCR or real time PCR using universal phytoplasma primers	
Rubus stunt phytoplasma	Country freedom <b>OR</b> Nested PCR or real time PCR using universal phytoplasma primers	
Diseases of unknown etiology		
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 etiology, and phytoplasmas will only be accepted when material is sourced from a MPI-accredited offshore facility. Country freedom must be endorsed by the exporting NPPO, and must be included in the agreement between MPI and the accredited offshore facility.
- **2.** The **unit for testing** is defined in section 2.3.2.1.
- **3. Tissue culture plantlets** must be potted up and grown in a MPI approved greenhouse, only material from the greenhouse is to be selected for testing.
- **4. Growing season** is defined as an extended period of plant growth that includes environmental conditions equivalent to spring (longer wetter days and colder temperatures), summer (longer dryer days and warm temperatures), and autumn (shorter wetter days and warm but cooling temperatures).
- **5. Virus testing** is to be conducted on new spring growth.
- **6. Phytoplasma and bacteria testing** is to be conducted at the end of the summer growth period.
- 7. Graft indexing: Each Rubus plant must be tested by leaf-grafting or bottle-grafting onto two replicate indicator plants. The indicator plants must be maintained in a vigorous state of growth before and after grafting. Grafted plants are to be inspected regularly for symptoms of disease for at least 3 months. A single indicator plant must be left ungrafted as a negative control. It is recommended that a single indicator plant is budded with a positive control; the positive control is to be a non-regulated virus of Rubus.
- **8. Herbaceous indicator plants**: *Chenopodium quinoa, Cucumis sativus,* and *Nicotiana clevelandii*. Two plants of each herbaceous indicator species must be used in each test. Herbaceous indicator plants must be grown at 18-25°C before and after inoculation and must be shaded for 24 hrs prior to inoculation. Post-inoculated indicator species must be held under appropriate glasshouse conditions for at least 4 weeks. Inoculated indicator plants must be inspected at least twice per week for symptoms of virus infection.
  - A single plant of each indicator species must be inoculated with buffer solution as a negative control. It is recommended that a single plant of each indicator species is inoculated with a positive control; the positive control is to be a non-regulated virus of *Rubus*.
- **9. Enzyme linked immunosorbent assay (ELISA) tests**. All ELISA tests must be validated using positive and negative controls prior to use in quarantine testing.
  - Positive and negative controls must be used in all tests.
- **10. Polymerase chain reaction (PCR) tests.** All PCR tests must be validated using positive and negative controls prior to use in quarantine testing. Positive and no template controls must be used in all tests. Ideally positive internal control primers and a negative plant control should also be used in PCR tests.

11.	<b>Inspection</b> of the <i>Rubus</i> plants by the Operator of the PEQ facility for signs of pest and disease must be at least twice per week during periods of active growth. A record of inspections carried out by the Operator is to be kept and made available to the MPI Inspector on request.
12.	Other internationally recognised testing methods may be accepted by MPI with prior notification.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Salix*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

# **GENERAL CONDITIONS:**

**Approved Countries**: All

**Quarantine Pests**: Erwinia salicis; Melampsora spp., Phellinus noxius; Pytophthora

ramorum; Xylella fastidiosa

**Entry Conditions**: **Basic**; with variations and additional conditions as specified below:

### A. For Whole Plants:

PEQ: Level 3B

Minimum Period: 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

from countries not recognised by MPI as free from Xylella fastidiosa

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

c. Conditions for *Phellinus noxius* (section 2.2.1.13) **Note**: Only applies to the following species: *Salix babylonica* 

### **B.** For Tissue Cultures:

- a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5) **Guidance for importers:** There will be a minimum quarantine period of <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 MPI-registered laboratory at the importers expense, prior to release to the importer

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Sandersonia*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

# 1. Type of Sandersonia nursery stock approved for entry into New Zealand

Dormant bulbs

Plants in tissue culture

### 2. Pests of Sandersonia

Refer to the pest list.

### 3. Entry conditions for:

# 3.1 Sandersonia dormant bulbs from any country

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

### (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The Sandersonia dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

### **AND**

- held in a manner to ensure that infestation/reinfestation does not occur, following certification.

### (iii) Additional declarations to the phytosanitary certificate

No additional declarations are required.

### 3.2 Sandersonia plants in tissue culture from any country

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

### (ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

### (iii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The Sandersonia plants in tissue culture have been:

 inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

(iv) <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<sup>1</sup>

**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".
- a. Conditions for Potato spindle tuber viroid

Note: Does not apply to the following species: 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 *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".
- b. Conditions for *Tomato apical stunt viroid*<sup>1</sup>

**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".
- c. Conditions for Tomato chlorotic dwarf viroid<sup>1</sup>

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*<sup>1</sup>

**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 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*<sup>1</sup>

**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 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

Note: Does not apply to the following species: 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 *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*<sup>1</sup>

**Note:** Only applies to the *Calibrachoa* genus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Tomato chlorotic dwarf viroid* is not known to occur".

### OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*".

### OR

iii) "Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements".

**Guidance for importers:** Tissue culture imported under this option must be imported into a <u>level 2</u> <u>PEQ greenhouse for a minimum period of 3 months</u> to undergo testing for the presence of *Tomato chlorotic dwarf viroid* during the quarantine period.

# **Inspection, Testing and Treatment Requirements**

ORGANISM	MPI ACCEPTABLE METHODS	Comments
Insects	Visual inspection AND approved	Applies to whole plants and
	insecticide treatments as described in	cuttings only
	section 2.2.1.6 of the Basic conditions	
Mites	Visual inspection AND approved	Applies to whole plants and
	miticide treatments as described in the	cuttings only
	section 2.2.1.6 of the Basic conditions	
Viroids		•
Columnea latent	PCR based methods	Only applies to Brunfelsia
viroid		undulata, Gloxinia
		gymnostoma and
		Nematanthus wettsteinii
		whole plants, cuttings, and
		tissue culture imported into
		a level 2 PEQ facility
Potato spindle tuber	PCR based methods	Applies to whole plants,
viroid		cuttings, and tissue culture
		imported into a level 2 PEQ
		facility, except for Gloxinia
		gymnostoma and
		Nematanthus wettsteinii
Tomato apical stunt	PCR based methods	Only applies to <i>Cestrum</i>
viroid		whole plants, cuttings, and
		tissue culture imported into
		a level 2 PEQ facility
Tomato chlorotic	PCR based methods	Only applies to
dwarf viroid		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.

 $\label{thm:measures} \mbox{Measures for $Columnea\ latent\ viroid, Tomato\ apical\ stunt\ viroid\ and\ Tomato\ chlorotic\ dwarf\ viroid\ will\ come\ into\ force\ on\ 22\ August\ 2020}$ 

<sup>&</sup>lt;sup>1</sup>Implementation of measures:

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Solanum tuberosum*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

# 1. Type of *Solanum tuberosum* nursery stock approved for entry into New Zealand Plants in tissue culture

*Solanum tuberosum* can be imported into New Zealand as plants in tissue culture from any country.

### 2. Pests of Solanum tuberosum

Refer to the pest list.

# 3. Entry conditions for:

# 3.1 Solanum tuberosum plants in tissue culture from offshore MPI-accredited facilities in any country

### (i) Documentation

# Import permit is required

**Declaration for genetically modified organisms is required:** Refer to section 5 of this schedule for details.

**Phytosanitary requirements:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Solanum tuberosum* plants in tissue culture exported to New Zealand.

### (ii) Special tissue culture medium requirements

The tissue culture medium must not contain charcoal.

### (iii) *Phytosanitary requirements*

Before a phytosanitary certificate is issued, the exporting country national plant protection organisation (NPPO) must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken:

The Solanum tuberosum tissue cultures in the consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

### **AND**

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the MPI-accredited facility.

### AND

- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification.

# (iv) Additional declarations to the phytosanitary certificate

"The *Solanum tuberosum* tissue cultures in this consignment have been:

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of MPI-accredited facility];

### **AND**

- have been held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification."

## (v) Inspection, testing and treatments of the consignment

For all imported *Solanum tuberosum* tissue cultures, MPI reserves the right to validate all testing and audit all treatment processes that are undertaken by a facility accredited by MPI for testing/treatment purposes. This applies to MPI-accredited facilities offshore and within New Zealand. Audits will be conducted on a regular basis and at the expense of the importer.

### (vi) Post-entry quarantine

PEQ: Not required

# 3.2 Solanum tuberosum plants in tissue culture from non-accredited facilities in any country

## (i) **Documentation**

### Import permit is required

**Declaration for genetically modified organisms is required:** Refer to section 5 for details. **Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Solanum tuberosum* plants in tissue culture exported to New Zealand.

# (ii) Special tissue culture medium requirements

The tissue culture medium must not contain charcoal.

### (iii) *Phytosanitary requirements*

The exporting country NPPO must be satisfied that the requirements of the model phytosanitary certificate have been met before the phytosanitary certificate is issued.

### (iv) Additional declarations to the phytosanitary certificate

There are no additional declarations to the phytosanitary certificate.

### (v) Inspection, testing and treatments of the consignment

Upon arrival, the inspection, treatment and testing requirements for specified pests must be undertaken at a Level 3B post entry quarantine facility. Refer to *Solanum tuberosum* Inspection and Testing Requirements following the *Solanum tuberosum* pest list.

### (vi) Post-entry quarantine

**PEQ**: Level 3B

**Quarantine Period**: Tissue cultures must be deflasked into the greenhouse for the quarantine period. 3 months is an indicative minimum quarantine period; this is the time required to complete inspections and/or indexing to detect regulated pests. The quarantine period may be extended if material is slow growing, pests are detected or additional treatments/testing are required.

# 4. Validation of test results and audit of treatments at MPI-accredited laboratories or facilities

For all imported *Solanum tuberosum* plants in tissue culture, MPI reserves the right to validate all testing and audit all treatment processes that are undertaken by a facility accredited by MPI for testing/treatment purposes. This applies to MPI-accredited facilities offshore and within New Zealand. Audits will be conducted on a regular basis and at the expense of the importer.

# 5. Declaration for genetically modified organisms

All import permit applications must include a signed declaration that the *Solanum tuberosum* plants in tissue culture are not genetically modified organisms, as defined by the New Zealand Hazardous Substances and New Organisms Act 1996 (HSNO Act, 1996). For a copy of the declaration form refer to the end of this schedule.

# Pest List for Solanum tuberosum

### **REGULATED PESTS (actionable)**

Mite

Arachnida

Acarina

Tetranychidae

Tetranychus evansi tetranychid mite

Fungi

Chytridiomycota **Chytridiales** 

Svnchvtriaceae

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 alfamovirus	-
	Solanum apical leaf curling begomovirus	-
	Solanum yellows luteovirus	-
	Southern potato latent carlavirus	-
	Sowbane mosaic sobemovirus	-
	Tobacco etch potyvirus*	-
	Tobacco necrosis necrovirus [strains not in New	
	Zealand]	
	Tobacco necrotic dwarf luteovirus*	-
	Tobacco rattle tobravirus [strains not in New Zealand]	-
	Tobacco streak ilarvirus [strains not in New Zealand]	-
	Tobacco stunt varicosavirus*	-
	Tomato bushy stunt tombusvirus*	-
	Tomato infectious chlorosis crinivirus	-
	Tomato leaf curl begomovirus - Australia*	-
	Tomato leaf curl begomovirus - New Delhi	-
	Tomato top necrosis nepovirus*	-
	Tomato yellow leaf curl begomovirus	-
	Tomato yellow mosaic begomovirus	-
	Tomato yellow vein streak begomovirus*	-
	Wild potato mosaic potyvirus	-
D1. 4	onloano a	
Pnyt	coplasmas	
	Columbia basin purple top phytoplasma	-
	Eggplant little leaf phytoplasma	
	Peanut witches' broom*	-
	Potato marginal flavescence	-
	Potato phyllody phytoplasma	-

Potato purple-top roll phytoplasma Potato purple-top wilt phytoplasma Potato round leaf phytoplasma Potato stolbur phytoplasma Potato witches' broom phytoplasma Saq'O disease

Note: \* Pathogens that infect Solanum tuberosum experimentally (i.e. not yet found to infect potato naturally under field conditions).

# Inspection and Testing Requirements for Solanum tuberosum

ORGANISM TYPES	ACCEPTABLE METHODS	Comments
	(See Note 6 at the end of this table).	
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.
Oomycete		
Phytophthora capsici	Growing season inspection in PEQ for symptom expression	
Phytophthora infestans (A2 mating strain) Phytophthora palmivora	Growing season inspection in PEQ for symptom expression Growing season inspection in PEQ for	
т пуюриноги ришичоги	symptom expression	
Bacteria	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
'Candidatus Liberibacter	Growing season inspection in PEQ for	
solanacearum' haplotype B	symptom expression AND PCR	
Clavibacter michiganensis	Growing season inspection in PEQ for	
subsp. sepedonicus	symptom expression AND	
saosp. sepenomens	• Immunofluorescence	
	or	
	• ELISA <b>AND</b> grow plantlets on	
	Murashige and Skoog medium	
	or	
	• PCR AND grow plantlets on	
	Murashige and Skoog medium	
Dickeya chrysanthemi pv.	Growing season inspection in PEQ for	
chrysanthemi	symptom expression <b>AND</b> plating on	
сы узаниет	selective pectate media or PCR	
Disk our a show a goth suri py	Growing season inspection in PEQ for	+
Dickeya chrysanthemi pv.		
parthenii	symptom expression <b>AND</b> plating on	
D: 1	selective pectate media or PCR	
Dickeya paradisiaca	Growing season inspection in PEQ for	
	symptom expression <b>AND</b> plating on	
(5.1	selective pectate media or PCR	
'Dickeya solani'	Growing season inspection in PEQ for	
	symptom expression AND plating on	
	selective pectate media <b>or</b> PCR	
Pectobacterium betavasculorum	Growing season inspection in PEQ for	
	symptom expression AND plating on	
	selective pectate media or PCR	
Pectobacterium polaris	Growing season inspection in PEQ for	
	symptom expression AND plating on	
	selective pectate media or PCR	
Ralstonia pseudosolanacearum	Growing season inspection in PEQ for	
(formerly R. solanacearum race	symptom expression,	
1)	<b>AND</b> plating on selective media	
	OR PCR	
Xylella fastidiosa	Growing season inspection in PEQ for	
	symptom expression AND PCR	
Viroid		

ORGANISM TYPES	ACCEPTABLE METHODS	Comments
	(See Note 6 at the end of this table).	Comments
Potato spindle tuber viroid	PCR using two sets of primers	
[transient]	or Return PAGE (with silver staining)	
	<b>or</b> Hybridisation (P32 or digoxigenin	
	labelled RNA probes)	
Viruses	,	
Arracacha B nepovirus	ELISA or PCR AND herbaceous	Sap transmitted with difficulty.
-	indicators Ca	ELISA must detect the oca strain
Andean potato latent tymovirus	ELISA or PCR AND herbaceous	
	indicators Nb, No	
Andean potato mild mosaic 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 or PCR AND herbaceous	
Totalo olden imgspot nepovirus	indicators Cq, No	
Potato deforming mosaic	PCR or ELISA	
begomovirus		
Potato latent carlavirus	PCR	
Potato mop-top furovirus	ELISA or PCR AND herbaceous	ELISA can be used to detect the
	indicators Ca, Cq, Nd	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	distributed.
Potato rough dwarf carlavirus	PCR	
Potato T trichovirus	ELISA or PCR AND Herbaceous	
1 otato 1 trenovirus	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	ELISA or PCR AND herbaceous	
not in NZ]	indicators Nb, No	
Potato yellow dwarf	Herbaceous indicators Nc	
nucleorhabdovirus		
Potato yellow mosaic	Herbaceous indicators Nb, Nt	
begomovirus		
Potato yellow vein crinivirus	PCR or hybridisation	
Potato yellowing alfamovirus	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 Cq, Ca	
Tobacco necrosis necrovirus	Herbaceous indicators Ca, Cq, Nc	Tobacco necrosis virus A
[strains not in New Zealand]		Tobacco necrosis virus B

ORGANISM TYPES	ACCEPTABLE METHODS	Comments
	(See Note 6 at the end of this table).	
Tobacco rattle tobravirus [strains not in New Zealand]	PCR AND herbaceous indicators Ca, Nc	Serological detection is unreliable because of diversity in the particle proteins of different isolates.
Tobacco streak ilarvirus [strains not in New Zealand]	Herbaceous indicators Nt	Potato strain SB10 infects potato naturally.
Tomato infectious chlorosis crinivirus	PCR	·
Tomato leaf curl begomovirus – New Delhi	Herbaceous indicators Nb	Potato leaf curl is a new disease in northern India caused by a strain of Tomato leaf curl new Delhi virus.
Tomato yellow leaf curl begomovirus	PCR or ELISA	
Tomato yellow mosaic begomovirus	PCR or ELISA AND herbaceous indicators Nb, Nt	
Wild potato mosaic potyvirus	Herbaceous indicators Nc, No	
Phytoplasmas		
Columbia basin purple top phytoplasma	Nested or real-time PCR using universal 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 phytoplasma primers	
Potato purple-top roll	Nested or real-time PCR using universal	
phytoplasma	phytoplasma primers	
Potato purple-top wilt	Nested or real-time PCR using universal	
phytoplasma	phytoplasma primers	
Potato round leaf phytoplasma	Nested or real-time PCR using universal phytoplasma primers	
Potato stolbur phytoplasma	Nested or real-time PCR using universal phytoplasma primers	
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 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
Tonato emorotic awaii viiota	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
Tiourion mosure degome virus	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
Tisparagus 5 potentias	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
Cussava green motile hepovirus	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
Cussia inita mosaic caraviras	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
Cherry real four hepovirus	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
255prant mosare tymo viras	being conducted elsewhere in this schedule, e.g.
	the indicators Cq and Nc.
Henbane mosaic potyvirus*	Tests that would detect this virus are already
Tienoune mosure poty virus	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
r r r r r r r r r r r r r r r r r r r	being conducted elsewhere in this schedule, e.g.
	the indicator Ca
Pelargonium line pattern carmovirus*	Tests that would detect this virus are already
8	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
ŭ	being conducted elsewhere in this schedule e.g.

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 predetermined 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 deneyi, No Nicotiana occidentalis P1 and Nt Nicotiana tabacum (cv White Burley)): at least two plants of each herbaceous indicator species must be used in each test. Herbaceous indicator hosts (Ca Chenopodium amaranticolour, Nb Nicotiana benthamiana and Nc Nicotiana clevelandii: at least four plants of each herbaceous indicator species must be used in each test.
- 4. For herbaceous indexing and ELISA, plants must be sampled from at least two positions on every stem including a young, fully expanded leaflet at the top of each stem and an older leaflet from a midway position (Jeffries, 1998). For the PSTVd PCR young actively growing leaf tissue must be used.
- 5. Herbaceous indicator plants must be grown under appropriate temperatures and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection. A suitable positive control must be included.
- 6. Enzyme linked immunosorbent assay (ELISA) and polymerase chain reaction (PCR) tests for viruses. Tests must be completed at the optimal time for detection. In general, plants shall be sampled from at least two positions including a young, fully expanded leaf at the top of the stem and an older leaf from a midway position.
- 7. All PCR, hybridisation and ELISA tests must be validated using positive controls prior to use in quarantine testing. Positive and negative controls (including a blank water control for PCR) must be used in all tests. Ideally positive internal controls and a negative plant control should also be used in PCR tests.
- 8. Inspect *Solanum tuberosum* plants for signs of pest and disease at least once per week. Inspect inoculated herbaceous indicator plants at least twice per week for symptoms of virus infection
- 9. With prior notification, MPI will accept other internationally recognised testing methods.

# **Declaration Form**

## To be completed and signed by the exporter and importer.

As defined by the New Zealand HSNO Act 1996, Genetically modified organism means, unless expressly provided otherwise by regulations, any organism in which any of the genes or any other genetic material (a) have been modified by in vitro techniques; or (b) are inherited or otherwise derived, through any number of replications, from any genes or other genetic material which has been modified by in vitro techniques.

Note that under the Hazardous Substances and New Organisms (HSNO) Act 1996. The import and release of any genetically modified crop without approval from the Environmental Protection Authority (EPA) it is unlawful. requirements set out in the Nursery Stock Import Health Standard (MPI Import Health Standard: 155.02.06: Importation of Nursery Stock - http://www.mpi.govt.nz/document-vault/1152), (species name and lot/line number or unique identifier as stated on all the other import documentation) was produced neither "from" nor "by" genetically modified crops. I undertake to inform immediately the importer and the Ministry for Primary Industries, MPI, New Zealand of any information that can undermine the accuracy of this declaration. Note that MPI may request evidence as to how production, handling and transport of the nursery stock is performed in the field, or require and audit as a way to provide quality to the production system. I,..... (importer's name and address)............declare to the best of my knowledge that according to the requirements set out in the Nursery Stock Import Health Standard (MPI Import Health Standard: 155.02.06: Importation of Nursery Stock - http://www.mpi.govt.nz/document-vault/1152), (species name and lot/line number or unique identifier as stated on all the other import documentation) was produced neither "from" nor "by" genetically modified crops. Signed by (exporter) and Company Name and details (print name) Date Signed by (importer) and Company Name and details

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

(print name)

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Solidago*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

# **GENERAL CONDITIONS:**

**Approved Countries**: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

Quarantine Pests: Aster yellows phytoplasma, Uredinales; Xylella fastidiosa

**Entry Conditions**: **Basic**; with variations and additional conditions as specified below:

### A. For Whole Plants:

**PEQ**: Level 2

**Minimum Period**: 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12) **Guidance for importers**: The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa*
- b. Additional declaration: "Aster yellows phytoplasma is not known to occur in \_\_ (the country or state where the plants were grown) \_\_".

### **B. For Tissue Cultures:**

- a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
   Guidance for importers: There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*
- b. Additional Declaration: "The cultures have been derived from parent stock tested or inspected and found free of Aster yellows phytoplasma".

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Syringa*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

# **GENERAL CONDITIONS:**

**Approved Countries**: All

Quarantine Pests: Virus & virus-like diseases

**Entry Conditions**: **Basic**; with variations and additional conditions as specified below:

### A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

**Additional Declaration:** "The plants were inspected during the growing season and no

symptoms of viruses or virus-like diseases were detected".

### **B. For Tissue Cultures:**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2; **PLUS** 

### **Additional Declaration:**

"The cultures have been derived from parent stock tested and found free of viruses or viruslike diseases". **Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under Tillandsia", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

# **GENERAL CONDITIONS:**

**Approved Countries:** All

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

A. For Cuttings and Whole Plants:

**PEQ:** Level 2

**Minimum Period:** 3 months

### **B. For Tissue Cultures:**

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under Tricyrtis", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

# **GENERAL CONDITIONS:**

**Approved Countries**: All

Quarantine Pests: Tetranychus kanzawai

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

**A. For Whole Plants:** 

**PEQ**: Level 2

**Minimum Period**: 3 months

### **B. For Tissue Cultures:**

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Tritonia*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries:** All

Quarantine Pests: Puccinia gladioli

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

### A. For Whole Plants:

PEQ: Level 2

**Minimum Period:** 6 months **Additional Declarations:** 

"Puccinia gladioli is not known to occur in \_\_\_\_\_\_ (the country or state where the plants were grown) \_\_\_\_\_\_".

### OR

"The plants were inspected during the growing season and *Puccinia gladioli* was not detected".

B. For Dormant Bulbs (Corms) from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

### **OPTION 1:**

No import permit is required.

**PEQ:** None

**Cleanliness:** Bulbs (corms) must be free of leafy coverings.

# **Additional Declaration(s):**

"In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests." An import permit is required.

# **OPTION 2: PEQ:** Level 1

**Minimum Period:** 3 months

Cleanliness: Bulbs (corms) must be free of leafy coverings.

C. For Dormant Bulbs from Countries <u>other than</u> Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, USA:

# **OPTION 1: PEO:** Level 1

**Minimum Period:** 3 months

Cleanliness: Bulbs (corms) must be free of leafy coverings.

### **Additional Declaration(s):**

"The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

### **AND**

treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

# **OPTION 2: PEQ:** Level 2

**Minimum Period:** 3 months

**Cleanliness:** Bulbs (corms) must be free of leafy coverings.

### **D. For Tissue Cultures:**

As for Standard Entry Conditions for Tissue Cultures - see Section 2.2.2.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Tulipa*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

# 1. Type of Tulipa nursery stock approved for entry into New Zealand

Dormant bulbs

Plants in tissue culture

### 2. Pests of Tulipa

Refer to the pest list.

### 3. Entry conditions for:

# 3.1 Tulipa dormant bulbs from any country

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** an import permit is required.

# (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

### The *Tulipa* dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests OR treated for regulated fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

### **AND**

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

### **AND**

sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria and viruses.

## AND

treated for regulated insects and mites as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

### AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

### (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section, and by providing the following additional declaration to the phytosanitary certificate:

"The *Tulipa* dormant bulbs in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

### **AND**

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi [if applicable].

### AND

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria and viruses."

### (iv) Post-entry quarantine

# **PEQ**: Level 1

**Quarantine Period**: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required. Cut flowers may receive biosecurity clearance while the imported plants remain in post-entry quarantine following inspection of the parent plants and with prior approval from a MPI Inspector.

## 3.2 Tulipa dormant bulbs from the Netherlands

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

# (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

### The *Tulipa* dormant bulbs have been:

produced in accordance with the requirements of the Bloembollenkeuringsdienst (BKD) Class 1 bulb certification scheme.

### AND

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

### **AND**

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

### **AND**

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria and viruses.

### **AND**

- treated for regulated insects and mites as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

### **AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

### (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section, and by providing the following additional declaration to the phytosanitary certificate:

"The *Tulipa* dormant bulbs in this consignment have been:

- produced in accordance with the requirements of the BKD Class 1 bulb certification scheme.

## AND

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi [if applicable].

### AND

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria and viruses."

### (iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed.

## 3.3 Tulipa plants in tissue culture from any country

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

## (ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

### (iii) *Phytosanitary requirements*

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Tulipa* plants in tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

### AND

 derived from parent stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

### **AND**

derived from parent stock tested using molecular/ serological methods [choose ONE option] and found free of *Tobacco rattle virus* and *Tomato bushy stunt virus*.

### (iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declaration to the phytosanitary certificate:

"The *Tulipa* plants in tissue culture have been derived from parent stock:

inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests

### AND

tested using molecular/ serological methods [choose ONE option] and found free of Tobacco rattle virus and Tomato bushy stunt virus."

### (iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed overseas. Alternatively the inspection and testing may be completed in post-entry quarantine upon arrival in New Zealand according to the following conditions:

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** an import permit is required.

**PEQ**: Level 3B

Quarantine Period: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

# Pest List for Tulipa

### **REGULATED PESTS (actionable)**

Insect

Insecta

Diptera

Anthomyiidae

Delia antiqua onion maggot

Homoptera Aphididae

Rhopalosiphoninus staphyleae tulipaellus tulip leaf aphid

Orthoptera Gryllotalpidae

Gryllotalpa gryllotalpa mole cricket

Thysanoptera Thripidae

Taeniothrips eucharii oriental thrips

Mite

Arachnida

Acarina

Eriophyidae

Aceria tulipae [vector] wheat curl mite

Nematode

Adenophorea

Dorylaimida

Longidoridae

Xiphimena coxi dagger nematode

Trichodoridae

Paratrichodorus pachydermus [vector]stubby root 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 tuliparumbasal rotSclerotium 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 not recognised by MPI as free from *Xylella fastidiosa*
- d. Conditions for *Phellinus noxius* (section 2.2.1.13) **Note**: Only applies to the following species: *Ulmus parvifolia*

### **B. For Tissue Cultures:**

**PEO**: Level 3B

**Minimum Period**: 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)

**Guidance for importers:** The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa* 

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Vaccinium*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

These conditions do not apply to *Vaccinium macrocarpon*.

# 1. Type of *Vaccinium* [excluding *Vaccinium macrocarpon*] nursery stock approved for entry into New Zealand

Cuttings (dormant); Plants in tissue culture.

### 2. Pests of Vaccinium

Refer to the pest list.

### 3. Entry conditions for:

# 3.1 *Vaccinium* cuttings and tissue culture from offshore MPI-accredited facilities in any country

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. The operator of the accredited facility must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Vaccinium*. Refer to the "*Vaccinium* Inspection, Testing and Treatment Requirements".

### (i) **Documentation**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vaccinium* nursery stock exported to New Zealand. **Import permit:** an import permit is required.

### (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Vaccinium* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

#### **AND**

treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

### **AND**

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-accredited facility].

### **AND**

- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification.

### (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section and by providing the following additional declarations to the phytosanitary certificate:

"The *Vaccinium* cuttings have been:

held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-accredited facility].

### AND

- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification."

## (iv) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

### (v) *Post-entry quarantine*

**PEQ**: All *Vaccinium* nursery stock must be imported under permit into post-entry quarantine in a level 2 quarantine facility accredited to standard MPI.STD.PEQ: Facilities for 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/testing are required.

### 3.2 Vaccinium cuttings from non-accredited facilities in any country

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vaccinium* nursery stock exported to New Zealand. **Import permit:** an import permit is required.

### (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The Vaccinium cuttings 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 accredited to standard MPI.STD.PEQ: Facilities for 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/testing are required.

### 3.3 Vaccinium tissue cultures from non-accredited facilities in any country

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vaccinium* nursery stock exported to New Zealand. **Import permit:** an import permit is required.

## ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Vaccinium* 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. The following countries are recognised by MPI as being free from *Phytophthora ramorum*: Australia, Israel, Japan, and South Africa.

### (iii) Additional declarations to the phytosanitary certificate

The following additional declaration can be included for countries recognised by MPI as being free from *Phytophthora ramorum*:

"The *Vaccinium* tissue cultures in this consignment have been sourced from a "Pest Free Area" free from *Phytophthora ramorum*".

### (iv) Special tissue culture medium requirements

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 accredited to standard MPI.STD.PEQ: Facilities for Post Entry Ouarantine for Plants.

# Special requirements for plants imported into a level 3A quarantine facility:

- Before plants are deflasked into a level 3A quarantine facility the tissue cultures must be held at a level 3 tissue culture laboratory until the following activities have been completed:
  - Tissue cultures must be held between 17°C and 25°C for a minimum period of four weeks and all plants must be inspected by the MPI inspector for signs or symptoms of *Phytophthora ramorum* prior to deflasking. This inspection will be in addition to growing season inspections which are required in the greenhouse. This is only required for plants which do not have an additional declaration certifying they have been sourced from a country recognised by MPI as being free from *Phytophthora ramorum*.
  - Sub culturing must not occur during this incubation period, however plants may be sub-cultured on arrival in New Zealand, prior to commencement of the four week incubation.
  - Tissue cultures must not be transferred to the level 3A quarantine facility until they have been tested for, and found free from *Monilinia vaccinii-corymbosi*.
- Requirements at the level 3A quarantine facility:
  - All plants must be inspected for signs and symptoms of pests and disease at least twice per week throughout the entire quarantine period (including during dormancy).
  - Plants must be irrigated using a method which prevents water coming into contact with plant foliage (such as drip irrigation). Overhead irrigation must not be used
  - Contingency plans must be developed to identify actions that will be taken to contain the propagules of any fungal or oomycete disease organisms in the event of disease symptoms becoming evident during the quarantine period.
     These plans must be recorded in the facility operating manual.

## Quarantine Period and Inspection, Testing and Treatment Requirements:

The imported tissue culture plants must be deflasked and grown for a minimum period of 9 months in post-entry quarantine. During this time plants will be inspected, treated and/or tested for regulated pests as specified in the "Inspection, Testing and Treatment Requirements for *Vaccinium*", at the expense of the importer. This time is the indicative minimum quarantine period and may be extended if material is slow growing, pests are detected, or treatments/testing are required.

## Pest List for Vaccinium

# **REGULATED PESTS (actionable)**

Insect

Insecta

Coleoptera

Cerambycidae

Oberea myops azalea stem borer

Chrysomelidae

Altica sylvia blueberry flea beetle Rhabdopterus picipes cranberry rootworm

Curculionidae

Anthonomus musculus cranberry weevil
Conotrachelus nenuphar plum curculio
Pseudanthonomus validus currant fruit weevil

Scarabaeidae

Popillia japonica Japanese beetle

Diptera

Cecidomyiidae

Contarinia vaccinii blueberry tip midge

**Tephritidae** 

Rhagoletis mendax blueberry maggot

Hemiptera Coreidae

Veneza phyllopus leaf-footed bug

Homoptera

Aphididae

Illinoia borealis aphid

Illinoia pepperi blueberry aphid

Cicadellidae

Euscelis striatulus Blunt-nosed leafhopper Scaphytopius magdalensis sharpnosed leafhopper

Hymenoptera

Tenthredinidae

Caliroa annulipes sawfly

Neopareophora 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 rosanus rose leafroller
Argyrotaenia velutinana red-banded leafroller

Aroga trialbamaculella leaftier

Cheimophila salicella European carnation tortrix

Choristoneura hebenstreitella tortricid

Choristoneura rosaceana oblique-banded leafroller

Cydia packardi cherry fruitworm

Dichomeris vacciniella leaftier

Hendecaneura shawiana blueberry tip borer Spilonota ocellana eyespotted bud moth

**Thysanoptera** Thripidae

> Catinathrips similis thrips Catinathrips vaccinicola thrips Frankliniella bispinosa flower thrips

Frankliniella tritici eastern flower thrips Frankliniella vaccinii blueberry thrips

Scirtothrips ruthveni

Taeniothrips vaccinophilus thrips

Mite

Arachnida

Acarina Eriophyidae

> Acalitus vaccinii blueberry bud mite

**Fungus** 

Ascomycota

**Diaporthales** 

Valsaceae

Diaporthe vaccinii (anamorph Phomopsis vaccinii) twig blight

**Dothideales** 

Botryosphaeriaceae

Botryosphaeria corticis cane blight

Botryosphaeria vaccinii (anamorph Phyllosticta elongata)

Polystomellaceae

Dothidella vacciniicola twig canker

**Ervsiphales** Ervsiphaceae

> Microsphaera vaccinii powdery mildew

Hypocreales Hypocreaceae

> Calonectria ilicicola (anamorph Cylindrocladium root and stem rot

crotalariae)

Leotiales

Leotiaceae

Godronia cassandrae (anamorph Fusicoccum foliage spot

putrefaciens)

Godronia cassandrae f. sp. vaccinii cane canker

Sclerotiniaceae

Monilinia baccarum mummy berry Monilinia fructigena (anamorph Monilia fructigena) European brown rot

Monilinia ledi twig blight

Monilinia megalospora

Monilinia oxycocci

Monilinia urnula brown rot Monilinia vaccinii-corymbosi brown rot

**Phyllachorales** 

Phyllachoraceae

Ophiodothella vaccinii fly speck leaf spot

Meliolales

Meliolaceae

black mildew Asteridiella exilis

Rhytismatales Rhytismataceae

Lophodermium hypophyllum

Lophodermium maculare leaf spot Rhytisma vaccinii tar leaf spot

**Basidiomycota: Basidiomycetes** 

**Agaricales** Tricholomataceae **Exobasidiales** Exobasidiaceae **Uredinales Pythiales** 

Armillaria mellea (anamorph Rhizomorpha subcorticalis) Armillaria ostovae

armillaria root rot armillaria root rot

Exobasidium maculosum

**Basidiomycota: Teliomycetes** 

Pucciniastraceae

Pucciniastrum goeppertianum rust

Oomvcota Pythiaceae

Phytophthora ramorum sudden oak death disease

mitosporic fungi (Coelomycetes)

**Sphaeropsidales** Sphaerioidaceae

Dothichiza caroliniana double leaf spot Coniothyrium vaccinicola brand canker stem blight Phoma vaccinii Piggotia vaccinii leaf spot Septoria albopunctata septoria spot Septoria vaccinii septoria spot

unknown Coelomycetes unknown Coelomycetes

Gloeosporium minus leaf spot and stem canker

Leptothyrium conspicuum fly speck

mitosporic fungi (Hyphomycetes)

Hyphomycetales Moniliaceae

> Gloeocercospora inconspicua leaf spot Ramularia vaccinii leaf spot

unknown Hyphomycetes unknown Hyphomycetes

Aureobasidium vaccinii twig and leaf blight

**Bacterium** 

Burkholderiaceae

Ralstonia pseudosolanacearum Bacterial wilt

(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)
Insects	Visual inspection AND approved insecticide treatments (Refer to section
	2.2.1.6 of the basic conditions)
Mite	Visual inspection AND approved miticide treatments (Refer to section
	2.2.1.6 of the basic conditions)
Fungi	Growing season inspection in PEQ for disease symptom expression
Diaporthe vaccinii	Plating of twig or leaf material onto suitable isolation medium
Monilinia vaccinii-corymbosi	Growing season inspection in PEQ for disease symptom expression <b>AND</b> [for tissue cultures which will be deflasked into a level 3A quarantine facility, option 3.3 of the <i>Vaccinium</i> schedule only]; one of the following tests must occur before the tissue cultures are transferred to the quarantine facility:  PCR OR plating onto suitable isolation medium.
Oomycota	
Phytophthora ramorum	Growing season inspection in PEQ for disease symptom expression <b>AND</b> [for tissue cultures which were not certified as sourced from a country free from <i>P. ramorum</i> , and which will be deflasked into a level 3A quarantine facility under option 3.3 of the <i>Vaccinium</i> schedule]: Tissue cultures must be held in a level 3 tissue culture facility between 17°C and 25°C for a minimum period of four weeks, and inspected by the MPI inspector before transfer to the greenhouse.
Bacterium	
Agrobacterium rubi	Growing season inspection in PEQ for disease symptom expression
Ralstonia pseudosolanacearum	Growing season inspection in PEQ for disease symptom expression,
(formerly R. solanacearum race 1	AND plating on selective media or PCR using DNA from plant stem
Xylella fastidiosa	Growing season inspection in PEQ for disease symptom expression AND PCR
Virus	
Blueberry leaf mottle virus	Herbaceous indicators Cq and Nc AND ELISA or PCR
Bluberry red ringspot virus (syn. Cranberry ringspot virus)	ELISA or PCR
Blueberry scorch virus	Herbaceous indicator Cq AND ELISA or PCR
Blueberry shock virus	Herbaceous indicators Nc and Nt AND ELISA or PCR
Blueberry shoestring virus	ELISA or PCR
Peach rosette mosaic virus	Herbaceous indicators Cq and Nt AND ELISA or PCR
Tobacco streak virus	Herbaceous indicators Cq and Nt AND ELISA or PCR
[strains not in New Zealand]	
Tomato ringspot virus	Herbaceous indicators Cq and Nt AND ELISA or PCR
Phytoplasmas	
Blueberry stunt phytoplasma	Nested PCR or real time PCR using universal phytoplasma primers
Cranberry false blossom	Nested PCR or real time PCR using universal phytoplasma primers
phytoplasma	No. 4 DCD constraint DCD circuit
Vaccinium witches' broom	Nested PCR or real time PCR using universal phytoplasma primers
phytoplasma  Discoss of unknown acticless	
Disease of unknown aetiology  Rhue berry fruit drop disease	Growing season inspection in DEO for disease symptom expression
Blue berry 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-accredited facilities in any country

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. The operator of the accredited facility must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Vaccinium macrocarpon*. Refer to the "*Vaccinium macrocarpon* Inspection, Testing and Treatment Requirements".

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vaccinium macrocarpon* nursery stock exported to New Zealand.

**Import permit:** an import permit is required.

### (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Vaccinium macrocarpon* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

### **AND**

treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

### AND

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-accredited facility]

### AND

held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification.

### (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section and by providing the following additional declarations to the phytosanitary certificate:

"The *Vaccinium macrocarpon* cuttings / plants in tissue culture [choose ONE option] have been

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-accredited facility].

### **AND**

- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification."

### (iv) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

## (v) <u>Post-entry quarantine</u>

**PEQ**: All *Vaccinium macrocarpon* nursery stock must be imported under permit into postentry quarantine in a Level 2 greenhouse facility accredited to Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of 6 months in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. Six months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

# 3.2 Vaccinium macrocarpon cuttings and tissue culture from non-accredited facilities in any country

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vaccinium macrocarpon* nursery stock exported to New Zealand.

Import permit: an import permit is required.

### (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Vaccinium macrocarpon* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

### **AND**

treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

### **AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

### (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section. No additional declarations are required.

## (iv) Post-entry quarantine

**PEQ**: All *Vaccinium macrocarpon* nursery stock must be imported under permit into postentry quarantine in a Level 3B greenhouse facility accredited to Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

Quarantine Period and Inspection, Testing and Treatment Requirements: The nursery stock will be grown for a minimum period of either 9 (tissue culture) or 16 months (cuttings) in post-entry quarantine. During this time it will be inspected, treated and/or tested for regulated pests as specified in the "Inspection, Testing and Treatment Requirements for *Vaccinium macrocarpon*", at the expense of the importer. These times are indicative minimum quarantine periods and may be extended if material is slow growing, pests are detected, or treatments/testing are required.

# Pest List for Vaccinium macrocarpon

# **REGULATED PESTS (actionable)**

**Insect** 

Insecta

Coleoptera

Chrysomelidae

Rhabdopterus picipes cranberry rootworm

Curculionidae

Anthonomus musculus cranberry weevil

Pseudanthonomus validus currant fruit weevil

Scarabaeidae

Popillia japonica Japanese beetle

Diptera

Tephritidae

Rhagoletis pomonella apple maggot fly

Homoptera Aphididae

Aphis vaccinii blueberry aphid

Illinoia borealis aphid

Cicadellidae

Euscelis striatulus Blunt-nosed leafhopper

Hymenoptera Tenthredinidae

Pristiphora idiota willow redgall sawfly

Lepidoptera Arctiidae

Hyphantria cunea fall webworm

Geometridae

Itame ribearia currant spanworm

Noctuidae

Acronicta tritona acronicta caterpillar
Actebia fennica black army cutworm

Pyralidae

Acrobasis vaccinii cranberry fruitworm

Tortricidae

Archips rosanusrose leafrollerArgyrotaenia velutinanared-banded leafroller

Aroga trialbamaculella leaftier Choristoneura hebenstreitella tortricid

Choristoneura rosaceana oblique-banded leafroller

Dichomeris vacciniella leaftier

Thysanoptera Thripidae

Frankliniella vaccinii blueberry thrips

Mite

Arachnida

Acarina

Eriophyidae

Acalitus vaccinii blueberry bud mite

**Fungus** 

Ascomycota

Diaporthales Valsaceae

Diaporthe vaccinii (anamorph Phomopsis vaccinii)

twig blight

**Dothideales** 

Botryosphaeriaceae

Botryosphaeria vaccinii (anamorph Phyllosticta

elongata)

**Erysiphales** 

Erysiphaceae

Microsphaera vaccinii powdery mildew

Leotiales

Leotiaceae

Godronia cassandrae (anamorph Fusicoccum 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

Coniothyrium vaccinicolabrand cankerPhoma vacciniistem blightSeptoria vacciniiseptoria spotStrasseria oxycoccifruit rot

unknown Coelomycetes unknown Coelomycetes

Gloeosporium minus leaf spot and stem canker

Leptothyrium conspicuum fly speck

Oomycota Pythiales Pythiaceae

Phytophthora ramorum Sudden Oak Death disease

Bacterium

Pseudomonadaceae

Xylella fastidiosa

Rhizobiaceae

Agrobacterium rubi cane gall

Virus

Blueberry scorch virus

Bluberry red ringspot virus (syn. Cranberry ringspot

virus)

Tobacco streak virus [strains not in New Zealand]

Phytoplasma

Cranberry false blossom phytoplasma -

# Inspection, Testing and Treatment Requirements for *Vaccinium macrocarpon*

ORGANISM TYPES	MPI-ACCEPTED METHODS (See notes below)
Insects	Visual inspection AND approved insecticide treatments (Refer to section 2.2.1.6 of the basic conditions)
Mite	Visual inspection AND approved miticide treatments (Refer to section 2.2.1.6 of the basic conditions)
Fungi	Growing season inspection in PEQ for disease symptom expression.
Bacterium	
Agrobacterium rubi	Growing season inspection in PEQ for disease symptom expression.
Xylella fastidiosa	Growing season inspection in PEQ for disease symptom expression AND PCR
Virus	
Blueberry scorch virus	Herbaceous indicator Cq AND ELISA or PCR.
Blueberry red ringspot virus (syn. Cranberry ringspot virus)	ELISA or PCR.
Tobacco streak virus [strains not in New Zealand]	Herbaceous indicators Cq and Nt AND ELISA or PCR.
Phytoplasmas	
Cranberry false blossom phytoplasma	Nested PCR or real time PCR using universal phytoplasma primers.

### **Notes:**

- 1. The unit for testing is defined in section 2.3.2.1.
- 2. Herbaceous indicator hosts: *Chenopodium quinoa* (Cq) and *Nicotiana tabacum* (Nt). At least two plants of each herbaceous indicator species must be used in each test. Tests are to be carried out using the new season's growth in the spring. Plants shall be sampled from at least two positions on every stem including a young, fully expanded leaf at the top of each stem and an older leaf from a midway position. Herbaceous indicator plants must be grown under appropriate temperatures and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.
- 3. Virus testing (herbaceous indexing, ELISA and PCR) must be carried out in the spring or under spring-like conditions using the new flush of growth. Bacteria and phytoplasma testing (PCR) must be carried out at the end of the summer or under summer-like conditions.
- 4. Vaccinium plants must be sampled from at least two positions on every stem including a young, fully expanded leaf at the top of each stem and an older leaf from a midway position.
- 5. All PCR and ELISA tests must be validated using positive controls prior to use in quarantine testing. Positive and negative controls (including a blank water control for PCR) must be used in all tests. Ideally positive internal controls and a negative plant control should also be used in PCR tests.
- 6. Inspect *Vaccinium macrocarpon* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy.
- 7. With prior notification, MPI will accept other internationally recognised testing methods.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Verbena*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries**: All

**Quarantine Pests**: Phytophthora tentaculata, Tetranychus kanzawai, Tomato chlorotic dwarf viroid, Uredinales, Xylella fastidiosa

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

### A. For Whole Plants

PEQ: Level 2

Minimum Period: 3 months

a. Conditions for Phytophthora tentaculata<sup>1</sup>

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

"The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*".

### OR

"The [insert species name] plants in this consignment were produced in a "pest free area" for *Phytophthora tentaculata*".

### OR

"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*<sup>2</sup>

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) "The [insert plant species] plants in this consignment have been produced in a 'pest free area', where *Tomato chlorotic dwarf viroid* is not known to occur".

### OR

ii) "The [insert plant species] plants have been produced in a 'pest free place of production', where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*".

#### OR

- iii) Pre-determined testing in PEQ: refer to "Inspection, Testing and Treatment Requirements for *Verbena*".
- c. Conditions for Uredinales

Additional declaration: "Rust diseases are not known to occur on \_ (the imported genus) \_ in \_ (the country in which the plants were grown) \_".

d. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be <u>6 months</u> for nursery stock sourced from countries <u>not</u> recognised by MPI as free from *Xylella fastidiosa* 

### **B. For Tissue Cultures**

- a. Conditions for *Tomato chlorotic dwarf viroid*<sup>2</sup>
  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 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 ACCEPTABLE METHODS	Comments
Insects	Visual inspection <b>AND</b> approved insecticide treatments as described in section 2.2.1.6 of the Basic conditions	Applies to whole plants and cuttings only
Mites	Visual inspection <b>AND</b> approved miticide treatments as described in the section 2.2.1.6 of the Basic conditions	Applies to whole plants and cuttings only
Bacterium		
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 <i>Xylella fastidiosa</i> are identified in section 2.2.2.5
Viroid		
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.

### <sup>1</sup>Implementation of measures:

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora tentaculata* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora. tentaculata* are not mandatory.

<sup>2</sup>Implementation of measures:

Measures for Tomato chlorotic dwarf viroid will come into force on 22 August 2020

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Viburnum*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom, USA.

**Quarantine Pests**: *Phytophthora ramorum*; Uredinales

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

## A. For Cuttings and Whole Plants:

**PEO:** Level 2

**Minimum Period:** 3 months

1. Additional declaration:	"Rust diseases of genus	Coleospor	ium and Cronatium are not
known to occur on	(the host species being imported)	in	(the country in which the plants were grown)
"			

2. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

### **B. For 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 *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-accredited facilities, or into Level 3B post entry quarantine from non-accredited facilities.

### 2. Pests of Vitis

Refer to the pest list.

## 3. Entry conditions for:

# 3.1 Vitis cuttings and tissue cultures from offshore MPI-accredited facilities in any country

An offshore accredited facility is a facility that has been accredited to the Standard PIT.OS.TRA.ACPQF to undertake phytosanitary activities. For *Vitis*, the accredited facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Vitis*.

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vitis* nursery stock exported to New Zealand. **Import permit:** an import permit is required.

### (ii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The *Vitis* cuttings / plants in tissue culture [choose ONE option] have been:

inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

### **AND**

treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

### **AND**

- sourced from *either* mother plants that have been kept in insect-proof plant houses *or* from open ground mother plants [cuttings only, choose ONE option].

### AND

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-accredited facility].

### **AND**

held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification.

### (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section and by providing the following additional declarations to the phytosanitary certificate:

"The *Vitis* cuttings / plants in tissue culture [choose ONE option] have been:

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-accredited facility].

### AND

- sourced from mother plants that have been kept in insect-proof plant houses *or* sourced from open ground mother plants [cuttings only, choose ONE option].

### **AND**

sourced from mother plants which are at least 10 year old and have been inspected during the growing season and are free from symptoms of Syrah decline.

#### **AND**

- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the accredited facility, and certification."

### (iv) Post-entry quarantine

**PEQ:** "All *Vitis* nursery stock must be imported under permit into post-entry quarantine in a Level 2 greenhouse facility (or Level 3B greenhouse facility at the direction of the CTO) accredited to Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ)." **Quarantine Period and Inspection, Testing and Treatment Requirements:** Upon arrival

cuttings will be dipped in 1% sodium hypochlorite for 2 minutes [cuttings only]. The nursery stock will be grown in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. The minimum quarantine period will be:

- 4. 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
- 5. 16 months (which may be reduced to a minimum of 9 months at the discretion of the CTO) for cuttings sourced directly from open ground mother plants. These periods are indicative minimum quarantine periods and may be extended if material is slow growing, pests are detected, or treatments/testing are required.

# 3.2 Vitis cuttings and tissue culture from non-accredited facilities in any country

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vitis* nursery stock exported to New Zealand. **Import permit:** an import permit is required.

### (ii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The Vitis cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

AND

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

### **AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

### (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section of the phytosanitary certificate and by providing the following additional declarations to the phytosanitary certificate:

"The *Vitis* cuttings / plants in tissue culture [choose ONE option] have been:

- sourced from mother plants which are at least 10 year old and have been inspected during the growing season and are free from symptoms of Syrah decline.

### (iv) Post-entry quarantine

**PEQ**: All *Vitis* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility accredited to Facility Standard: Post Entry Quarantine for Plants (MPI.STD.PEQ).

Quarantine Period and Inspection, Testing and Treatment Requirements: Upon arrival cuttings will be dipped in 1% sodium hypochlorite for 2 minutes [cuttings only]. The nursery stock will be grown for a minimum period of 16 months active growth in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. Sixteen months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

# Pest List for Vitis

apple twig borer bostrichid beetle

### **REGULATED PESTS (actionable)**

Insect
--------

### Insecta

### Coleoptera Bostrichidae

Amphicerus bicaudatus Amphicerus bimaculatus

Amphicerus cornutus
Apate congener

Apate monachus black borer
Bostrychopsis jesuita large auger beetle

Dexicrates robustus

Melalgus confertus branch and twig borer

Micrapate scabrata Neoterius mistax Psoa quadrisignata -

Schistocerus 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

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

Scolvtidae

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]

Dikrella cockerellii Draeculacephala minerva

Draeculacephala minerva [vector]

Empoasca sp.

Erythroneura comes Erythroneura elegantula Erythroneura variabilis

Erythroneura ziczac

Graphocephala atropunctata

Graphocephala atropunctata [vector]

Hordnia circellata

Scaphoideus titanus [vector]

Cicadidae

Platypedia minor Tettigades chilensis

Coccidae

Ceroplastes rusci Eulecanium cerasorum Eulecanium pruinosum Heliococcus bohemicus

Parthenolecanium persicae

Pulvinaria betulae

Pulvinaria innumerabilis Pulvinaria vitis

Diaspididae

Aonidiella inornata Chrysomphalus aonidum Diaspidiotus uvae Oceanspidiotus spinosus Parlatoria cinerea

Parlatoria oleae Pinnaspis strachani Pseudaonidia trilobitiformis

Quadraspidiotus juglansregiae Selenaspidus articulatus

Pseudaulacaspis pentagona

Margarodidae

Eurhizococcus brasiliensis Icerya seychellarum Margarodes capensis Margarodes greeni

Margarodes meridionalis Margarodes prieskaensis Margarodes trimeni

Margarodes vitis

Margarodes vredendalensis

Membracidae

Ceresa bubalus

Spissistilus bisonia

Spissistilus festinus

Phylloxeridae

Viteus vitifoliae [strain]

Pseudococcidae

Maconellicoccus hirsutus

Planococcus ficus

Pseudococcus capensis

Pseudococcus maritimus Rhizoecus kondonis

Hymenoptera **Aphelinidae** 

Coccophagus caridei [Animals Biosecurity]

red-headed sharpshooter blackberry leafhopper green sharpshooter green sharpshooter green leafhopper

eastern grape leafhopper western grape leafhopper variegated grape leafhopper

leafhopper

blue-green sharpshooter

raspberry leafhopper

fig wax scale calico scale frosted scale scale

European peach scale

scale

cottony maple scale woolly vine scale

inornate scale Florida red scale grape scale armoured scale chaff scale

olive scale hibiscus snow scale trilobite scale white peach scale walnut scale

West Indian red scale

margarodid Seychelles scale

Seychelles fluted scale

soft scale

margarodid margarodid

margarodid

tree hopper

three-cornered alfalfa hopper

grape phylloxera

pink hibiscus mealybug

fig mealybug

grape mealybug Kondo mealybug

Coccophagus gurneyi [Animals Biosecurity] Bethylidae Goniozus platynota [Animals Biosecurity] Braconidae Apanteles harrisinae [Animals Biosecurity] Bracon cushmani [Animals Biosecurity] Dolichogenidea tasmanica [Animals Biosecurity] 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 Crematogaster peringuevi [Animals Biosecurity] cocktail ant Formica cinerea [Animals Biosecurity] ant Pogonomyrmex californica [Animals Biosecurity] California harvester ant Solenopsis xyloni [Animals Biosecurity] southern fire ant Veromessor pergandei [Animals Biosecurity] desert seed-harvester ant Ichneumonidae Campoplex capitator [Animals Biosecurity] Dicaelotus inflexus [Animals Biosecurity] Mymaridae Anagrus epos [Animals Biosecurity] Pteromalidae Ophelosia charlesii [Animals Biosecurity] Pachyneuron sp. [Animals Biosecurity] Trichogrammatidae Trichogramma funiculatum [Animals Biosecurity] Trichogrammatomyia tortricis [Animals Biosecurity] Vespidae Polistes buysoni [Animals Biosecurity] Isoptera Kalotermitidae Cryptotermes brevis West Indian drywood termite Kalotermes flavicollis termite Kalotermes minor Neotermes chilensis termite Rhinotermitidae Coptotermes acinaciformis [official control] Australian subterranean termite Reticulitermes hesperus Termopsidae Porotermes quadricollis Lepidoptera Agaristidae Agarista agricola painted vine moth Heraclia superba grapevine zebra moth Arctiidae Estigmene acrea saltmarsh caterpillar fall webworm Hyphantria cunea Laora variabilis Spilosoma virginica yellow woollybear Turuptiana obliqua tiger moth

Cossidae

Coryphodema tristis Zeuzera coffeae

Heliozelidae

Antispila rivillei

Noctuidae

Achaea spp. Agrotis munda Alabama argillacea Anomis mesogona Anomis spp.

Calyptra spp. Copitarsia consueta Eudocima spp. Euxoa messoria Euxoa ochrogaster Helicoverpa punctigera

Mythimna sp.

Noctua fimbriata Noctua pronuba Oraesia spp.

Orthodes rufula

Peridroma margaritosa

Peridroma saucia Protorthodes rufula

Serrodes spp.

Sphingomorpha spp. Spodoptera littoralis Xestia c-nigrum

Oecophoridae

Echiomima sp.

Maroga melanostigma

Psychidae

Gymnelema plebigena

Pterophoridae

Geina periscelidactylus

Pyralidae

Desmia funeralis Euzophera bigella Ostrinia nubilalis

Saturniidae

Hemileuca eglanterina Hyalophora cecropia

Sesiidae

Vitacea polistiformis

Sphingidae

Eumorpha achemon Hippotion celerio Hyles euphorbiae Hyles lineata Theretra capensis Theretra oldenlandiae

Tortricidae

Archips argyrospilus Argyrotaenia citrana Argyrotaenia ljungiana Argyrotaenia velutinana Cryptophlebia leucotreta

Endopiza viteana Eulia stalactitis

Eupoecilia ambiguella Lobesia botrana Paralobesia viteana

quince trunk borer

red coffee borer

fruit-piercing moths brown cutworm cotton leafworm hibiscus looper

fruit-piercing moths noctuid moth fruit-piercing moths darksided cutworm redbacked cutworm

broad-bordered yellow underwing

large yellow underwing fruit-piercing moths

oriental tobacco budworm

cutworm

variegated cutworm

fruit-piercing moth

cotton leafworm spotted cutworm

fruit tree borer

bagworm

grape leaf-folder quince moth European corn borer

brown day-moth cecropia moth

grape root borer

achemon sphinx grapevine hawk moth spurge hawk moth whitelined sphinx grapevine hawk moth vine hawk moth

fruit tree leafroller orange tortrix

grey red-barred tortrix red-banded leafroller false codling moth

vine moth grape berry moth grape berry moth

Platynota 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] -

Conioptervgidae

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 thrips

Frankliniella minuta minute flower thrips Frankliniella occidentalis [pesticide resistant strain] western flower thrips

Heliothrips sylvanusthripsRhipiphorothrips cruentatusleaf thripsScirtothrips citricitrus thrips

Scolothrips sexmaculatus [Animals Biosecurity] -

Unknown Insecta Unknown Insecta

Cryptolarynx vitis Dyctineis pulvinosus -

Mite

Arachnida

Acarina

Anvstidae

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

Eotetranychus carpini tetranychid mite
Eotetranychus pruni hickory scorch mite
Eotetranychus smithi tetranychid mite
Eotetranychus viticola tetranychid mite
Eotetranychus willamettei hazel mite
Eotetranychus yumensis Yumi spider mite

Eotetranychus yumensisYumi spider miteEutetranychus orientalispear leaf blister miteOligonychus coffeaetea red spider miteOligonychus mangiferusmango spider miteOligonychus peruvianusspider mite

Oligonychus punicae avocado brown mite
Oligonychus yothersi avocado red mite
Tetranychus kanzawai kanzawa mite
Tetranychus mcdanieli McDaniel spider mite
Tetranychus pacificus Pacific spider mite

Mollusc

Gastropoda

Stylommatophora

Helicidae

Cernuella 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

Diaporth Dothideales

Mycosphaerellaceae

Guignardia bidwellii (anamorph Phyllosticta black rot

ampelicida)

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 Xylariaceae

Anthostomella pullulans Brulure

**Basidiomycota: Agaricomycetes** 

Hymenochaetales Hymenochaetaceae

Phellinus noxius brown root rot

**Basidiomycota: Basidiomycetes** 

Agaricales

Tricholomataceae

Armillaria mellea (anamorph Rhizomorpha armillaria root rot

subcorticalis)

Armillaria sp. armillaria root rot Armillaria tabescens armillaria root rot

Ganodermatales Ganodermataceae

Ganoderma lucidum (anamorph Polyporus lucidus) wood rot

Ganoderma tsugae -

**Poriales** 

Coriolaceae

Bjerkandera adusta white rot

Bjerkandera fumosa --

Lentinaceae

Pleurotus ostreatus wood decay

**Stereales** 

Stereaceae

Stereum sp. -

**Basidiomycota: Teliomycetes** 

Uredinales

**Unknown Uredinales** 

Physopella ampelopsidis grape rust

Mitosporic Fungi

Unknown Mitosporic Fungi Unknown Mitosporic Fungi

Phacellium sp. -

Mitosporic Fungi (Coelomycetes)

Sphaeropsidales Sphaerioidaceae

Ascochyta ampelina leaf spot
Coniella diplodiella white rot
Coniella petrakii white rot
Phomopsis longiparaphysata phomopsis rot
Pyrenochaeta vitis leaf spot

Septoria ampelina septoria leaf spot

**Unknown Coelomycetes** 

**Unknown Coelomycetes** 

Nattrassia toruloidea leaf spot Pestalotia menezesiana fruit rot

Pestalotia 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.

leaf fall Stigmina vitis

#### **Bacterium**

Pseudomonadaceae

Xanthomonas campestris pv. viticola bacterial canker Pierce's disease Xylella fastidiosa Xylophilus ampelinus bacterial blight

Rhizobiaceae

Agrobacterium rubi cane gall

Virus

Artichoke Italian latent virus Cherry leaf roll virus [strains not in New Zealand] Grapevine Ajinashika disease virus Grapevine Algerian latent virus Grapevine Anatolian ringspot virus Grapevine angular mosaic virus Grapevine berry inner necrosis virus Grapevine Bulgarian latent virus Grapevine chrome mosaic virus Grapevine deformation virus Grapevine fanleaf virus [strains not in New Zealand] Grapevine labile rod-shaped virus *Grapevine leafroll-associated virus* [type 7] Grapevine line pattern virus Grapevine pinot gris virus Grapevine red blotch-associated virus Grapevine stunt virus Grapevine Tunisian ringspot virus Grapevine virus D Peach rosette mosaic virus Petunia asteroid mosaic virus Raspberry ringspot virus Sowbane mosaic virus

Zealand]

Tomato ringspot virus

Strawberry latent ringspot virus [strains not in New

Viroid

Australian grapevine viroid Grapevine yellow speckle viroid 2

Phytoplasma

Australian grapevine yellows phytoplasma Grapevine bois noir phytoplasma Grapevine flavescence doree phytoplasma Grapevine yellows Palatine grapevine yellows Tomato big bud phytoplasma

Vergilbungskrankheit (German grapevine yellows)

Diseases of unknown aetiology
Grapevine vein clearing
LN33 stem grooving Syrah decline

# Inspection, Testing and Treatment Requirements for Vitis

ORGANISM TYPES	MPI-ACCEPTED METHODS (See notes below)
Insects	Visual inspection AND approved insecticide treatments (Refer to section
	2.2.1.5 of the basic conditions) [cuttings only]
Mites	Visual inspection AND approved miticide treatments (Refer to section
	2.2.1.5 of the basic conditions) [cuttings only] or binocular microscope
	inspection in PEQ [plants in tissue culture only]
Fungi	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes upon
	arrival in the post entry quarantine facility.
	Growing season inspection in PEQ for disease symptom expression AND
	examination using a dissecting microscope or hand lens (longitudinal and
	transverse sections) AND plating on potato dextrose agar
Bacterium	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes upon
	arrival in the post entry quarantine facility.
Agrobacterium rubi	Growing season inspection in PEQ for disease symptom expression AND
	Hot water treatment (Refer to "Approved Treatments for Vitis")
Xanthomonas campestris pv.	Growing season inspection in PEQ for disease symptom expression AND
viticola	Hot water treatment (Refer to "Approved Treatments for Vitis")
Xylophilus ampelinus	Growing season inspection in PEQ for disease symptom expression AND
Valatia Carti I	Hot water treatment (Refer to "Approved Treatments for Vitis")
Xylella fastidiosa	Growing season inspection in PEQ for disease symptom expression AND
	PCR (two sets, samples to be collected at least four weeks apart) AND Hot water treatment (Refer to "Approved Treatments for <i>Vitis</i> ")
Virus	water treatment (Refer to Approved Treatments for vitis )
Artichoke Italian latent virus	Growing season inspection in PEO for disease symptom expression
Cherry leaf roll virus [strains	Growing season inspection in PEQ for disease symptom expression  ELISA or PCR AND herbaceous indicators (Ca, Cq, Cs and Nt)
not in New Zealand]	ELISA OF FCK AND heroaceous indicators (Ca, Cq, Cs and Nt)
Grapevine Ajinashika disease	Growing season inspection in PEQ for disease symptom expression
virus	of owing season inspection in 12Q for disease symptom expression
Grapevine Algerian latent virus	Growing season inspection in PEQ for disease symptom expression
Grapevine Anatolian ringspot	Growing season inspection in PEQ for disease symptom expression
virus	
Grapevine angular mosaic	Growing season inspection in PEQ for disease symptom expression
virus	
Grapevine berry inner necrosis	Growing season inspection in PEQ for disease symptom expression
virus	
Grapevine Bulgarian latent	Herbaceous indicators (Ca and Cq)
virus	
Grapevine chrome mosaic virus	Herbaceous indicators (Ca, Cq, Cs and Nt)
Grapevine deformation virus	Herbaceous indicators (Ca and Cq)
Grapevine fanleaf virus [strains	ELISA or PCR AND herbaceous indicators (Ca, Cq, and Cs)
not in New Zealand]  Grapevine labile rod-shaped	Growing season inspection in PEQ for disease symptom expression
virus	Growing season inspection in FEQ for disease symptom expression
Grapevine leafroll-associated	PCR
virus [type 7]	
Grapevine line pattern virus	Growing season inspection in PEQ for disease symptom expression
Grapevine pinot gris virus	PCR
Grapevine red blotch-	PCR
associated virus	
Grapevine stunt virus	Growing season inspection in PEQ for disease symptom expression
Grapevine Tunisian ringspot	Growing season inspection in PEQ for disease symptom expression
virus	
Grapevine virus D	PCR
Peach rosette mosaic virus	ELISA or PCR AND herbaceous indicators (Ca, Cq, Cs and Nt)
Petunia asteroid mosaic virus	PCR or ELISA
Raspberry ringspot virus	ELISA or PCR AND herbaceous indicators (Ca, Cq, Cs and Nt)
Sowbane mosaic virus	Herbaceous indicators (Ca and Cq)

Strawberry latent ringspot virus [strains not in New Zealand]	PCR AND herbaceous indicators (Ca, Cq and Cs )
Tomato ringspot virus	ELISA or PCR AND herbaceous indicators (Ca and Cq)
Viroids	Growing season inspection in PEQ for disease symptom expression
Phytoplasmas	Plants derived from cuttings: Nested PCR or real-time PCR using universal phytoplasma primers AND Hot water treatment (Refer to "Approved Treatments for <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)
Disease of unknown aetiology	
Grapevine vein clearing	Growing season inspection in PEQ for disease symptom expression
LN33 stem grooving	Woody indexing or green indexing (LN33)
Syrah decline	Additional declaration endorsed on the phytosanitary certificate, refer to section 3.1 (iii) for offshore MPI-accredited facilities or 3.2 (iii) for non-accredited facilities.

### **Notes:**

- 1. The unit for testing is defined in section 2.3.2.1.
- 2. Herbaceous indicator hosts (**Ca** Chenopodium amaranticolor, **Cq** Chenopodium quinoa, **Cs** Cucumis sativus and **Nt** Nicotiana tabacum): at least two plants of each herbaceous indicator species must be used in each test. Tests are to be carried out using the new season's growth in the spring. Plants shall be sampled from at least two positions on every stem including a young, fully expanded leaf at the top of each stem and an older leaf from a midway position. Herbaceous indicator plants must be grown under appropriate temperatures and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.
- 3. Woody or green indexing: at least two plants of each woody/green indicator must be used in each test. All woody indicators are to be inoculated by double budding while green indicators are top grafted. A suitable positive control must be included.
- 4. Enzyme linked immunosorbent assay (ELISA) and polymerase chain reaction (PCR) tests for viruses. Tests must be completed at the optimal time for detection. In general, plants shall be sampled from at least two positions including a young, fully expanded leaf at the top of the stem and an older leaf from a midway position.
- 5. All PCR and ELISA tests must be validated using positive controls prior to use in quarantine testing. Positive and negative controls (including a blank water control for PCR) must be used in all tests. Ideally positive internal controls and a negative plant control should also be used in PCR tests.
- 6. Inspect *Vitis* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy.
- 7. With prior notification, MPI will accept other internationally recognised testing methods.

# **Approved Treatments for Vitis**

### **Hot Water Treatment**

The consignment must be treated using hot water treatment (dipping), for the eradication of phytoplasmas and fastidious vascular prokaryotic organisms, as follows:

- 1. Cuttings with good hydration and reserves are stored in a cool room (~ 4°C). Before treatment, the dormant material must be held at room temperature for one day (24 hours).
- 2. For the treatment, the dormant material must be dipped into the hot water at 50°C for 45

minutes or at 45°C for 3 hours (FAO/IBPGR Technical Guidelines for Safe Movement of Grapevine Germplasm, 1990, Martelli G.P and Walter B. Virus Certification of Grapevines. In - Plant Virus Disease Control, edited by A. Hadidi, RK Khetarpal and H Koganezawa. APS Press 1998). The water bath must have a moving system to homogenize the temperature and a precise control system to monitor the temperature at accuracy of 0.1°C.

3. After the treatment the cuttings must stay for one day (24 hours) at room temperature. After this period they are transferred to a cool room.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Wollemia nobilis*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

# 1. Type of Wollemia nobilis nursery stock approved for entry into New Zealand Plants in-vitro

### 2. Pests of Wollemia nobilis

Refer to the pest list.

### 3. Entry conditions for:

### 3.1 Wollemia nobilis plants in-vitro from Australia

The requirements of this schedule are in addition to the requirements specified in Section 2.2.2 "Entry Conditions for Tissue Culture".

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

## (ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

### (iii) Phytosanitary requirements

The full botanical name of *Wollemia nobilis* must be identified upon the phytosanitary certificate.

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken:

The Wollemia nobilis plants in-vitro have been:

inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

### AND

- derived from mother stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

### **AND**

- derived from explant material which has been surface sterilised in a solution of 0.5% sodium hypochlorite and sterile water, or MPI approved alternative treatment.

### **AND**

- prepared by asexual reproduction (clonal techniques) under sterile conditions.

## AND

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

### (iv) Additional declarations to the phytosanitary certificate

No additional declarations are required.

## (v) <u>Post-entry quarantine</u>

Post-entry quarantine is not required provided that the above measures have been completed.

# Pest List for Wollemia nobilis

## **REGULATED PESTS (actionable)**

**Fungus** 

Ascomycota

**Dothideales** 

Botryosphaeriaceae

Botryosphaeria spp.

Oomycota

Pythiales

Pythiaceae

Phytophthora cinnamomi black rot

Arbuscular mychorrhizae

All regulated species

Ectomycorrhizae

All regulated species

For organisms intercepted that are not listed within this pest list refer to MPI's "<u>Biosecurity</u> Organisms Register for Imported Commodities" to determine regulatory status.

If the organism is not identified or categorised within the register, please contact plantimports@mpi.govt.nz

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Yucca*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**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*<sup>1</sup>

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

"The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*".

### OR

"The [insert species name] plants in this consignment were produced in a "pest free area" for *Phytophthora palmivora*".

### OR

"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.

For consignments with a phytosanitary certificate issued on or after 25 May 2018 the requirements for *Phytophthora palmivora* must be met.

For consignments with a phytosanitary certificate issued no later than <u>24 May 2018</u>, the requirements for *Phytophthora*. *palmivora* are not mandatory.

<sup>&</sup>lt;sup>1</sup>Implementation of measures:

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Zantedeschia*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### 1. Type of Zantedeschia nursery stock approved for entry into New Zealand

Dormant bulbs

Plants in tissue culture

### 2. Pests of Zantedeschia

Refer to the pest list.

### 3. Entry conditions for:

## 3.1 Zantedeschia dormant bulbs from any country

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** an import permit is required.

### (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MPI) have been undertaken.

The Zantedeschia dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

### **AND**

sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

### **AND**

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria and viruses.

### **AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

### (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section [if applicable], and by providing the following additional declaration to the phytosanitary certificate:

"The Zantedeschia dormant bulbs in this consignment have been:

sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated nematodes and fungi [if applicable].

AND

- sourced from a "Pest free area", "Pest free place of production" or "Pest free production site", free from regulated bacteria, phytoplasmas and viruses."

### (iv) Post-entry quarantine

**PEQ**: Level 1

**Quarantine Period**: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

## 3.2 Zantedeschia plants in tissue culture from any country

### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

## (ii) <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 of Agriculture and Forestry (MPI) have been undertaken.

The Zantedeschia plants in tissue culture have been:

 inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

### AND

 derived from parent stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

### (iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declaration to the phytosanitary certificate:

"The Zantedeschia plants in tissue culture have been derived from parent stock:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests

### (iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed overseas. Alternatively the inspection and testing may be completed in post-entry quarantine upon arrival in New Zealand according to the following conditions:

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** an import permit is required.

**PEQ**: Level 3B

**Quarantine Period**: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required.

# Pest List for Zantedeschia

## **REGULATED PESTS (actionable)**

Nematode

Secernentea

Tylenchida

Meloidogynidae

Meloidogyne arenaria peanut root knot nematode

**Fungus** 

**Basidiomycota: Basidiomycetes** 

**Agaricales** 

Tricholomataceae

Armillaria mellea (anamorph Rhizomorpha armillaria root rot

subcorticalis)

Oomycota

**Pythiales** Pythiaceae

Phytophthora richardiae

rhizome and root rot

Pythium aphanidermatum cottony leak

**Bacterium** 

Xanthomonas campestris pv. zantedeschiae

Virus

Zantedeschia mild mosaic virus

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as "see 155.02.06 under *Zingiber*", and are additional to those specified in sections 1, 2 and 3 of the import health standard.

## **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Helicobasidium mompa; Virus diseases

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

### A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

### **B. For Dormant Bulbs:**

**PEQ:** Level 1

**Minimum Period:** 3 months **Additional Declaration(s):** 

"The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

### **AND**

treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

### **AND**

- sourced from a "Pest free area" or "Pest free place of production", free from *Helicobasidium mompa* OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment."

### **C. For Tissue Cultures:**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

### **PLUS**

### **Additional Declaration:**

"The cultures have been derived from parent stock tested and found free of virus diseases."