



# **MINISTRY FOR PRIMARY INDUSTRIES**

## **STANDARD 155.02.06**

### **Importation of Nursery Stock**

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

Biosecurity New Zealand  
Animal & Plant Health Directorate  
PO Box 2526  
Wellington 6140, New Zealand  
[www.mpi.govt.nz](http://www.mpi.govt.nz)

# CONTENTS

## Endorsement

## Review

## Amendment Record

### 1. Introduction

- 1.1 Official Contact Point (New Zealand National Plant Protection Organisation)
- 1.2 Scope
- 1.3 References
- 1.4 Definitions and Abbreviations
- 1.5 General

### 2. Import Specification and Entry Conditions

- 2.1 Inspection on Arrival and Maximum Pest Limit
- 2.2 Entry Conditions
  - 2.2.1 Basic Conditions
    - 2.2.1.1 Types of Nursery Stock that may be imported
    - 2.2.1.2 Import Permit
    - 2.2.1.3 Labelling
    - 2.2.1.4 Cleanliness
    - 2.2.1.5 Phytosanitary Certificate
    - 2.2.1.6 Pesticide treatments for whole plants and cuttings
    - 2.2.1.7 Pesticide treatments for dormant bulbs
    - 2.2.1.8 Measures for *Ceratocystis fimbriata sensu lato* complex (strains not in New Zealand)
    - 2.2.1.9 Measures for *Helicobasidium mompa*
    - 2.2.1.10 Measures for *Phymatotrichopsis omnivora*
    - 2.2.1.11 Measures for *Phytophthora ramorum*
    - 2.2.1.12 Measures for *Xylella fastidiosa*
    - 2.2.1.13 Measures for *Phellinus noxius*
    - 2.2.1.14 Post-Entry Quarantine
  - 2.2.2 Entry Conditions for Tissue Culture
    - 2.2.2.1 Labelling
    - 2.2.2.2 Cleanliness & Tissue Culture Media
    - 2.2.2.3 Phytosanitary Certificate
    - 2.2.2.4 Import Permit
    - 2.2.2.5 Measures for *Xylella fastidiosa* on tissue culture
    - 2.2.2.6 Post-Entry Quarantine for tissue cultures
  - 2.2.3 Importation of Pollen
  - 2.2.4 Importation of New Organisms
- 2.3 Compliance Procedures
  - 2.3.1 Validation of Overseas Measures
  - 2.3.2 Treatment and Testing of the Consignment
  - 2.3.3 Biosecurity Clearance
- 2.4 New Zealand Nursery Stock Returning from Overseas

### 3. Schedule of Special Entry Conditions

- 3.1 Special Entry Conditions
- 3.2 Approval of Offshore Plant Quarantine Facilities
- 3.3 Amendments to the Plants Biosecurity Index

## ENDORSEMENT

This Ministry for Primary Industries standard is hereby approved. Pursuant to section 24A of the Biosecurity Act 1993, I hereby issue this document as an import health standard, to incorporate amendments made up to and including 21 June 2021.

---

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

Date: 21 June 2021

## REVIEW

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

## AMENDMENT RECORD

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

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

26	Section 2.2.2.2	27 January 2014
27	<i>Vitis</i> schedule	11 March 2014
28	<i>Rubus</i> schedule	21 March 2014
29	Section 2.3.2.1, section 2.2.1.11, schedules for <i>Allium</i> , <i>Begonia</i> , <i>Canna</i> , <i>Citrus</i> , <i>Crocus</i> , <i>Dahlia</i> , <i>Fortunella</i> , <i>Fragaria</i> , <i>Gladiolus</i> , <i>Hippeastrum</i> , <i>Lilium</i> , <i>Malus</i> , <i>Miscanthus x giganteus</i> , <i>Narcissus</i> , <i>Olea</i> , <i>Persea</i> , <i>Poncirus</i> , <i>Prunus</i> , <i>Rubus</i> , <i>Solanum tuberosum</i> , <i>Tulipa</i> , <i>Vaccinium</i> , <i>Vaccinium macrocarpon</i> and <i>Vitis</i>	11 June 2014
30	Schedules for <i>Chrysanthemum</i> , <i>Diascia</i> , <i>Dahlia</i> and <i>Solanum</i>	18 August 2014
31	Schedules for <i>Citrus</i> , <i>Fortunella</i> , <i>Fragaria</i> , <i>Malus</i> and <i>Poncirus</i>	27 November 2014
32	Schedules for <i>Hippeastrum</i> and <i>Vitis</i>	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>Eucalyptus</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 <i>Fragaria</i> , <i>Malus</i> , <i>Olea</i> , <i>Prunus</i> , <i>Rubus</i> , <i>Solanum tuberosum</i> , <i>Vaccinium</i> and <i>Vitis</i>	11 March 2016
35	Section 2.2.1.12, and schedule for <i>Acacia</i>	06 May 2016
36	Section 2.2.1.13 (new section for <i>Phellinus noxius</i> , with renumbering of subsequent sections). Schedules for <i>Acacia</i> , <i>Acrocomia</i> , <i>Aesculus</i> , <i>Araucaria</i> , <i>Arbutus</i> , <i>Artocarpus</i> , <i>Camellia</i> , <i>Camellia sinensis</i> , <i>Cedrus</i> , <i>Citrus</i> , <i>Crataegus</i> , <i>Cycas</i> , <i>Delphinium</i> , <i>Diospyros</i> , <i>Eriobotrya</i> , <i>Eucalyptus</i> , <i>Eugenia</i> , <i>Ficus</i> , <i>Fortunella</i> , <i>Hebe</i> , <i>Hydrangea</i> , <i>Litchi</i> , <i>Mangifera</i> , <i>Metrosideros</i> , <i>Nandina</i> , <i>Persea</i> , <i>Planera</i> , <i>Poncirus</i> , <i>Populus</i> , <i>Prunus</i> , <i>Rhododendron</i> , <i>Rosa</i> , <i>Salix</i> , <i>Ulmus</i> , and <i>Vitis</i>	21 November 2016
37	Sections 1.3, 1.4, 2.2.1.12, 2.2.1.12, 2.3.2. Schedules for <i>Acacia</i> , <i>Acer</i> , <i>Acrocomia</i> , <i>Aesculus</i> , <i>Arbutus</i> , <i>Asparagus</i> , <i>Bidens</i> , <i>Canna</i> , <i>Carya</i> , <i>Carya ovata</i> , <i>Castanea</i> , <i>Citrus</i> , <i>Cotoneaster</i> , <i>Delphinium</i> , <i>Diospyros</i> , <i>Eucalyptus</i> , <i>Eugenia</i> , <i>Eupatorium</i> , <i>Fagus</i> , <i>Fagus sylvatica</i> , <i>Ficus</i> , <i>Fuchsia</i> , <i>Fortunella</i> , <i>Fragaria</i> , <i>Helianthus</i> , <i>Hebe</i> , <i>Humulus</i> , <i>Hydrangea</i> , <i>Ipomoea batatas</i> , <i>Juglans</i> , <i>Juniperus</i> , <i>Metrosideros</i> , <i>Nandina</i> , <i>Olea</i> , <i>Persea</i> , <i>Phoenix</i> , <i>Photinia</i> , <i>Platanus</i> , <i>Poncirus</i> , <i>Populus</i> , <i>Prunus</i> , <i>Pseudotsuga</i> , <i>Pyrus</i> , <i>Quercus</i> , <i>Ranunculus</i> , <i>Rosa</i> , <i>Rubus</i> , <i>Salix</i> , <i>Solanum tuberosum</i> , <i>Solidago</i> , <i>Ulmus</i> , <i>Vaccinium</i> , <i>Verbena</i> and <i>Vitis</i>	21 December 2016
38	Schedule for <i>Rosa</i>	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</i> , <i>Acer</i> , <i>Acrocomia</i> , <i>Aesculus</i> , <i>Arbutus</i> , <i>Asparagus</i> , <i>Bidens</i> , <i>Canna</i> , <i>Carya</i> , <i>Carya ovata</i> , <i>Castanea</i> , <i>Cotoneaster</i> , <i>Delphinium</i> , <i>Diospyros</i> , <i>Eucalyptus</i> , <i>Eugenia</i> , <i>Eupatorium</i> , <i>Fagus</i> , <i>Fagus sylvatica</i> , <i>Ficus</i> , <i>Fuchsia</i> , <i>Hebe</i> , <i>Humulus</i> , <i>Hydrangea</i> , <i>Ipomoea batatas</i> , <i>Juglans</i> , <i>Malus</i> , <i>Metrosideros</i> , <i>Nandina</i> , <i>Phoenix</i> , <i>Photinia</i> , <i>Platanus</i> , <i>Populus</i> , <i>Prunus</i> , <i>Pseudotsuga</i> , <i>Quercus</i> , <i>Ranunculus</i> , <i>Rosa</i> , <i>Salix</i> , <i>Solanum tuberosum</i> , <i>Solidago</i> , <i>Ulmus</i> , <i>Vaccinium macrocarpon</i> , and <i>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 Quarantine for Plants (MPI.STD.PEQ).	8 March 2017
41	Addition of <i>Petunia</i> schedule.	9 June 2017
42	Amendment to the <i>Petunia</i> schedule with new GM requirements	31 October 2017
43	Amendment to the <i>Vaccinium</i> schedule with a change to post 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</i> , <i>Acacia</i> , <i>Acer</i> , <i>Acrocomia</i> , <i>Aesculus</i> , <i>Allium</i> , <i>Araucaria</i> , <i>Arbutus</i> , <i>Artocarpus</i> , <i>Calanthe</i> , <i>Carica</i> , <i>Chrysanthemum</i> , <i>Crataegus</i> , <i>Dahlia</i> , <i>Delphinium</i> , <i>Dianthus</i> , <i>Dianthus caryophyllus</i> , <i>Diospyros</i> , <i>Dracaena</i> , <i>Eugenia</i> , <i>Ficus</i> , <i>Gerbera</i> , <i>Hebe</i> , <i>Lilium</i> , <i>Mangifera</i> , <i>Metrosideros</i> , <i>Olea</i> , <i>Paulownia</i> , <i>Phalaenopsis</i> , <i>Phoenix</i> , <i>Solanum</i> , <i>Verbena</i> , <i>Yucca</i> and creation of three new schedules (i.e. <i>Anthurium</i> , <i>Chichorium</i> and <i>Epipremnum</i> schedules).	26 April 2018
46	Amendment to the <i>Solanum tuberosum</i> schedule with addition of ‘ <i>Candidatus Liberibacter solanacearum</i> ’ haplotype B, Columbia basin purple top phytoplasma, <i>Pectobacterium polaris</i> and <i>Potato Virus H</i> .	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> 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 “Measures for <i>Xylella fastidiosa</i> ”	29 November 2019
54	Amendment to the <i>Prunus</i> schedule	23 January 2020
56	Amendment to the <i>Ficus</i> schedule with addition of measures for <i>Ralstonia pseudosolanacearum</i>	07 February 2020
57	Amendment to the ‘Basic entry conditions’ 2.2.1.6 (b) to manage regulated plant mites. Amendment of the <i>Calanthe</i> , <i>Dahlia</i> , <i>Tricyrtis</i> , <i>Verbena</i> , <i>Hydrangea</i> , <i>Gentiana</i> schedules with removal of special measures for <i>Tetranychus kanzawai</i> .	20 May 2020
58	Amendment to the <i>Petunia</i> schedule: addition of option for importers to provide a non-GMO declaration to meet the GM requirements for <i>Petunia</i> nursery stock (whole plants, cuttings and tissue cultures), amendment to information required on GM testing certificates for <i>Petunia</i> nursery stock (whole plants, cuttings and tissue cultures), removal of the requirement for an import permit for <i>Petunia</i> tissue cultures.	20 May 2020
59	Amendment to the <i>Arbutus</i> and <i>Metrosideros</i> schedules editing the <i>Xylella fastidiosa</i> note. Amendment to the <i>Chrysanthemum</i> , <i>Chrysanthemum morifolium</i> and <i>Cichorium</i> schedules to add <i>Xylella fastidiosa</i> measures. Minor amendment to <i>Arbutus</i> , <i>Chrysanthemum</i> , <i>Cichorium</i> and <i>Metrosideros</i> schedules to fix grammatical errors.	2 June 2020
60	Amendment to the <i>Acacia</i> , <i>Aesculus</i> , <i>Petunia</i> , <i>Solanum</i> and <i>Verbena</i> schedules with addition of measures for <i>Columnea latent viroid</i> , <i>Tomato apical stunt viroid</i> and <i>Tomato chlorotic dwarf viroid</i> . Harmonization of measures for <i>Potato spindle tuber viroid</i> on the <i>Chrysanthemum</i> , <i>Dahlia</i> and <i>Diascia</i> schedules. Amendment to the <i>Acacia</i> , <i>Anthurium</i> , <i>Epipremnum</i> , <i>Ficus</i> and <i>Rosa</i> schedules to add acceptable PFPP declaration for <i>Ralstonia pseudosolanacearum</i> from Costa Rica. Addition of <i>Hoya</i> schedule	22 July 2020
61	Minor amendments to the whole IHS to address inconsistencies, typos and other administrative changes.	03 December 2020
62	Removal of woody indexing as a requirement in the <i>Malus</i> schedule of special entry conditions; and a subsequent adjustment to the post entry quarantine period and inspection, testing and treatment requirements table.	2 March 2021
63	Amendment to <i>Chrysanthemum morifolium</i> schedule with addition of measures for <i>Potato spindle tuber viroid</i> (PSTVd).	21 June 2021

# 1. INTRODUCTION

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

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

Ministry for Primary Industries  
PO Box 2526  
34-38 Bowen Street  
Wellington  
NEW ZEALAND

Telephone: +64 4 894 5514  
E-mail: [PlantImports@mpi.govt.nz](mailto:PlantImports@mpi.govt.nz)  
Website: <http://www.mpi.govt.nz>

## 1.2 SCOPE

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

## 1.3 REFERENCES

### New Zealand legislation

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

### Standards issued under the Biosecurity Act 1993

The following standards can be accessed on the website:

<https://www.biosecurity.govt.nz/importing/plants/nursery-stock/requirement-documents-for-importing-nursery-stock/>

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

The following standards can be accessed on the website:

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

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

The following standard can be accessed on the website:



- Treatment Requirement MPI-ABTRT: Approved Biosecurity Treatments

### **International Standard for Phytosanitary Measures (ISPM)**

- ISPM 04. Requirements for the establishment of pest free areas
- ISPM 05. Glossary of phytosanitary terms
- ISPM 10. Requirements for the establishment of pest free places of production and pest free production sites
- ISPM 12. Phytosanitary certificates
- ISPM 20. Guidelines for a phytosanitary import regulatory system
- ISPM 24. Guidelines for the determination and recognition of equivalence of phytosanitary measures
- ISPM 27. Diagnostic protocols for regulated pests
- ISPM 43. Requirements for the use of fumigation as a phytosanitary measure

## **1.4 DEFINITIONS AND ABBREVIATIONS**

**a.i.:** Active ingredient.

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

**Budwood:** See Cuttings.

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

**Consignment:** A quantity of plants, plant products or other articles being moved from one country to another and covered, when required, by a single phytosanitary certificate (a consignment may be composed of one of more commodities or lots) [ISPM Pub. No. 05, 2019].

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

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

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

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

**Free from (of a consignment, field or place of production):** Without pests (or a specific pest) in numbers or quantities that can be detected by the application of phytosanitary procedures [ISPM Pub. No. 05, 2019].

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

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

**Graftstick:** See Cuttings.

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

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

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

**International Plant Protection Convention:** International Plant Protection Convention, as deposited with FAO (Food and Agricultural Organization of the United Nations) in Rome in 1951 and as subsequently amended [ISPM Pub. No. 05, 2019].

**IPPC:** International Plant Protection Convention.

**International Standard for Phytosanitary Measures:** An international standard adopted by the Conference of FAO, the Interim Commission on Phytosanitary Measures or the Commission on Phytosanitary Measures, established under the IPPC [ISPM Pub. No. 05, 2019].

**ISPM:** International Standard for Phytosanitary Measures.

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

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

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

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

**National Plant Protection Organisation:** Official service established by a government to discharge the functions specified by the IPPC [ISPM Pub. No. 05, 2019; formerly Plant Protection Organization (National)].

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

**NPPO:** National Plant Protection Organisation.

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

**Permit to Import:** See Import permit.

**Pest:** Any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products [ISPM Pub. No. 05, 2019].

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

**Pest free area:** An area in which a specific pest does not occur as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained [ISPM Pub. No. 05, 2019].

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

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

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

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

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

**Plants *in vitro*:** A commodity class for plants growing in an aseptic medium in a closed container [ISPM Pub. No. 05, 2019; formerly plants in tissue culture].

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

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

**Scionwood:** See Cuttings.

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

**Whole Plants:** A nursery stock commodity sub-class for rooted cuttings and whole plants (mature plants with developed roots).

## 1.5 GENERAL

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

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

Environmental Protection Authority  
Private Bag 63002  
Wellington 6140  
NEW ZEALAND

Phone: +64 4 916 2426  
E-mail: [info@epa.govt.nz](mailto: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.

### **Guidance:**

If EPA approves an application, MPI will prioritise it alongside other tasks and will undertake a pest risk analysis and develop an import health standard in accordance with the requirements of the Biosecurity Act 1993. Pest risk analyses may be undertaken at the importer's expense. For inquiries regarding pest risk analyses, please contact MPI at the address given below.

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

Ministry for Primary Industries

PO Box 2526  
34-38 Bowen Street  
Wellington  
NEW ZEALAND  
Telephone: +64 4 894 5514  
E-mail: [PlantImports@mpi.govt.nz](mailto:PlantImports@mpi.govt.nz)  
Website: <http://www.mpi.govt.nz>

#### **Guidance:**

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

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

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

##### **Equivalence**

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

## **2. IMPORT SPECIFICATION AND ENTRY CONDITIONS**

### **2.1 INSPECTION ON ARRIVAL AND MAXIMUM PEST LIMIT**

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

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

### **2.2 ENTRY CONDITIONS**

All imported nursery stock must comply with the following requirements:

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

AND

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

## **2.2.1 BASIC CONDITIONS**

### **2.2.1.1 Types of Nursery Stock that may be imported**

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

- cuttings (dormant and/or non-dormant);
- whole plants (including rooted cuttings);
- dormant bulbs and tubers or;
- tissue culture (see section 2.2.2).

### **2.2.1.2 Import Permit**

An import permit is required unless specified otherwise in section 2.2.2 or a schedule of special conditions.

**Guidance:**

To apply for a permit, complete the Form “Application for permit to import nursery stock or seed for sowing” available from MPI’s website:

<https://www.biosecurity.govt.nz/dmsdocument/36648-application-for-permit-to-import-nursery-stock-or-seed-for-sowing>

The completed form should be sent to [PlantImports@mpi.govt.nz](mailto:PlantImports@mpi.govt.nz).

### **2.2.1.3 Labelling**

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

### **2.2.1.4 Cleanliness**

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

### **2.2.1.5 Phytosanitary Certificate**

Consignments must be accompanied by a phytosanitary certificate certifying that the nursery stock has been inspected in the exporting country in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests, and conforms with New Zealand's current import requirements. If visually detectable pests are found which are not listed in the import health standard, the certifying NPPO must establish their regulatory status prior to issuing the certificate. This information is available in MPI's "[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<sup>3</sup>) and temperature (°C):

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

**OR**

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

**OR**

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

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

### **Mites (non-diapausing)**

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

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

One of the following two treatments is required:

(1) Methyl bromide (dormant material only): continuous fumigation at atmospheric pressure in accordance with a schedule that achieves the minimum concentration-time product (CT) (minimum achieved dose ( $\text{g}\cdot\text{h}/\text{m}^3$ )) at a minimum temperature ( $^{\circ}\text{C}$ ) that must not be less than  $10^{\circ}\text{C}$ , 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 ( $\text{g}/\text{m}^3$ )) during that treatment, as per the schedules in Table 1. Alternative options for longer exposure times with weaker concentrations or at higher temperature ( $^{\circ}\text{C}$ ) are also specified in the table below.



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

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

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

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

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

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

#### Guidance:

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

The concentration-time product (CT) utilized for methyl bromide treatment in this standard is the sum of the products of the concentration (g/m<sup>3</sup>) 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) Chemical treatment: spray to the point of runoff (with a suitable surfactant), or preferably immerse in a dip(s) with agitation, according to the following conditions. The plants must be sprayed/dipped using either OPTION 1 (one-acaricide treatment option) or OPTION 2 (two-acaricides combined treatment option) as indicated below. For dipping, the treatment time is normally 2 minutes, but must be increased to 5 minutes if bubbles remain present on the plant surface. Dip solutions must be used no more than twice or as per manufacturer's recommendations. All treatments must be carried out in accordance with manufacturer's recommendations at the maximum label rate as shown in the table below;

### OPTION 1: One acaricide treatment

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

Active ingredient	Chemical group	Rate (g/L water)*	Formulation type**	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		

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

\*\*SC-Suspension concentrate

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

### OPTION 2: Two acaricides combined treatment

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

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

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

\*SC-Suspension concentrate; EC-Emulsifiable concentrate

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

#### 2.2.1.7 Pesticide treatments for dormant bulbs

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

## **Insects**

One of the following four treatments is required:

(1) Methyl bromide fumigation: fumigation for 2 hours at atmospheric pressure at one of the following combinations of rate (g/m<sup>3</sup>) and temperature (°C):

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

## **OR**

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

## **OR**

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

## **OR**

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

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

## **Mites**

One of the following four treatments is required:

(1) Methyl bromide fumigation: fumigation for 2 hours at atmospheric pressure at one of the following combinations of rate (g/m<sup>3</sup>) and temperature (°C):

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

**OR**

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

**OR**

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

**OR**

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

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

**Nematodes**

Both of the following treatments are required:

(1) Methyl bromide fumigation: fumigation for 2 hours at atmospheric pressure at one of the following combinations of rate (g/m<sup>3</sup>) and temperature (°C):

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

**OR**

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

**AND**

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

**Fungi**

Both of the following treatments are required:

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

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

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

## AND

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

## OR

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

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

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

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

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

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

- |                     |                       |                       |
|---------------------|-----------------------|-----------------------|
| • <i>Acacia</i>     | • <i>Erythrina</i>    | • <i>Protea</i>       |
| • <i>Actinidia</i>  | • <i>Eucalyptus</i>   | • <i>Punica</i>       |
| • <i>Alocasia</i>   | • <i>Fagus</i>        | • <i>Quercus</i>      |
| • <i>Ananas</i>     | • <i>Ficus carica</i> | • <i>Schizolobium</i> |
| • <i>Annona</i>     | • <i>Inga</i>         | • <i>Schotia</i>      |
| • <i>Betula</i>     | • <i>Juglans</i>      | • <i>Spathodea</i>    |
| • <i>Carya</i>      | • <i>Mangifera</i>    | • <i>Styrax</i>       |
| • <i>Cassia</i>     | • <i>Metrosideros</i> | • <i>Syngonium</i>    |
| • <i>Celtis</i>     | • <i>Metroxylon</i>   | • <i>Tilia</i>        |
| • <i>Citrus</i>     | • <i>Ostrya</i>       | • <i>Ulmus</i>        |
| • <i>Colocasia</i>  | • <i>Passiflora</i>   | • <i>Xanthosoma</i>   |
| • <i>Corymbia</i>   | • <i>Pimenta</i>      |                       |
| • <i>Eriobotrya</i> | • <i>Populus</i>      |                       |

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

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

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

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

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

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

**AND**

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

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

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

**2.2.1.9 Measures for *Helicobasidium mompa***

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

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

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

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

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

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

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

**a) For dormant bulbs:**

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

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

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

**AND**

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

Both of the following treatments are required:

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

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

## AND

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

## OR

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

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

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



### 2.2.1.10 Measures for *Phymatotrichopsis omnivora*

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

For whole plants (including rooted cuttings) from Brazil, Mexico, United States of America, or Venezuela, the phytosanitary certificate must have the following additional declaration: "The nursery stock has been sourced from a 'pest free area', free from *Phymatotrichopsis omnivora*".

#### **Guidance:**

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

### 2.2.1.11 Measures for *Phytophthora ramorum*

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

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

- |                      |                                  |                       |
|----------------------|----------------------------------|-----------------------|
| • <i>Abies</i>       | • <i>Eucalyptus</i>              | • <i>Populus</i>      |
| • <i>Acer</i>        | • <i>Fagus</i>                   | • <i>Pseudotsuga</i>  |
| • <i>Aesculus</i>    | • <i>Fagus sylvatica</i>         | • <i>Quercus</i>      |
| • <i>Arbutus</i>     | • <i>Fuchsia</i>                 | • <i>Rhododendron</i> |
| • <i>Berberis</i>    | • <i>Gaultheria</i>              | • <i>Rubus</i>        |
| • <i>Carpinus</i>    | • <i>Kalmia</i>                  | • <i>Salix</i>        |
| • <i>Castanea</i>    | • <i>Lithocarpus densiflorus</i> | • <i>Ulmus</i>        |
| • <i>Corylus</i>     | • <i>Olea</i>                    | • <i>Viburnum</i>     |
| • <i>Cotoneaster</i> | • <i>Photinia</i>                |                       |

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

- |                            |                       |                                       |
|----------------------------|-----------------------|---------------------------------------|
| • <i>Alnus</i>             | • <i>Distylium</i>    | • <i>Pistacia</i>                     |
| • <i>Annona</i>            | • <i>Empetrum</i>     | • <i>Ribes</i>                        |
| • <i>Betula</i>            | • <i>Erica</i>        | • <i>Robinia</i>                      |
| • <i>Buddleja</i>          | • <i>Garrya</i>       | • <i>Rosa</i> cultivar Pink Meidiland |
| • <i>Camellia</i>          | • <i>Gevuina</i>      | • <i>Rosa</i> cultivar Pink Sevillana |
| • <i>Camellia sinensis</i> | • <i>Grevillea</i>    | • <i>Rosa</i> cultivar Royal Bonica   |
| • <i>Celtis</i>            | • <i>Hedera</i>       | • <i>Rosa</i> <i>gymnocarpa</i>       |
| • <i>Cercis</i>            | • <i>Hydrangea</i>    | • <i>Rosa</i> <i>rugosa</i>           |
| • <i>Ceratonia</i>         | • <i>Ilex</i>         | • <i>Rosa</i> <i>sempervirens</i>     |
| • <i>Chamaecyparis</i>     | • <i>Larix</i>        | • <i>Sambucus</i>                     |
| • <i>Chimaphila</i>        | • <i>Liriodendron</i> | • <i>Tilia</i>                        |
| • <i>Choisya</i>           | • <i>Loropetalum</i>  |                                       |
| • <i>Cistus</i>            | • <i>Mahonia</i>      |                                       |
| • <i>Citrus</i>            | • <i>Malus</i>        |                                       |

- *Clematis*
- *Cornus*
- *Corylopsis*
- *Manglietia*
- *Nerium*
- *Picea*
- *Tsuga*
- *Veronica spicata*
- *Zenobia*

**Guidance:**

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

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

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

“The plants have been sourced from a ‘pest free area’, free from *Phytophthora ramorum*”

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

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

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

“The plants have been sourced from a NZ MPI approved ‘pest free place of production’ for *Phytophthora ramorum*”

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

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

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

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

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

### 2.2.1.12 Measures for *Xylella fastidiosa*

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

**Guidance:**

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

Also,

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

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

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

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

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

**ii) For countries not recognised by MPI as free from *Xylella fastidiosa***

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

**1. Additional declaration:**

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

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

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

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

**Minimum period:** 6 months

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

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

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

**Guidance:**

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

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

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

### 2.2.1.13 Measures for *Phellinus noxius*

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

- i) **For countries recognised by MPI as free from *Phellinus noxius***

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

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

- ii) **For countries not recognised by MPI as free from *Phellinus noxius***

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

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

**OR, for areas approved by MPI**

- b) “The plants have been sourced from a ‘pest free area’, [*insert area name*], free from *Phellinus noxius*”.

**Guidance:**

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

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

### 2.2.1.14 Post-Entry Quarantine

Following arrival in New Zealand all nursery stock, unless specified in the schedules of

special entry conditions, must undergo a period of post entry quarantine (PEQ) in order to check for the presence of regulated pests and/or diseases.

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

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

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

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

**Guidance:**

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

## 2.2.2 ENTRY CONDITIONS FOR TISSUE CULTURE

### 2.2.2.1 Labelling

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

### 2.2.2.2 Cleanliness & Tissue Culture Media

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

### 2.2.2.3 Phytosanitary Certificate

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

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

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

### 2.2.2.4 Import Permit

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

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

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

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

**Guidance:**

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

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

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

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

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

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

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

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

ii) **For countries not recognised by MPI as free from *Xylella fastidiosa***

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

**1. Additional declaration:**

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

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

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

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

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

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

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

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

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

**Guidance:**

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

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

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

### 2.2.2.6 Post-Entry Quarantine for tissue cultures

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

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

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

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

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

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



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

### **2.2.3 IMPORTATION OF POLLEN**

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

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

### **2.2.4 IMPORTATION OF NEW ORGANISMS**

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

## **2.3 COMPLIANCE PROCEDURES**

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

#### **Guidance:**

1. On arrival in New Zealand all documentation associated with the importation will be inspected by an inspector to ensure compliance.
2. Visual inspection of tissue culture upon arrival in New Zealand will determine if the tissue culture shows any signs of contamination (e.g. cloudy agar, fungal spores or bacterial growth). If contamination is observed the importer will be given the option of reshipment or destruction of the consignment.
3. If organisms are detected that cannot be identified, they will be treated as regulated organisms. If the number of units infested with quarantine pests exceeds the acceptance number, the nursery stock will be treated, reshipped or destroyed as directed by the inspector, at the expense of the importer.

### **2.3.1 VALIDATION OF OVERSEAS MEASURES**

For all imported nursery stock, MPI reserves the right to validate all measures that are undertaken overseas. This includes measures undertaken by national plant protection organisations, MPI-approved offshore facilities.

### **2.3.2 TREATMENT AND TESTING OF THE CONSIGNMENT**

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

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

All testing and treatment in New Zealand must be completed in MPI-approved facilities, approved to the Facility Standard 155.04.03: *Standard for Transitional Facilities for the Identification of Organisms*. Treatment requirement: *Treatment supplier requirements*.

#### **2.3.2.1 Pre-determined testing**

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

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

##### **Polymerase chain reaction (PCR)**

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

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

##### **Enzyme-linked immunosorbent assay (ELISA)**

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

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

##### **Graft (woody) indexing**

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

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

### 2.3.3 BIOSECURITY CLEARANCE

A biosecurity clearance, under section 26 of the Biosecurity Act 1993, may be given when the nursery stock meets the requirements of this standard. There are other restrictions in section 27 and 28 of the Biosecurity Act 1993 on the giving of biosecurity clearances i.e. compliance with an import health standard or import permit does not guarantee biosecurity clearance will be given. As per Section 27 of the Biosecurity Act 1993, biosecurity clearance will not be given if an inspector considers that the nursery stock is infected, or is showing signs of being infected, with organisms that may be unwanted organisms, or the inspector considers there has been a change in circumstances, or in the state of knowledge, that makes it unwise to give biosecurity clearance.

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

## 2.4 NEW ZEALAND NURSERY STOCK RETURNING FROM OVERSEAS

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

### (i) Nursery stock “unopened” offshore

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

### (ii) Nursery stock “opened” offshore

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

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

### 3. SCHEDULE OF SPECIAL ENTRY CONDITIONS

#### 3.1 SPECIAL ENTRY CONDITIONS

Plant genera listed in these schedules have entry requirements that differ in some way from the **Basic Conditions** (Section 2.2.1 and 2.2.2). Differences may involve:

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

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

#### 3.2 APPROVAL OF OFFSHORE PLANT QUARANTINE FACILITIES

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

#### 3.3 AMENDMENTS TO THE PLANTS BIOSECURITY INDEX

**Guidance:**

The [Plants Biosecurity Index](#) will be updated with plant species assessed by the EPA as being either “not new organisms” or approved for entry into New Zealand. The Plants Biosecurity Index will be continuously updated on MPI's website.

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

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

**GENERAL CONDITIONS:**

**Approved Countries:** All

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

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

**A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 6 months

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

**B. For Tissue Cultures**

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

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

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Ceratocystis fimbriata*, *Phellinus noxius*, *Phytophthora capsici*, *Phytophthora palmivora*, *Phytophthora ramorum*, *Phytophthora tentaculata*, *Ralstonia pseudosolanacearum*, *Tomato chlorotic dwarf viroid*, *Xylella fastidiosa*

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

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

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

**Note:** Only applies to the following genera: *Acacia* and *Passiflora*

- b. Conditions for *Phytophthora capsici*

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

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

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

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

- c. Conditions for *Phytophthora palmivora*

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

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

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

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

- d. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

**Note:** Only applies to the following species: *Veronica spicata*

e. Conditions for *Phytophthora tentaculata*

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

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

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

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora tentaculata*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora tentaculata*”.

f. Conditions for *Ralstonia pseudosolanacearum*

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

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

- i) “The [insert plant species] plants were sourced from a ‘pest free area’, free from *Ralstonia pseudosolanacearum*”.

**OR**

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

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

g. Conditions for *Tomato chlorotic dwarf viroid*

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

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

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

**OR**

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

**OR**

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

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

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries 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

**PEQ:** Level 2

**Minimum Period:** 3 months

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

**Note:** Only applies to the following genera: *Acacia* and *Passiflora*

b. Conditions for *Phytophthora capsici*

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

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

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

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

c. Conditions for *Phytophthora palmivora*

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

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

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

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

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

**Note:** Only applies to the following species: *Veronica spicata*

e. Conditions for *Phytophthora tentaculata*

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

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

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

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora tentaculata*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora tentaculata*”.

f. Conditions for *Ralstonia pseudosolanacearum*

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

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

- i) “The [insert plant species] plants were sourced from a ‘pest free area’, free from *Ralstonia pseudosolanacearum*”.

**OR**

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



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

g. Conditions for *Tomato chlorotic dwarf viroid*

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

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

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

**OR**

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

**OR**

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

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

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

**C. For Tissue Culture**

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

**PLUS**

a. Conditions for *Ralstonia pseudosolanacearum*

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

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

- i) “The [insert plant species] plants were sourced from a ‘pest free area’, free from *Ralstonia pseudosolanacearum*”.

**OR**

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

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

b. Conditions for *Tomato chlorotic dwarf viroid*

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

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

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

**OR**

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

**OR**

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

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

- 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*

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

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

**PEQ:** Level 3A

**Minimum Period:** 3 months

- a. Conditions for *Ralstonia pseudosolanacearum*

Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Pelargonium*”

- b. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.1.12 or 2.2.2.5)

**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 3A PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

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

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

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

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

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Cryphonectria parasitica*, *Phytophthora palmivora*, *Phytophthora ramorum*, *Xylella fastidiosa*

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

**A. For Cuttings and Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Phytophthora palmivora*

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

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

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

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

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

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

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

d. Conditions for *Cryphonectria parasitica*

**Additional Declaration:** “*Cryphonectria parasitica* is not known to occur in \_\_\_\_\_  
\_\_\_\_\_ [the country or state where the plants/cuttings were produced]”.

**OR**

**PEQ:** Level 3B

**Minimum Period:** 6 months

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

## **B. For Tissue Culture**

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

### **PLUS**

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

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

## Acrocomia

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

### **GENERAL CONDITIONS:**

**Approved Countries:** Australia, Hawaii, mainland United States of America

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

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

#### **A. For Whole Plants and Cuttings**

**PEQ:** Level 2

**Minimum Period:** 3 months

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

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)  
**Note:** Only applies to members of the *Metroxylon* genus
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)  
**Note:** Only applies to members of the *Phoenix* genus  
**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*
- c. Conditions for *Phellinus noxius* (section 2.2.1.13)  
**Note:** Only applies to the following species: *Areca catechu*, *Areca triandra*, *Chrysalidocarpus lutescens*, *Coco nucifera*, *Elaeis guineensis*, *Roystonea regia*
- d. Conditions for *Phytophthora palmivora*  
**Note:** Only applies to the following genera: *Archontophoenix*, *Areca*, *Bactris*, *Borassus*, *Chamaedorea*, *Chrysalidocarpus*, *Cocos*, *Elaeis*, *Howea*, *Livistona*, *Rhopalostylis*, *Sabal*, *Syagrus*, *Trachycarpus* and *Washingtonia*

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

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

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

- e. Conditions for Cadang cadang and lethal yellowing  
**Additional Declaration:** “Cadang cadang and lethal yellowing are not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

## **B. For Tissue Cultures**

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

**PLUS**

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

**PEQ:** Level 2

**Minimum Period:** 3 months

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

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

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

- b. Conditions for Cadang cadang and lethal yellowing

Additional Declaration: “Cadang cadang and lethal yellowing are not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

## ***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:  
<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 *Aesculus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Phellinus noxius*, *Phytophthora palmivora*, *Phytophthora ramorum*, *Phytophthora tentaculata*, *Tomato chlorotic dwarf viroid*, *Xylella fastidiosa*

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

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Phytophthora palmivora*

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

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

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

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

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

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

c. Conditions for *Phytophthora tentaculata*

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

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

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

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora tentaculata*”.

**OR**

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

d. Conditions for *Tomato chlorotic dwarf viroid*

**Note:** Only applies to the following species: *Pittosporum tobira*



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

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

**OR**

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

**OR**

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

- e. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

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

- f. Conditions for *Phellinus noxius* (section 2.2.1.13)

**Note:** Only applies to the following species: *Fraxinus griffithii* and *Rhus succedanea*

## **B. For Cuttings**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Phytophthora palmivora*

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

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

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

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

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

- c. Conditions for *Phytophthora tentaculata*

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

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

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

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora tentaculata*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora tentaculata*”.

- e. Conditions for *Tomato chlorotic dwarf viroid*

**Note:** Only applies to the following species: *Pittosporum tobira*

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

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

**OR**

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

**OR**

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

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

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

### C. For Tissue Cultures

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

**PLUS**

a. Conditions for *Tomato chlorotic dwarf viroid*

**Note:** Only applies to the following species: *Pittosporum tobira*

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

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

**OR**

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

**OR**

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

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

b. 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*.

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

ORGANISM	MPI-ACCEPTED METHODS	Comments
<b>Bacteria</b>		
<i>Xylella fastidiosa</i>	Refer to section 2.2.1.12 “Measures for <i>Xylella fastidiosa</i> ”	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
<b>Viroids</b>		
<i>Tomato chlorotic dwarf viroid</i>	PCR based method	Applies to whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility

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

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

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

Dormant bulbs

Plants in tissue culture

**2. Pests of *Allium***

Refer to the pest list.

**3. Entry conditions for:**

**3.1 *Allium* dormant bulbs from any country**

(i) Documentation

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

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

(ii) Phytosanitary requirements

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

The *Allium* dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.  
**AND**
- sourced from a ‘pest free area’ (country freedom), free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.  
**AND**
- treated for regulated insects and mites as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.  
**AND**
- sourced from a ‘pest free area’ (country freedom) free from the organisms listed below:
  - **Phytoplasmas:**  
Aster yellows phytoplasma, Garlic decline phytoplasma, and Onion yellows phytoplasma.
  - **Viruses:**  
*Garlic dwarf virus, Garlic mite-borne latent virus, Garlic virus X, Onion mite-borne latent virus, Shallot yellow stripe virus, Sint-Jan's onion latent virus and Tobacco rattle virus.*
  - **Bacteria:**  
*Erwinia chrysanthemi* pv. *Chrysanthemi*, *Burkholderia cepacia*, and *Pseudomonas xanthochlora*.

**AND**

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

(iii) Additional declarations to the phytosanitary certificate

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

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

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

**AND**

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

**AND**

- One of the following Additional Declarations for *Phytophthora capsici* and *P. palmivora*:

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

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici* and *P. palmivora*”.

**OR**

iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici* and *P. palmivora*”.

(iv) Post-entry quarantine

**PEQ: Level 2**

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

(v) Assessment of Equivalent Phytosanitary Status

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

**3.2 *Allium* plants in tissue culture from any country**

(i) Documentation

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

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

(ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

(iii) Phytosanitary requirements

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

The *Allium* plants in tissue culture have been:

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

**AND**

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

- **Phytoplasmas:**

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

- **Viruses:**

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

(iv) Additional declarations to the phytosanitary certificate

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

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

(v) Post-entry quarantine

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

(vi) Assessment of Equivalent Phytosanitary Status

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

# Pest List for *Allium*

## REGULATED PESTS (actionable)

### Insect

### Insecta

#### Coleoptera

##### Curculionidae

*Brachycerus muricatus*

weevil

*Brachycerus undatus*

weevil

*Ceutorhynchus jakovlevi*

onion weevil

##### Nitidulidae

*Carpophilus obsoletus*

dried fruit beetle

#### Diptera

##### Anthomyiidae

*Delia antiqua*

onion maggot

*Delia florilega*

onion fly

##### Heleomyzidae

*Suillia lurida*

garlic fly

*Suillia univittata*

-

##### Syrphidae

*Eumerus amoenus*

onion bulb fly

#### Lepidoptera

##### Cossidae

*Dyspessa ulula*

garlic moth

##### Yponomeutidae

*Acrolepia alliella*

-

*Acrolepia sapporensis*

allium leafminer

*Acrolepiopsis assectella*

leek moth

#### Thysanoptera

##### Thripidae

*Thrips tabaci* [vector]

onion thrips

### Mite

### Arachnida

#### Acarina

##### Acaridae

*Rhizoglyphus setosus*

bulb mite

##### Eriophyidae

*Aceria tulipae* [vector]

wheat curl mite

### Nematode

### Adenophorea

#### Dorylaimida

##### Longidoridae

*Paralongidorus maximus*

-

##### Trichodoridae

*Paratrichodorus allius*

stubby root nematode

*Paratrichodorus minor* [vector]

stubby root nematode

*Paratrichodorus teres*

stubby root nematode

### Secernentea

#### Tylenchida

##### Aphelenchoididae

*Aphelenchoides besseyi*

rice white-tip nematode

*Aphelenchoides parietinus*

-

##### Belonolaimidae

*Belonolaimus gracilis*

sting nematode

##### Hoplolaimidae

*Helicotylenchus indicus*

spiral nematode

*Helicotylenchus microlobus*

spiral nematode

*Helicotylenchus multicinctus*

spiral nematode

<i>Hoplolaimus seinhorsti</i>	lance nematode
<i>Rotylenchulus reniformis</i>	reniform nematode
<b>Meloidogynidae</b>	
<i>Meloidogyne arenaria</i>	peanut root knot nematode
<i>Meloidogyne chitwoodi</i>	root knot nematode
<b>Tylenchidae</b>	
<i>Ditylenchus dipsaci</i> [strains not in New Zealand]	stem and bulb nematode
<b>Fungus</b>	
<b>Ascomycota</b>	
<b>Dothideales</b>	
<b>Mycosphaerellaceae</b>	
<i>Mycosphaerella allii-cepae</i> (anamorph <i>Cladosporium allii-cepae</i> )	leaf blotch
<b>Basidiomycota: Basidiomycetes</b>	
<b>Agaricales</b>	
<b>Tricholomataceae</b>	
<i>Armillaria mellea</i> (anamorph <i>Rhizomorpha subcorticalis</i> )	armillaria root rot
<b>Basidiomycota: Teliomycetes</b>	
<b>Uredinales</b>	
<b>Melampsoraceae</b>	
<i>Melampsora allii-fragilis</i>	rust
<b>Pucciniaceae</b>	
<i>Puccinia asparagi</i>	asparagus rust
<b>Basidiomycota: Ustomycetes</b>	
<b>Ustilaginales</b>	
<b>Tilletiaceae</b>	
<i>Urocystis colchici</i>	leaf smut
<b>Oomycota</b>	
<b>Peronosporales</b>	
<b>Peronosporaceae</b>	
<i>Phytophthora capsici</i>	fruit rot of peppers
<i>Phytophthora palmivora</i>	black rot
<b>mitosporic fungi (Coelomycetes)</b>	
<b>Sphaeropsidales</b>	
<b>Sphaerioidaceae</b>	
<i>Phyllosticta allii</i>	leaf blight
<i>Septoria viridi-tingens</i>	--
<b>Bacterium</b>	
<b>Enterobacteriaceae</b>	
<i>Erwinia chrysanthemi</i> pv. <i>chrysanthemi</i>	bacterial soft rot
<b>Pseudomonadaceae</b>	
<i>Burkholderia cepacia</i>	sour skin
<i>Pseudomonas xanthochlora</i>	-
<b>Virus</b>	
<i>Garlic dwarf virus</i>	-
<i>Garlic mite-borne latent virus</i>	-
<i>Garlic virus X</i>	-
<i>Onion mite-borne latent virus</i>	-
<i>Shallot yellow stripe virus</i>	-
<i>Sint-Jan's onion latent virus</i>	-
<i>Tobacco rattle virus</i> [strains not in New Zealand]	-
<b>Phytoplasma</b>	
Aster yellows phytoplasma	-
Garlic decline phytoplasma	-
Onion yellows phytoplasma	-



## *Alstroemeria*

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

### **GENERAL CONDITIONS:**

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

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

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

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Frankliniella occidentalis* and *Liriomyza* spp.

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

- a. Additional Declaration

i) **For bulbs produced under an MPI-approved Dutch bulb propagation scheme:**

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

**OR**

ii) **For bulbs NOT produced under an MPI-approved bulb propagation scheme:**

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

##### **OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

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

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

## ***Andromeda***

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

### **GENERAL CONDITIONS:**

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

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

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

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Chrysomyxa ledi* and *Microsphaera* spp.

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

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

**OR**

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

**AND**

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

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

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

## *Anemone*

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

### **GENERAL CONDITIONS:**

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

**Quarantine Pests:** Uredinales

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

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

##### **a. Conditions for Uredinales**

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

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

##### **OPTION 1:**

**No import permit is required**

**PEQ:** None

##### **a. Additional Declaration**

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

##### **OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

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

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

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

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Phytophthora capsici*, *Ralstonia pseudosolanacearum*

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

**A. Whole Plants and Cuttings**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Phytophthora capsici*

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

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

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

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

b. Conditions for *Ralstonia pseudosolanacearum*

**Note:** Only applies to the following genera: *Anthurium*

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

i) “The [insert plant species] plants were sourced from a ‘pest free area’, free from *Ralstonia pseudosolanacearum*”.

**OR**

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

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

**B. For Tissue Culture**

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

**PLUS**

a. Conditions for *Ralstonia pseudosolanacearum*

**Note:** Only applies to the following genera: *Anthurium*

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

i) “The [insert plant species] plants were sourced from a ‘pest free area’, free from *Ralstonia pseudosolanacearum*”.

**OR**

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

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

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

**Note:** Only applies to the following genera: *Anthurium*

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

**PEQ:** Level 3A

**Minimum Period:** 3 months

a. Conditions for *Ralstonia pseudosolanacearum*

Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Anthurium*”

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

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

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

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Leeches, snails, snail eggs, worms

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

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Additional Declaration:  
“The plants were inspected immediately prior to export and no snails, snail eggs, worms or leeches were detected in a 600 unit sample”.

**Special Conditions:**

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

**QUARANTINE AQUARIUM**

MPI Registration Number:

Name of Quarantine Operator:

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

**B. For Tissue Cultures**

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

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

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Phellinus noxius*, *Phytophthora capsici*, *Phytophthora palmivora*, *Xylella fastidiosa*

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

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

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

b. Conditions for *Phytophthora capsici*

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

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

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

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

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

c. Conditions for *Phytophthora palmivora*

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

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

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

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

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

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

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

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

## **B. For Cuttings**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Phytophthora capsici*

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

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

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

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

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

b. Conditions for *Phytophthora palmivora*

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

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

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

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

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

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

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

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

## **C. For Tissue Cultures**

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

**PLUS**

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

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

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



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

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

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

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

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

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

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

c. Conditions for *Phytophthora tentaculata*

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

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

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

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora tentaculata*”.

**OR**

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

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

**Note:** Only applies to the members of the *Arctostaphylos*, *Laurus* and *Magnolia* genera

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

- e. Conditions for *Phellinus noxius* (section 2.2.1.13)

**Note:** Applies to the following species: *Michelia compressa*, *Michelia figo*, *Osmanthus fragrans*, and applies to all members of the *Cinnamomum* genus

## B. For Cuttings

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Phytophthora palmivora*

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

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

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

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

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

- c. Conditions for *Phytophthora tentaculata*

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

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

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

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora tentaculata*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora tentaculata*”.

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

**Note:** Only applies to the members of the *Arctostaphylos*, *Laurus* and *Magnolia* genera

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

## C. For Tissue Cultures

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

**PLUS**

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

**Note:** Only applies to the members of the *Arctostaphylos*, *Laurus* and *Magnolia* genera

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

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

**GENERAL CONDITIONS:**

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

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

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

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

**OPTION 1:**

**PEQ:** Level 2

**Minimum Period:** 6 months

- a. Additional Declaration  
“The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water, prior to export”.
- b. Conditions for *Gymnosporangium clavipes* and *Gymnosporangium globosum*  
Additional Declaration: “*Gymnosporangium clavipes* and *Gymnosporangium globosum* are not known to occur on \_\_\_\_\_ [host species being imported] in \_\_\_\_\_ [the country or state in which the plants were grown]”.

**OPTION 2:**

**PEQ:** Level 3B

**Minimum Period:** 3 months

## *Artocarpus*

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

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Phellinus noxius*

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

#### **A. For Tissue Cultures**

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

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

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Virus diseases

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

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 6 months

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

**OPTION 1:**

**No import permit is required**

**PEQ:** None

a. Additional Declaration

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

**OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

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

**OPTION 1:**

**PEQ:** Level 1

**Minimum Period:** 3 months

a. Additional Declaration

“The dormant bulbs in this consignment have been:

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

**AND**

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

**OPTION 2:**

**PEQ:** Level 2

**Minimum Period:** 3 months

**D. For Tissue Cultures**

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

**PLUS**

- a. Conditions for virus diseases

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

## *Asparagus*

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

### **GENERAL CONDITIONS:**

**Approved Countries:** All

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

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

#### **A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 3 months

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

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

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

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

**PLUS**

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

**PEQ:** Level 3B

**Minimum Period:** 3 months

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

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

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

**GENERAL CONDITIONS:**

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

**Quarantine Pests:** Aster yellows phytoplasma, Uredinales

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

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for Aster yellows phytoplasma

Additional Declaration: “Aster yellows phytoplasma is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

**B. For Tissue Cultures**

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

**PLUS**

- a. Conditions for Aster yellows phytoplasma

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**

**PEQ:** Level 2

**Minimum Period:** 3 months

#### **B. For Plants in Tissue Cultures**

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

## ***Begonia***

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

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Virus diseases

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

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

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

#### **OPTION 1:**

**No import permit is required**

**PEQ:** None

##### **a. Additional Declaration**

##### **i) For bulbs produced under an MPI-approved Dutch bulb propagation scheme:**

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

**OR**

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

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

#### **OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

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

**OPTION 1:**

**PEQ:** Level 1

**Minimum Period:** 3 months

a. Additional Declaration

“The dormant bulbs in this consignment have been:

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

**AND**

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

**OPTION 2:**

**PEQ:** Level 2

**Minimum Period:** 3 months

**D. For Tissue Cultures**

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

**PLUS**

a. Conditions for virus diseases

Additional declaration: “The cultures have been derived from parent stock tested and found free of virus diseases.”

## ***Berberis***

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

### **GENERAL CONDITIONS:**

**Approved Countries:** All

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

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

**A. For Whole Plants (dormant) or Cuttings (dormant):**

**PEQ:** Level 2

**Minimum Period:** 3 months

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

b. Additional Declarations

i) “The plants were inspected during the previous growing season and no rust diseases were detected”.

**AND**

ii) “The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water”.

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

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Xylella fastidiosa*

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

**A. For Cuttings and Whole Plants**

**PEQ:** Level 2

**Minimum period:** 3 months

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

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

- b. Additional Declaration

“The plants have been dipped in Furalaxyl at the rate of 0.25g a.i. per litre of water.”

**B. For Tissue Cultures**

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

**PLUS**

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

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

## ***Bowenia***

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

### **GENERAL CONDITIONS:**

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

**Quarantine Pests:** *Demysus meleoides*

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

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

**PEQ:** Level 2

**Minimum Period:** 6 months

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

**B. For 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**

**PEQ:** Level 2

**Minimum Period:** 6 months

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

**OPTION 1:**

**No import permit is required.**

**PEQ:** None

a. Additional Declaration

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

**OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

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

**OPTION 1:**

**PEQ:** Level 1

**Minimum Period:** 3 months

a. Additional Declaration

“The dormant bulbs in this consignment have been:

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

**AND**

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

**OPTION 2:**

**PEQ:** Level 2

**Minimum Period:** 3 months

**D. For Tissue Cultures**

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

**PLUS**

- a. Conditions for Caladium virus X

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



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

**GENERAL CONDITIONS:**

**Approved Countries:** All

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

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

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 1 year

a. Additional Declaration

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

b. Conditions for *Phytophthora capsici*

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

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

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

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

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

c. Conditions for *Phytophthora palmivora*

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

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

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

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

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

**B. For Tissue Cultures**

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

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

**GENERAL CONDITIONS:**

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

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

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

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

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

- a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)  
**Note:** Only applies to the following species: *Camellia japonica*
- c. Additional Declaration  
“The plants have been dipped in prochloraz at the rate of 0.5g a.i. per litre of water”.

**B. For Cuttings**

**PEQ:** Level 2

**Minimum Period:** 3 months

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

- a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- b. Additional Declaration  
“The plants have been dipped in prochloraz at the rate of 0.5g a.i. per litre of water”.

**C. For Tissue Cultures**

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

## *Camellia sinensis*

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

### **GENERAL CONDITIONS:**

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

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

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

#### **A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 3 months

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

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

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

**PLUS**

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

**PEQ:** Level 3B

**Minimum Period:** 3 months

- Conditions for *Phytophthora ramorum* (section 2.2.1.11)

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

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Virus diseases, *Xylella fastidiosa*

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

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 6 months

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

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

**OPTION 1:**

**No import permit is required**

**PEQ:** None

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

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

- b. Additional Declaration

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

**OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

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

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

**C. For Dormant Bulbs from Countries other than Australia and South Africa**

**OPTION 1:**

**PEQ:** Level 1

**Minimum Period:** 3 months

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

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

- b. Treatment: treated for regulated insects as described in section 2.2.1.7 of the basic

conditions within 7 days prior to freezing, cold-storage or shipment.

c. Additional Declaration

“The dormant bulbs in this consignment have been derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.”

**OPTION 2:**

**PEQ:** Level 2

**Minimum Period:** 3 months

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

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

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

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

**PLUS**

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

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

b. Conditions for virus diseases

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

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

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Papaya mosaic virus*, *Papaya ringspot virus*, *Phytophthora capsici*, *Phytophthora palmivora*

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

**OPTION 1:**

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Additional Declaration

“*Papaya mosaic virus* and *Papaya ringspot virus* are not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

b. Conditions for *Phytophthora capsici*

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

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

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

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

c. Conditions for *Phytophthora palmivora*

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

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

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

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

**B. For Tissue Cultures**

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

**PLUS**

a. Additional Declaration

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

**OPTION 2:****For Whole Plants and Tissue Cultures**

**PEQ:** Level 3B

**Minimum Period:** 3 months



## *Carpinus*

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

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Phytophthora ramorum*

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

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

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Phytophthora ramorum* (see Section 2.2.1.11)
- b. Additional Declaration  
“The plants have been dipped in a combination of \_\_\_\_\_[insert one of the options below], at the rate of 1g a.i. per litre of water, and thiram, at the rate of 1.5g a.i. per litre of water”.

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

Benomyl

Carbendazim

Thiophanate methyl

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

**GENERAL CONDITIONS:**

**Approved Countries:** Australia, United States of America

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

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

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 6 months

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

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

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

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

- c. Additional Declaration

“*Fusicladium effusum* and Pecan bunch are not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

**B. For Tissue Cultures**

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

**PLUS**

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

**PEQ:** Level 2

**Minimum Period:** 6 months

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

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

- b. Additional Declaration

“*Fusicladium effusum* and Pecan bunch are not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

## *Carya ovata*

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

### **GENERAL CONDITIONS:**

**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 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*
- c. Additional Declaration  
“*Cryphonectria parasitica* is not known to occur in \_\_\_\_\_ [the country or state where the plants/cuttings were produced]”.

##### **OPTION 2:**

**PEQ:** Level 3B

**Minimum Period:** 6 months

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

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

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

**PLUS**

- a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)  
**Note:** Only applies to members of the *Liriodendron* genus  
**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.
- b. Subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer.

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

**GENERAL CONDITIONS:**

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

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

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

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

**PEQ:** Level 3B

**Minimum Period:** 3 months

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

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

- c. Conditions for *Cryphonectria parasitica* and *Ceratocystis fagacearum*

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

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

**OR**

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

**B. For Tissue Cultures**

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

**PLUS**

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

**PEQ:** Level 3B

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)

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

- b. Conditions for *Cryphonectria parasitica* and *Ceratocystis fagacearum*

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

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

**OR**

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

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

**GENERAL CONDITIONS:**

**Approved Countries:** All

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

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

**A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 6 months

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

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

**B. For Tissue Cultures**

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

## *Chrysanthemum*

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

### **GENERAL CONDITIONS:**

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

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

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

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

##### **a. Conditions for Uredinales**

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

##### **b. Conditions for *Potato spindle tuber viroid***

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

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

**OR**

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

**OR**

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

##### **c. Conditions for *Phytophthora tentaculata***

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

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

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

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora tentaculata*”.

**OR**

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

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

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

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

## B. For Tissue Cultures

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

### PLUS

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 level 2 PEQ greenhouse for a minimum period of 3 months to undergo testing for the presence of *Potato spindle tuber viroid* during the quarantine period.

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

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

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

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



## *Chrysanthemum morifolium*

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

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Frankliniella occidentalis*, *Liriomyza* spp., *Potato spindle tuber viroid*, virus diseases, *Xylella fastidiosa*

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

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

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

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

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

b. Conditions for *Frankliniella occidentalis* and *Liriomyza* spp.”

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

c. Conditions for *Potato spindle tuber viroid*

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

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

**OR**

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

**OR**

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

PEQ greenhouse for a minimum period of 3 months to undergo testing for the presence of *Potato spindle tuber viroid* during the quarantine period.

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

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

**PLUS**

a. Conditions for virus diseases

**Additional Declaration:** “The cultures have been derived from parent stock tested and

found free of virus or virus like diseases.”

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

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

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

c. Conditions for *Potato spindle tuber viroid*

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

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

**OR**

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

**OR**

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

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

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

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

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

## ***Cichorium***

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

### **GENERAL CONDITIONS:**

**Approved Countries:** All

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

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

#### **A. For Whole Plants or Cuttings**

**PEQ:** Level 2

**Minimum Period:** 3 months

##### **a. Conditions for *Phytophthora tentaculata***

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

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

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora tentaculata*”.

**OR**

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

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

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

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

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

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

**PLUS**

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

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

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

Cuttings (dormant); Plants in tissue culture

**2. Pests of *Citrus***

Refer to the pest list.

**3. Entry conditions for:**

**3.1 *Citrus* cuttings from offshore MPI-approved facilities (quarantine stations)**

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

(i) Documentation

**Import permit is required**

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

(ii) Inspection, Testing and Treatments of the consignment

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

(iii) 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 an MPI-approved facility

AND

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

(iv) Additional declarations to the phytosanitary certificate

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

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

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

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

AND

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

AND

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

AND

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

(v) Post-entry quarantine

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

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

Indicative minimum quarantine periods are:

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

### 3.2 *Citrus* cuttings from non-approved facilities in any country

(i) Documentation

**Import permit is required**

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

(ii) Phytosanitary requirements

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

The *Citrus* cuttings have been:

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

(iii) Additional declarations to the phytosanitary certificate

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

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

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

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

(iv) Inspection, Testing and Treatments of the consignment

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

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

(v) 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/tests are required.

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

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

(i) Documentation

**Import permit is required**

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

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

(iv) 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 an MPI-approved facility

AND

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

(v) Additional declarations to the phytosanitary certificate

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

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

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

AND

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

AND

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

(vi) Post-entry quarantine

**PEQ:** Level 2

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

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

(i) 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-approved facility. Refer to *Citrus* Inspection, Testing and Treatment Requirements following the *Citrus* pest list.

(vi) Post-entry quarantine

**PEQ:** Level 3B

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



# Pest List for *Citrus*

## REGULATED PESTS (actionable)

### Insect

### Insecta

#### Coleoptera

##### Bostrichidae

*Apate indistincta*

shot-hole borer

*Apate terebrans*

shot-hole borer

##### Buprestidae

*Agrilus ales*

flatheaded citrus borer

*Agrilus auriventris*

citrus flatheaded borer

##### Cerambycidae

*Anoplophora malasiaca*

white-spotted longicorn beetle

*Chelidonium gibbicolle*

-

*Dihammus vastator*

fig longhorn

*Melanauster chinensis*

-

*Paradisterna plumifera*

speckled longicorn

*Promeces linearis*

-

*Skeletodes tetrops*

longhorn beetle

*Strongylurus thoracicus*

pittosporum longicorn

*Uracanthus cryptophagus*

citrus branch borer

##### Chrysomelidae

*Colasposoma fulgidum*

bluegreen citrus nibbler

*Colasposoma scutellare*

-

*Geloptera porosa*

pitted apple beetle

*Luperomorpha funesta*

mulberry flea beetle

*Monolepta australis*

red-shouldered leaf beetle

*Sebaethe fulvipennis*

flea beetle

##### Coccinellidae

*Cheilomenes lunata* [Animals Biosecurity]

-

*Chilocorus cacti* [Animals Biosecurity]

-

*Chilocorus distigma* [Animals Biosecurity]

-

*Chilocorus nigrita* [Animals Biosecurity]

-

*Exochomus flavipes* [Animals Biosecurity]

-

*Pentilia castanea* [Animals Biosecurity]

-

*Rhyzobius lophanthae* [Animals Biosecurity]

-

*Scymnus nanus* [Animals Biosecurity]

-

*Serangium parcesetosum* [Animals Biosecurity]

-

*Stethorus aethiops* [Animals Biosecurity]

-

*Stethorus histrio* [Animals Biosecurity]

-

*Stethorus punctata picipes* [Animals Biosecurity]

-

##### Curculionidae

*Amystax fasciatus* [Animals Biosecurity]

-

*Artipus* sp.

-

*Brachycerus citriperda*

-

*Callirhopalus bifasciatus*

two-banded Japanese weevil

*Dereodus recticollis*

-

*Diaprepes abbreviatus*

citrus weevil

*Diaprepes* spp.

-

*Eutinophaea bicristata*

citrus leaf-eating weevil

*Leptopius squalidus*

fruit tree root weevil

*Naupactus xanthographus*

fruit tree weevil

*Otiorhynchus cribricollis*

cribrate weevil

*Pachnaeus citri*

-

*Pachnaeus litus*

citrus root weevil

*Perperus lateralis*

white-striped weevil

*Prepodes* spp.

-

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

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

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

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

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

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

<b>Unknown Insecta</b>	
<i>Cosmophyllum pallidulum</i>	-
<b>Mite</b>	
<b>Arachnida</b>	
<b>Acarina</b>	
<b>Acaridae</b>	
<i>Thyreophagus entomophagus italicus</i> [Animals Biosecurity]	-
<b>Anystidae</b>	
<i>Anystis agilis</i> [Animals Biosecurity]	-
<b>Eriophyidae</b>	
<i>Aculops pelekassi</i>	eriphyid mite
<i>Tegolophus australis</i>	brown citrus mite
<b>Phytoseiidae</b>	
<i>Amblyseius addoensis</i> [Animals Biosecurity]	-
<i>Amblyseius citri</i> [Animals Biosecurity]	-
<i>Amblyseius swirskii</i> [Animals Biosecurity]	-
<i>Euseius hibisci</i> [Animals Biosecurity]	-
<i>Euseius scutalis</i> [Animals Biosecurity]	-
<i>Euseius stipulatus</i> [Animals Biosecurity]	-
<i>Euseius tularensis</i> [Animals Biosecurity]	-
<i>Iphiseius degenerans</i> [Animals Biosecurity]	predatory mite
<i>Typhlodromus athiasae</i> [Animals Biosecurity]	-
<b>Stigmaeidae</b>	
<i>Agistemus africanus</i> [Animals Biosecurity]	-
<i>Agistemus tranatalensis</i> [Animals Biosecurity]	-
<i>Eryngiopus siculus</i> [Animals Biosecurity]	-
<b>Tarsonemidae</b>	
<i>Tarsonemus cryptocephalus</i> [Animals Biosecurity]	-
<b>Tenuipalpidae</b>	
<i>Brevipalpus chilensis</i>	false spider mite
<i>Brevipalpus lewisi</i>	bunch mite
<i>Brevipalpus obovatus</i>	privet mite
<i>Tenuipalpus emeticae</i> [Animals Biosecurity]	-
<i>Tuckerella ornata</i>	-
<i>Ultratenuipalpus gonianaensis</i>	tenuipalpid mite
<b>Tetranychidae</b>	
<i>Calacarus citrifolii</i>	clover mite
<i>Eotetranychus kankitus</i>	tetranychid mite
<i>Eotetranychus lewisi</i>	big beaked plum mite
<i>Eotetranychus yumensis</i>	Yumi spider mite
<i>Eutetranychus africanus</i>	tetranychid mite
<i>Eutetranychus banksi</i>	Texas citrus mite
<i>Eutetranychus orientalis</i>	pear leaf blister mite
<i>Oligonychus mangiferus</i>	mango spider mite
<i>Tetranychus kanzawai</i>	kanzawa mite
<b>Tuckerellidae</b>	
<i>Tuckerella knorri</i>	hawthorn spider mite
<b>Spider</b>	
<b>Arachnida</b>	
<b>Araneae</b>	
<b>Clubionidae</b>	
<i>Cheiracanthium mildei</i> [Animals Biosecurity]	-
<b>Theridiidae</b>	
<i>Theridion</i> sp. [Animals Biosecurity]	-
<b>Mollusc</b>	
<b>Gastropoda</b>	



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

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

### **Phytoplasma**

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

### **Disease of unknown aetiology**

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

## Inspection, Testing and Treatment Requirements for *Citrus*\*

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

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

\* Country freedom is accepted as equivalence to a treatment.

**Notes:**

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

## *Clivia*

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

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Virus diseases

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

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 6 months

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

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

#### **PLUS**

- a. Conditions for virus diseases

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:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Pratylenchus convallariae*

Additional Declaration: “*Pratylenchus convallariae* is not known to occur in \_\_\_\_\_  
\_\_\_\_\_ [the country or state where the plants were grown]”.

## *Corylus*

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

### **GENERAL CONDITIONS:**

**Approved Countries:** All

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

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

#### **A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 3 months

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

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

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

**PLUS**

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

**PEQ:** Level 3B

**Minimum Period:** 3 months



## *Cotoneaster*

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

### **GENERAL CONDITIONS:**

**Approved Countries:** All

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

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

#### **A. For Cuttings and Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Phytophthora ramorum* (see section 2.2.1.11)
- b. Conditions for *Xylella fastidiosa* (see section 2.2.1.12)  
**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*
- c. Conditions for *Gymnosporangium* spp.

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

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

**OR**

- ii) “The plants were from a crop inspected during the growing season and no rust diseases were detected”.

- d. Additional Declaration

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

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

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

**PLUS**

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

## *Crataegus*

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

### **GENERAL CONDITIONS:**

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

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

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

#### **A. For Whole Plants**

##### **OPTION 1**

**PEQ:** Level 2

**Minimum Period:** 6 months

- a. Conditions for *Gymnosporangium clavipes* and *Gymnosporangium globosum*
- i) **Additional Declaration:** “*Gymnosporangium clavipes* and *Gymnosporangium globosum* are not known to occur on \_\_\_\_\_ [host species being imported] in \_\_\_\_\_ [the country or state in which the plants were grown]”.

**AND**

- ii) **Additional Declaration:** “The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water, prior to export”.

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

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

- c. Conditions for *Phytophthora capsici*

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

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

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

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

##### **OPTION 2**

**PEQ:** Level 3B

**Minimum Period:** 3 months

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

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

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

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

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

**GENERAL CONDITIONS:**

**Approved Countries:** All

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

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

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 6 months

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

**OPTION 1:**

**No import permit is required**

**PEQ:** None

a. Additional Declaration:

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

**OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

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

**OPTION 1:**

**PEQ:** Level 1

**Minimum Period:** 3 months

a. Additional Declaration:

“The dormant bulbs in this consignment have been:

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

**AND**

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

**OPTION 2:**

**PEQ:** Level 2

**Minimum Period:** 3 months

**D. For Tissue Cultures**

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

**PLUS**

- a. Conditions for virus diseases

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

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

**GENERAL CONDITIONS:**

**Approved Countries:** All

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

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

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 6 months

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

**OPTION 1:**

**No import permit is required**

**PEQ:** None

a. Additional Declaration

i) **For bulbs produced under an MPI-approved Dutch bulb propagation scheme:**

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

**OR**

ii) **For bulbs NOT produced under an MPI-approved bulb propagation scheme:**

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

**OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

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

**OPTION 1:**

**PEQ:** Level 1

**Minimum Period:** 3 months

a. Additional Declaration

“The dormant bulbs in this consignment have been:

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

**AND**

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

**OPTION 2:**

**PEQ:** Level 2

**Minimum Period:** 3 months

**D. For Tissue Cultures**

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

**PLUS**

a. Conditions for virus diseases

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

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Cycas*”.

**GENERAL CONDITIONS:**

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

**Quarantine Pests:** *Aulacaspis yasumatsui*, *Demyrsus meleoides*, *Phellinus noxius*

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

**A. For Cuttings (dormant), including offsets in the form of dormant buds divided from the trunk**

**PEQ:** Level 2

**Minimum Period:** 6 months

**Inspection Requirements:** A minimum of 600 plants are to be inspected during each inspection in post-entry quarantine

- a. Conditions for *Aulacaspis yasumatsui*  
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.



## *Dahlia*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Dahlia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Phymatotrichopsis omnivora*, *Phytophthora capsici*, *Potato spindle tuber viroid*, *Tetranychus kanzawai*, Uredinales

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for Uredinales

Additional Declaration: “Rust diseases are not known to occur on *Dahlia* in \_\_\_\_\_ [the country in which the plants were grown]”.

b. Conditions for *Phytophthora capsici*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

c. Conditions for *Potato spindle tuber viroid*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Potato spindle tuber viroid* is not known to occur”.

**OR**

ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*”.

**OR**

iii) Pre-determined testing in PEQ: refer to “Inspection, Testing and Treatment Requirements for *Dahlia*”.

**B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom:**

**OPTION 1:**

**No import permit is required**

**PEQ:** None

**1) For bulbs produced under an MPI-approved Dutch bulb propagation scheme**

a. Additional Declaration

“In addition to inspection of the dormant bulbs prior to shipment, the imported bulbs meet the requirements of the BKD Class 1 bulb certification scheme.”

b. Conditions for *Phytophthora capsici*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

c. Conditions for *Potato spindle tuber viroid*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Potato spindle tuber viroid* is not known to occur”.

**OR**

ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*”.

**2) For bulbs NOT produced under an MPI-approved bulb propagation scheme:**

a. Additional Declaration

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

b. Conditions for *Phytophthora capsici*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

c. Conditions for *Potato spindle tuber viroid*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Potato spindle tuber viroid* is not known to occur”.

**OR**

- ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*”.

**OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

a. Conditions for *Phytophthora capsici*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

b. Conditions for *Potato spindle tuber viroid*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Potato spindle tuber viroid* is not known to occur”.

**OR**

- ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*”.

**C. For Dormant Bulbs from the United States of America**

**No import permit is required unless the bulbs require post-entry quarantine**

**PEQ:** None or Level 2 (see below)

a. Additional Declaration

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests”.

b. Conditions for *Phymatotrichopsis omnivora*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The dormant tubers have been sourced from a ‘pest free area’, free from *Phymatotrichopsis omnivora*”.

**OR**

- ii) “The dormant bulbs have been sourced from a ‘pest free place of production’, free from *Phymatotrichopsis omnivora*”.

**AND**

- The consignment must be treated for fungi as described in Section 2.2.1.7 “Pesticide treatments for dormant bulbs”. If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section of the phytosanitary certificate.

**AND**

- Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine

c. Conditions for *Phytophthora capsici*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

d. Conditions for Potato *spindle tuber viroid*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Potato spindle tuber viroid* is not known to occur”.

**OR**

- ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*”.

**D. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, United States of America:**

**PEQ:** Level 1 or Level 2 (see below)

**Minimum Period:** 3 months

a. Additional Declaration

“The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

**AND**

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.”

b. Conditions for *Phymatotrichopsis omnivora*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The dormant tubers have been sourced from a ‘pest free area’, free from *Phymatotrichopsis omnivora*”.

**OR**

- ii) “The dormant bulbs have been sourced from a ‘pest free place of production’, free from *Phymatotrichopsis omnivora*”.

**AND**

- The consignment must be treated for fungi as described in Section 2.2.1.7 “Pesticide treatments for dormant bulbs”. If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section of the phytosanitary certificate.

**AND**

- Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine

c. Conditions for *Phytophthora capsici*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

d. Conditions for *Potato spindle tuber viroid*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Potato spindle tuber viroid* is not known to occur”.

**OR**

- ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*”.

## E. For Tissue Cultures

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

a. Conditions for *Potato spindle tuber viroid*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Potato spindle tuber viroid* is not known to occur”.

**OR**

- ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*”.

**OR**

- iii) Pre-determined testing in PEQ: refer to “Inspection, Testing and Treatment Requirements for *Dahlia*”.

**Guidance for importers:** Tissue culture imported under this option must be imported into a level 2 PEQ greenhouse for a minimum period of 3 months to undergo testing for the presence of *Potato spindle tuber viroid* during the quarantine period.

b. Conditions for virus diseases

“The cultures have been derived from parent stock tested and found free of virus diseases.”

### Inspection, Testing and Treatment Requirements for *Dahlia*

ORGANISM	MPI-ACCEPTED METHODS	Comments
<b>Viroids</b>		
<i>Potato spindle tuber viroid</i>	PCR based methods	Applies to whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility

**Guidance for importers:** Testing in PEQ for the presence of *Potato spindle tuber viroid* is only necessary when an importer has been unable to secure one of the alternative declarations.

## ***Delphinium***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Delphinium*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom, United States of America.

**Quarantine Pests:** *Ceratocystis fimbriata*, *Phellinus noxius*, *Phytophthora capsici*, *Phytophthora palmivora*, *Phytophthora tentaculata*, Uredinales, *Xylella fastidiosa*

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)  
**Note:** Only applies to members of the *Erythrina* genus
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)  
**Note:** Applies to the following species: *Barleria cristata* **and** applies to all members of the *Erythrina* genus
- c. Conditions for *Phytophthora capsici*  
**Note:** Only applies to the following genus: *Carolinianum*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

d. Conditions for *Phytophthora palmivora*

**Note:** Only applies to the following genus: *Erythrina*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

e. Conditions for *Phytophthora tentaculata*

**Note:** Only applies to the following genera: *Delphinium* and *Salvia*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora tentaculata*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora tentaculata*”.

f. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Note:** Only applies to the members of the *Convolvulus*, *Crepis*, *Erigeron*, *Euryops*, *Geranium*, *Phyllanthus*, *Salvia* and *Senecio* genera

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

g. Conditions for Uredinales

**Additional Declaration:** “Rust diseases of genus *Coleosporium* and *Cronatium* are not known to occur on \_\_\_\_\_[the host species being imported] in \_\_\_\_\_[the country in which the plants were grown]”.

## B. For Tissue Cultures

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)

**Note:** Only applies to the members of the *Convolvulus*, *Crepis*, *Erigeron*, *Euryops*, *Geranium*, *Phyllanthus*, *Salvia* and *Senecio* genera

**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.



**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Dianthus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Frankliniella occidentalis*, *Liriomyza* spp., *Phytophthora capsici*, *Phytophthora palmivora*, Uredinales

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Frankliniella occidentalis* and *Liriomyza* spp.

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 Uredinales

Additional Declaration: “The plants were inspected during the growing season and no rust diseases were found”.

- c. Conditions for *Phytophthora capsici*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

d. Conditions for *Phytophthora palmivora*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

## *Dianthus caryophyllus*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Dianthus caryophyllus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Frankliniella occidentalis*, *Liriomyza* spp., *Phytophthora capsici*, *Phytophthora palmivora*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below.

#### **A. For Whole Plants**

##### **OPTION 1:**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Frankliniella occidentalis* and *Liriomyza* spp.

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*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

- c. Conditions for *Phytophthora palmivora*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

## **OPTION 2: (For Netherlands only)**

**PEQ:** Level 2

**Minimum Period:** 4 weeks

### **a. Additional Declarations**

- i) “The imported plants meet the requirements of the NAKtuinbouw Elite (Class SEE or EE) [choose one] certification scheme.”

**AND**

- ii) “The plants have been held at  $1.5^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$  for 2 days, then fumigated with methyl bromide at  $14\text{g}/\text{m}^3$  for 4 hours at  $15^{\circ}\text{C}$  and packed so that re-infestation with insects cannot occur.”

### **b. Conditions for *Phytophthora capsici***

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

### **c. Conditions for *Phytophthora palmivora***

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

## **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Diascia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Potato spindle tuber viroid*

**Entry Conditions:** **Basic;** with variations and additional conditions as specified below:

**A. For Whole Plants and Cuttings**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Potato spindle tuber viroid*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Potato spindle tuber viroid* is not known to occur”.

**OR**

ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*”.

**OR**

iii) Pre-determined testing in PEQ: refer to “Inspection, Testing and Treatment Requirements for *Diascia*”.

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

a. Conditions for *Potato spindle tuber viroid*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Potato spindle tuber viroid* is not known to occur”.

**OR**

ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*”.

**OR**

iii) Pre-determined testing in PEQ: refer to “Inspection, Testing and Treatment Requirements for *Diascia*”.

**Guidance for importers:** Tissue culture imported under this option must be imported into a level 2 PEQ greenhouse for a minimum period of 3 months to undergo testing for the presence of *Potato spindle tuber viroid* during the quarantine period.

## Inspection, Testing and Treatment Requirements for *Diascia*

ORGANISM	MPI-ACCEPTED METHODS	Comments
<b>Viroids</b>		
<i>Potato spindle tuber viroid</i>	PCR based methods	Applies to whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility

**Guidance for importers:** Testing in PEQ for the presence of *Potato spindle tuber viroid* is only necessary when an importer has been unable to secure one of the alternative declarations.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Dioscorea*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Phymatotrichopsis omnivora*, Virus diseases

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 6 months

**B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom:**

**OPTION 1:**

**No import permit is required**

**PEQ:** None

a. Additional Declaration

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

**OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

**C. For Dormant Bulbs from the United States of America**

**No import permit is required unless the bulbs require post-entry quarantine.**

**PEQ:** None or Level 2 (see below)

a. Additional Declarations

i) “In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests”.

**AND**

ii) “The dormant bulbs have been sourced from a ‘pest free area’, free from *Phymatotrichopsis omnivora*”.

**OR**

1. "The dormant bulbs have been sourced from a 'pest free place of production', free from *Phymatotrichopsis omnivora*".  
**AND**
2. The consignment must be treated for fungi as described in Section 2.2.1.7 "Pesticide treatments for dormant bulbs". If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section of the phytosanitary certificate.  
**AND**
3. Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine.

**D. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, United States of America**

**PEQ:** Level 1 or Level 2 (see below)

**Minimum Period:** 3 months

a. Additional Declarations

- i) "The dormant bulbs in this consignment have been:
  - derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.  
**AND**
  - treated for regulated insects as described in section 2.2.1.7 'Pesticide treatments for dormant bulbs' in the basic conditions within 7 days prior to freezing, cold-storage or shipment."
- ii) "The dormant tubers have been sourced from a 'pest free area', free from *Phymatotrichopsis omnivora*".

**OR**

1. "The dormant bulbs have been sourced from a 'pest free place of production', free from *Phymatotrichopsis omnivora*".  
**AND**
2. The consignment must be treated for fungi as described in Section 2.2.1.7 "Pesticide treatments for dormant bulbs". If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the "Disinfestation and/or Disinfection Treatment" section of the phytosanitary certificate.  
**AND**
3. Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine.

**E. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

a. Conditions for virus diseases

Additional Declaration: "The cultures have been derived from parent stock tested and found free of virus diseases."



## *Diospyros*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Diospyros*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Cephalosporium diospyri*, *Phellinus noxius*, *Phytophthora capsici*, *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

- b. Conditions for *Phellinus noxius* (section 2.2.1.13)

- c. Conditions for *Phytophthora capsici*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 3B

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

## ***Dracaena***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Dracaena*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Chrysomphalus aonidum*, *Pantoea ananatis*, *Phytophthora palmivora*, *Xyleborus* spp. (except *Xyleborus compressus*, *Xyleborus saxeseni*, *Xyleborus truncatus*)

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

#### **A. For Cuttings and Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

##### **a. Additional Declarations**

“The *Dracaena* cuttings/plants [choose one] in this consignment have been:

- i) sourced from a ‘pest free area’ or ‘pest free place of production’ [choose one], free from *Xyleborus* spp. (except *Xyleborus compressus*, *Xyleborus truncatus* and *Xyleborus saxeseni*).

**AND**

- ii) sourced from a ‘pest free area’ or ‘pest free place of production’ [choose one], free from *Chrysomphalus aonidum*

**OR**

- inspected in accordance with appropriate official procedures and found to be free of *Chrysomphalus aonidum*.”

##### **b. Conditions for *Phytophthora palmivora***

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

#### **Treatment for dormant cuttings:**

Dormant cuttings must be treated for regulated insects and mites as described in section 2.2.1.6 (part B) of the Basic Conditions.

#### **Treatment for non-dormant cuttings and whole plants (excluding *Dracaena deremensis*):**

Non-dormant cuttings and whole plants must be treated for regulated insects and mites on arrival in New Zealand using methyl bromide fumigation as described in section 2.2.1.6 (part

B) of the Basic Conditions. Methyl bromide may be damaging to some *Dracaena* species and is carried out at the importer's risk.

**Treatment for non-dormant cuttings and whole plants of *Dracaena deremensis* ONLY:**

Prior to export the nursery stock must be treated for regulated insects and mites as described in section 2.2.1.6 (part B) of the Basic Conditions. On arrival in New Zealand, if no treatment was done prior to export, the importer has the option to treat the non-dormant cuttings or whole plants using the alternate chemical treatment listed below **OR** methyl bromide fumigation as described in section 2.2.1.6 (part B) of the Basic Conditions.

1. The foliage of imported plants shall be dipped in a combination of pesticides, from two different chemical groups, as specified below in Table 1. Dipping is to occur at room temperature, and the treatment time is 2-5 minutes.
2. 10-14 days after the initial dipping treatment, the consignment must be spray treated in PEQ with a combination of pesticides from two different chemical groups as specified in Table 1.

Table 1 Alternate treatment for *Dracaena deremensis*

Chemical group	Active ingredient (a.i.)	Rate
Organophosphorous	Acephate	0.8 g a.i. per litre of dip
	Dimethoate	1.1 g a.i. per litre of dip
Carbamate	Carbaryl	1.2 g a.i. per litre of dip
Spinosyns	Spinosad	2.0 g a.i. per litre of dip

**Inspection Requirements:** A minimum of 600 plants are to be inspected during each growing season inspection in post-entry quarantine.

**Measures for *Pantoea ananatis*:**

The following measures will apply to **all** *Dracaena* species on entry into New Zealand or while in post entry quarantine.

- If plants exhibit any symptoms that may be indicative of infection with *Pantoea ananatis*, samples will be collected and submitted for diagnostic testing.
- If any plants are identified as being infected with *Pantoea ananatis*, the whole consignment must be either reshipped or destroyed, at the expense of the importer.

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

## *Epipremnum*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Epipremnum*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Phytophthora capsici*, *Phytophthora palmivora*, *Ralstonia pseudosolanacearum*

**Entry Conditions:** **Basic;** with variations and additional conditions as specified below:

#### **A. For Whole Plants or Cuttings**

**PEQ:** Level 2

**Minimum Period:** 3 months

##### **a. Conditions for *Phytophthora capsici***

**Note:** Only applies to the following genera: *Epipremnum*, *Macadamia* and *Philodendron*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

##### **b. Conditions for *Phytophthora palmivora***

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

##### **c. Conditions for *Ralstonia pseudosolanacearum***

**Note:** Only applies to members of the following genus: *Epipremnum*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The [insert plant species] plants were sourced from a ‘pest free area’, free from *Ralstonia pseudosolanacearum*”.

**OR**

- ii) “The [insert plant species] plants have been sourced from a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*”.

**Note:** For phytosanitary certificates from Costa Rica, the following additional declaration can be accepted: “The [insert plant species] plants have been sourced from a ‘pest free place of production’, where parent plants were tested by PCR and found free from *Ralstonia pseudosolanacearum*”.

## **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

### **PLUS**

- a. Conditions for *Ralstonia pseudosolanacearum*

**Note:** Only applies to members of the following genus: *Epipremnum*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants were sourced from a ‘pest free area’, free from *Ralstonia pseudosolanacearum*”.

### **OR**

- ii) “The [insert plant species] plants have been sourced from a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*”.

**Note:** For phytosanitary certificates from Costa Rica, the following additional declaration can be accepted: “The [insert plant species] plants have been sourced from a ‘pest free place of production’, where parent plants were tested by PCR and found free from *Ralstonia pseudosolanacearum*”.

## **C. For Whole Plants and Cuttings imported into a level 3A PEQ facility**

**Note:** Only applies to members of the following genus: *Epipremnum*

**Guidance for importers:** This option is for importers that have been unsuccessful at securing a PFA or PFPP declaration for *Ralstonia pseudosolanacearum*.

**PEQ:** Level 3A

**Minimum Period:** 3 months

- a. Conditions for *Phytophthora capsici*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

### **OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

### **OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

- b. Conditions for *Ralstonia pseudosolanacearum*

Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Epipremnum*”.

## **D. For Tissue cultures imported into a level 3A PEQ facility**

**Note:** Only applies to members of the following genus: *Epipremnum*

**Guidance for importers:** This option is for importers that have been unsuccessful at securing a PFA or PFPP declaration for *Ralstonia pseudosolanacearum*.

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 3A

**Minimum Period:** 3 months

a. Conditions for *Ralstonia pseduosolanacearum*

Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Epipremnum*”.

### **Inspection, Testing and Treatment Requirements for *Epipremnum***

<b>ORGANISM</b>	<b>MPI-ACCEPTED METHODS</b>	<b>Comments</b>
<b>Bacteria</b>		
<i>Ralstonia pseudosolanacearum</i>	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective media <b>OR</b> PCR	Applies to <i>Epipremnum</i> whole plants, cuttings, and tissue culture imported into a level 3A PEQ facility

## *Eriobotrya*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Eriobotrya*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States of America.

**Quarantine Pests:** *Ceratocystis fimbriata*, *Phellinus noxius*, *Pseudomonas syringae* pv. *eriobotryae*

**Entry Conditions:** **Basic;** with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)  
**Note:** Only applies to the following species: *Eriobotrya japonica*
- c. Conditions for *Pseudomonas syringae* pv. *eriobotryae*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “*Pseudomonas syringae* pv. *eriobotryae* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

**OR**

- ii) “The plants were from a nursery that has been inspected for the presence of *Pseudomonas syringae* pv. *eriobotryae* and none has been detected”.

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Eucalyptus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Ceratocystis fimbriata*, *Chrysosporthe cubensis*, *Endothia havanensis*, *Mycosphaerella parva*, *Phellinus noxius*, *Phytophthora ramorum*, *Puccinia psidii* sensu lato (s.l.) complex (including *Uredo rangelii*), *Xylella fastidiosa*

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

**A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
- d. Conditions for *Phellinus noxius* (section 2.2.1.13)

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

- a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)  
**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.  
**Guidance for importers:** Tissue cultures which are imported under Option 2 of the conditions for *Puccinia psidii* s.l. complex, AND require PEQ under section 2.2.2.5, must complete the PEQ requirements for *Puccinia psidii* before being deflasked into the PEQ greenhouse.

- b. Conditions for *Puccinia psidii* s.l. complex

**OPTION 1:**

i) Additional Declaration

- “*Puccinia psidii* s.l. complex (including *Uredo rangelii*) is not known to occur in \_\_\_\_\_ [the country of origin]”.

**OR**

- “The tissue cultures in this consignment have been actively growing in the culture container for at least four weeks at temperatures between 15-23°C (59-73.4°F)”.

- ii) The tissue cultures are subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer.



**OPTION 2:**

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 2 Tissue culture laboratory

**Minimum Period:** 4 weeks

- i) The cultures containers are not to be opened during the quarantine period.

## *Eugenia*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Eugenia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

**Quarantine Pests:** *Phellinus noxius*, *Phytophthora palmivora*, *Puccinia psidii* sensu lato (s.l.) complex (including *Uredo rangelii*), *Xylella fastidiosa*

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

#### **A. For Whole Plants**

##### **OPTION 1:**

**PEQ:** Level 2

**Minimum Period:** 6 months

- a. Conditions for *Xylella fastidiosa* (see section 2.2.1.12)
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)  
**Note:** Only applies to the following species: *Syzygium samarangense*
- c. Conditions for *Phytophthora palmivora*  
**Note:** Only applies to the members of the following genus: *Syzygium*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

- d. Conditions for *Puccinia psidii* s.l. complex

**Additional Declaration:** “*Puccinia psidii* s.l. complex (including *Uredo rangelii*) is not known to occur in \_\_\_\_\_ [the country of origin]”.

##### **OPTION 2:**

**PEQ:** Level 3B

**Minimum Period:** 6 months

- a. Conditions for *Xylella fastidiosa* (see section 2.2.1.12)
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)  
**Note:** Only applies to the following species: *Syzygium samarangense*

## **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

### **PLUS**

- a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)

**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

**Guidance for importers:** Tissue cultures which are imported under Option 2 of the conditions for *Puccinia psidii* s.l. complex, AND require PEQ under section 2.2.2.5, must complete the PEQ requirements for *Puccinia psidii* before being deflasked into the PEQ greenhouse.

- b. Conditions for *Puccinia psidii* s.l. complex

#### **OPTION 1:**

- i) Additional Declaration

- “*Puccinia psidii* s.l. complex (including *Uredo rangelii*) is not known to occur in \_\_\_\_\_ [the country of origin]”.

#### **OR**

- “The tissue cultures in this consignment have been actively growing in the culture container for at least four weeks at temperatures between 15-23°C (59-73.4°F)”.

#### **OPTION 2:**

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 2 Tissue culture laboratory

**Minimum Period:** 4 weeks

- i) The cultures containers are not to be opened during the quarantine period.

## *Eupatorium*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Eupatorium*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom.

**Quarantine Pests:** Uredinales, *Xylella fastidiosa*

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*.

- b. Conditions for Uredinales

**Additional Declaration:** “Rust diseases of genus *Coleosporium* and *Cronatium* are not known to occur on \_\_\_\_\_ [the host species being imported] in \_\_\_\_\_ [the country in which the plants were grown]”.

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

- a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)

**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

## ***Eutrema***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Eutrema*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** Japan

**Quarantine Pests:** *Ascochyta brassicae*, *Athalia* spp., *Eurydema* spp., *Peronospora alliariae*, *Septoria wasabiae*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants and Cuttings**

**PEQ:** Level 2

**Minimum Period:** 3 months

##### **a. Additional Declaration**

“Plants have been dipped in captan at the rate of 1.25g a.i. per litre of water within 1 week of export”.

##### **b. Special Condition**

On arrival in New Zealand the plants are to be treated, under the supervision of an Inspector, at an MPI-registered transitional facility by dipping in metalaxyl or furalaxyl at the rate of 1.2g a.i. per litre of water.

#### **B. For Tissue cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

## *Fagus*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Fagus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States of America.

**Quarantine Pests:** *Ceratocystis fimbriata*, *Cronartium quercuum*, *Phytophthora ramorum*, Tortricidae, *Xylella fastidiosa*

**Entry Conditions: Basic:** with variations and additional conditions as specified below:

#### **A. For Cuttings (dormant) and Whole Plants (dormant)**

##### **OPTION 1:**

**PEQ:** Level 2

**Minimum Period:** 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)

**Note:** Only applies to members of the *Fagus* genus

- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

- c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Note:** Only applies to the members of the *Fagus* genus

- d. Additional Declaration

“The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water.”

##### **OPTION 2:**

**PEQ:** Level 3B

**Minimum Period:** 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)

**Note:** Only applies to members of the *Fagus* genus

- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Note:** Only applies to members of the *Fagus* genus

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

#### **PLUS**

- a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)

**Note:** Only applies to the members of the *Fagus* genus

**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

## *Fagus sylvatica*

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Fagus sylvatica*”, and are additional to those specified in sections 1,2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States of America.

**Quarantine Pests:** *Ceratocystis fimbriata*, *Cronartium quercuum*, *Cryphonectria parasitica*, *Phytophthora ramorum*, Tortricidae, *Xylella fastidiosa*

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

#### **A. For Whole Plants (dormant) and Cuttings (dormant)**

##### **OPTION 1:**

**PEQ:** Level 2

**Minimum Period:** 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)  
**Note:** Only applies to members of the *Fagus* genus
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
- d. Conditions for *Cryphonectria parasitica*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “*Cryphonectria parasitica* is not known to occur in \_\_\_\_\_[the country or state where the plants/cuttings were grown]”.

**OR, for cuttings only:**

- ii) “The tree(s), from which this material was taken, was inspected during the previous growing season and no *Cryphonectria parasitica* was detected”.

**OR, for young plants:**

- iii) “The plants were inspected during the previous growing season and no *Cryphonectria parasitica* was detected”.

- e. Additional Declaration

“The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water.”

##### **OPTION 2:**

**PEQ:** Level 3B

**Minimum Period:** 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)  
**Note:** Only applies to members of the *Fagus* genus

- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

## **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

### **PLUS**

- a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)  
**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.
- b. Subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer.



**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Ficus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Ceratocystis fimbriata*, *Phellinus noxius*, *Phytophthora capsici*, *Phytophthora palmivora*, *Ralstonia pseudosolanacearum*, *Uredo ficina*, *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

**Note:** Nursery stock of *Ficus microcarpa* must be free of flowers and fruit.

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)

**Note:** Only applies to the following species: *Ficus carica*

- b. Conditions for *Phellinus noxius* (section 2.2.1.13)

- c. Conditions for *Phytophthora capsici*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

- d. Conditions for *Phytophthora palmivora*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

- e. Conditions for *Ralstonia pseudosolanacearum*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants were sourced from a ‘pest free area’, free from *Ralstonia pseudosolanacearum*”.

**OR**

- ii) “The [insert plant species] plants have been sourced from a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*”.

**Note:** For phytosanitary certificates from Costa Rica, the following additional declaration can be accepted: ‘The [insert plant species] plants have been sourced from a ‘pest free place of production’, where parent plants were tested by PCR and found free from *Ralstonia pseudosolanacearum*’.

f. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

g. Conditions for *Uredo ficina*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “*Uredo ficina* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

**OR**

- ii) “The *Ficus* spp. has been sourced from a ‘pest free place of production’, free from *Uredo ficina*”

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Ralstonia pseudosolanacearum*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants were sourced from a ‘pest free area’, free from *Ralstonia pseudosolanacearum*”.

**OR**

- ii) “The [insert plant species] plants have been sourced from a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*”.

**Note:** For phytosanitary certificates from Costa Rica, the following additional declaration can be accepted: ‘The [insert plant species] plants have been sourced from a ‘pest free place of production’, where parent plants were tested by PCR and found free from *Ralstonia pseudosolanacearum*’.

b. Conditions for *Xylella fastidiosa* (section 2.2.2.5)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

c. Conditions for *Uredo ficina*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “*Uredo ficina* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

**OR**

- ii) “The *Ficus* spp. has been sourced from a ‘pest free place of production’, free from *Uredo ficina*”.

**C. For Whole Plants and Cuttings imported into a level 3A PEQ facility**

**Guidance for importers:** This option is for importers that have been unsuccessful at securing a PFA or PFPP declaration for *Ralstonia pseudosolanacearum*.

**PEQ: Level 3A**

**Minimum Period:** 3 months

**Note:** Nursery stock of *Ficus microcarpa* must be free of flowers and fruit.

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)

**Note:** Only applies to the following species: *Ficus carica*

b. Conditions for *Phellinus noxius* (section 2.2.1.13)

c. Conditions for *Phytophthora capsici*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

d. Conditions for *Phytophthora palmivora*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

e. Conditions for *Ralstonia pseudosolanacearum*

Growing season inspection in PEQ for symptom expression AND plating on selective media OR PCR using DNA from the plant stem

f. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

g. Conditions for *Uredo ficina*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “*Uredo ficina* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

**OR**

- ii) “The *Ficus* spp. has been sourced from a ‘pest free place of production’, free from *Uredo ficina*”

**D. For Tissue Cultures imported into a level 3A PEQ facility**

**Guidance for importers:** This option is for importers that have been unsuccessful at securing a PFA or PFPP declaration for *Ralstonia pseudosolanacearum*.

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 3A

**Minimum Period:** 3 months

a. Conditions for *Ralstonia pseudosolanacearum*

b. Growing season inspection in PEQ for symptom expression AND plating on selective media OR PCR using DNA from the plant stem  
Conditions for *Xylella fastidiosa* (section 2.2.2.5)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

c. Conditions for *Uredo ficina*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “*Uredo ficina* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

**OR**

- ii) “The *Ficus* spp. has been sourced from a ‘pest free place of production’, free from *Uredo ficina*”.

## ***Fortunella***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Fortunella*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **1. Type of *Fortunella* nursery stock approved for entry into New Zealand**

Cuttings (dormant); Plants in tissue culture

### **2. Pests of *Fortunella***

Refer to the pest list.

### **3. Entry conditions for:**

#### **3.1 *Fortunella* cuttings from offshore MPI-approved facilities (quarantine stations)**

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Fortunella*, the approved facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Fortunella*.

##### **(i) Documentation**

#### **Import permit is required**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Fortunella* cuttings exported to New Zealand.

##### **(ii) Inspection, Testing and Treatments of the consignment**

The inspection, testing and treatment requirements for specified regulated pests must be undertaken at the approved facility as specified in the agreement between MPI and the approved facility operator. Refer to *Fortunella* Inspection, Testing and Treatment Requirements following the *Fortunella* pest list.

##### **(iii) 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 an MPI-approved facility
- AND
- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the approved facility.

##### **(iv) Additional declarations to the phytosanitary certificate**

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO

must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Fortunella* cuttings in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI, and to conform with New Zealand's current phytosanitary requirements.

AND

- sourced from mother plants that have been kept in insect proof plant houses/sourced from open ground mother plants [choose one].

AND

- held and tested for/classified free from specified regulated pests at the approved facility as required in the agreement between MPI and the approved facility operator.

AND

- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the approved facility."

(v) Post-entry quarantine

**PEQ:** Level 2. Plants must be held at 18-25°C throughout the quarantine period.

**Quarantine Period:** This is the time required to complete inspections and/or indexing to detect regulated pathogens. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/tests are required.

Indicative minimum quarantine periods are:

- 6 months for *Fortunella* cuttings sourced from mother plants that have been kept in insect proof plant houses, which may be extended to 12 months to allow for testing to be completed; or
- 16 months for *Fortunella* cuttings sourced directly from open ground mother plants.

### 3.2 *Fortunella* cuttings from non-approved facilities in any country

(i) Documentation

**Import permit is required**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Fortunella* cuttings exported to New Zealand.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The *Fortunella* cuttings have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI (refer to the pest list).

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Fortunella* cuttings in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI, and to conform with the current phytosanitary requirements of MPI."

(iv) Inspection, Testing and Treatments of the consignment

Following inspection at the border, upon arrival, the *Fortunella* cuttings will be directed to a facility approved to the standard BMG-STD-TREAT: *Approval of Suppliers Providing Treatment of Imported Risk Goods and Forestry/Plant Related Material for Export*, to be sprayed/dipped in MPI-approved miticide and insecticides as described in section 2.2.1.6 of the basic conditions.

Following treatment, testing for specified regulated pests must be undertaken at a New Zealand Level 3B MPI-approved facility. Refer to *Fortunella* Inspection, Testing and Treatment Requirements following the *Fortunella* pest list.

(v) Post-entry quarantine

**PEQ:** Level 3B

**Quarantine Period:** This is the time required to complete inspections and/or indexing to detect regulated pathogens. 16 months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments are required.

### **3.3 *Fortunella* plants in tissue culture from offshore MPI-approved facilities**

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Fortunella*, the approved facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Fortunella*.

(i) Documentation

**Import permit is required**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Fortunella* tissue culture exported to New Zealand.

(ii) Pest proof container and growing media for tissue culture

Cultures imported in a growing media must have been grown in the vessel in which they are imported. The container must be rigid, and either clear plastic or clear glass. The tissue culture media must not contain charcoal.

(iii) Inspection, Testing and Treatments of the consignment

The inspection, treatment and testing requirements for specified pests must be undertaken at the approved facility as specified in the arrangement between MPI and the approved facility operator. Refer to *Fortunella* Inspection, Testing and Treatment Requirements following the *Fortunella* pest list.

(iv) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The *Fortunella* tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI (refer to the pest list).

AND

- held and tested for/classified free from specified regulated pests at an MPI-approved facility and,

AND

- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the approved facility.

(v) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Fortunella* tissue culture in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI, and to conform with New Zealand's current phytosanitary requirements.

AND

- held and tested for/classified free from specified regulated pests at the approved facility as specified in the agreement between MPI and the approved facility operator.

AND

- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the approved facility."

(vi) Post-entry quarantine

**PEQ:** Level 2

**Quarantine Period:** This is the time required to complete inspections and/or indexing to detect regulated pests. Six months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments are required.

### **3.4 *Fortunella* plants in tissue culture from non-approved facilities in any country**

(i) Documentation

**Import permit is required**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Fortunella* nursery stock exported to New Zealand.

(ii) 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-approved facility. Refer to *Fortunella* Inspection, Testing and Treatment Requirements following the *Fortunella* pest list.

(vi) Post-entry quarantine

**PEQ:** Level 3B

**Quarantine Period:** This is the time required to complete inspections and or indexing to detect regulated pests. 16 months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected or treatments required.

# Pest List for *Fortunella*

## REGULATED PESTS (actionable)

### Insect

### Insecta

#### Coleoptera

##### Bostrichidae

*Apate indistincta*

shot-hole borer

*Apate terebrans*

shot-hole borer

##### Buprestidae

*Agrilus alesi*

flatheaded citrus borer

*Agrilus auriventris*

citrus flatheaded borer

##### Cerambycidae

*Anoplophora malasiaca*

white-spotted longicorn beetle

*Chelidonium gibbicolle*

-

*Dihammus vastator*

fig longhorn

*Melanauster chinensis*

-

*Paradisterna plumifera*

speckled longicorn

*Promeces linearis*

-

*Skeletodes tetrops*

longhorn beetle

*Strongylurus thoracicus*

pittosporum longicorn

*Uracanthus cryptophagus*

citrus branch borer

##### Chrysomelidae

*Colasposoma fulgidum*

bluegreen citrus nibbler

*Colasposoma scutellare*

-

*Geloptera porosa*

pitted apple beetle

*Luperomorpha funesta*

mulberry flea beetle

*Monolepta australis*

red-shouldered leaf beetle

*Sebaethe fulvipennis*

flea beetle

##### Coccinellidae

*Cheilomenes lunata* [Animals Biosecurity]

-

*Chilocorus cacti* [Animals Biosecurity]

-

*Chilocorus distigma* [Animals Biosecurity]

-

*Chilocorus nigrita* [Animals Biosecurity]

-

*Exochomus flavipes* [Animals Biosecurity]

-

*Pentilia castanea* [Animals Biosecurity]

-

*Rhyzobius lophanthae* [Animals Biosecurity]

-

*Scymnus nanus* [Animals Biosecurity]

-

*Serangium parcesetosum* [Animals Biosecurity]

-

*Stethorus aethiops* [Animals Biosecurity]

-

*Stethorus histrio* [Animals Biosecurity]

-

*Stethorus punctata picipes* [Animals Biosecurity]

-

##### Curculionidae

*Amystax fasciatus* [Animals Biosecurity]

-

*Artipus* sp.

-

*Brachycerus citriperda*

-

*Callirhopalus bifasciatus*

two-banded Japanese weevil

*Dereodus recticollis*

-

*Diaprepes abbreviatus*

citrus weevil

*Diaprepes* spp.

-

*Eutinophaea bicristata*

citrus leaf-eating weevil

*Leptopius squalidus*

fruit tree root weevil

*Naupactus xanthographus*

fruit tree weevil

*Otiorhynchus cribricollis*

cribrate weevil

*Pachnaeus citri*

-

*Pachnaeus litus*

citrus root weevil

*Perperus lateralis*

white-striped weevil

*Prepodes* spp.

-

<i>Protoctrophus avidus</i>	weevil
<i>Sciobius marshalli</i>	citrus snout beetle
<i>Sympiezomias lewisi</i>	-
<b>Lucanidae</b>	
<i>Prosopocoilus spencei</i>	-
<b>Scarabaeidae</b>	
<i>Hypopholis indistincta</i>	scarab beetle
<i>Maladera matrida</i>	scarab beetle
<b>Scolytidae</b>	
<i>Salagena</i> sp.	-
<i>Xylosandrus germanus</i>	alnus ambrosia beetle
<b>Diptera</b>	
<b>Cecidomyiidae</b>	
<i>Contarinia citri</i>	leafcurling midge
<i>Contarinia okadae</i>	citrus flower gall midge
<i>Trisopsis</i> sp.	-
<b>Chamaemyiidae</b>	
<i>Leucopis alticeps</i> [Animals Biosecurity]	-
<b>Drosophilidae</b>	
<i>Drosophila paulistorum</i>	-
<i>Drosophila pseudoobscura</i>	-
<i>Drosophila simulans</i>	-
<i>Drosophila willistoni</i>	-
<b>Tephritidae</b>	
<i>Dirioxa pornia</i>	island fruit fly
<b>Hemiptera</b>	
<b>Anthocoridae</b>	
<i>Orius thripoborus</i> [Animals Biosecurity]	-
<i>Thripheps thripoborus</i> [Animals Biosecurity]	-
<b>Coreidae</b>	
<i>Acanthocoris striicornis</i>	larger squash bug
<i>Anoplocnemis curvipes</i>	coreid bug
<i>Leptoglossus membranaceus</i>	coreid bug
<i>Mictis profana</i>	crusader bug
<i>Paradasynus spinosus</i>	squash bug
<i>Veneza phyllopus</i>	leaf-footed bug
<b>Lygaeidae</b>	
<i>Nysius vinitor</i>	Rutherglen bug
<b>Miridae</b>	
<i>Austropeplus</i> sp.	citrus blossom bug
<b>Pentatomidae</b>	
<i>Antestia variegata</i>	antestia bug
<i>Antestiopsis orbitalis</i>	-
<i>Antestiopsis variegata</i>	antestia bug
<i>Biprorulus bibax</i>	spined citrus bug
<i>Glaucias subpunctatus</i>	polished green stink bug
<i>Halyomorpha mista</i>	brown-marmorated stink bug
<i>Musgraveia sulciventris</i>	bronze orange bug
<i>Plautia stali</i>	oriental stink bug
<i>Rhynchocoris humeralis</i>	pentatomid bug
<b>Unknown Hemiptera</b>	
<i>Holopterna vulga</i>	bug
<b>Homoptera</b>	
<b>Aleyrodidae</b>	
<i>Aleurocanthus citriperdus</i>	whitefly
<i>Aleurocanthus spiniferus</i>	orange spiny whitefly
<i>Aleurocanthus</i> spp.	whiteflies
<i>Aleurocanthus woglumi</i>	citrus blackfly
<i>Aleurodicus dispersus</i>	spiralling whitefly
<i>Aleurolobus marlatti</i>	Marlatt whitefly

<i>Aleuroplatus</i> sp.	whitefly
<i>Aleurothrixus floccosus</i>	woolly whitefly
<i>Aleurotuba jelinekii</i>	-
<i>Aleurotuberculatus aucubae</i>	aucuba whitefly
<i>Bemisia citricola</i>	-
<i>Dialeurodes citri</i>	citrus whitefly
<i>Dialeurodes citrifolii</i>	cloudywinged whitefly
<i>Dialeurolonga</i> sp.	-
<i>Parabemisia myricae</i>	Japanese bayberry whitefly
<i>Siphoninus phillyreae</i>	phillyrea whitefly
<b>Aphididae</b>	
<i>Aphis fabae</i>	bean aphid
<i>Aulacorthum magnoliae</i>	Japanese elder aphid
<b>Cicadellidae</b>	
<i>Asymmetrasca decedens</i>	leafhopper
<i>Circulifer opacipennis</i>	-
<i>Circulifer tenellus</i>	beet leafhopper
<i>Cuerna costalis</i>	leafhopper
<i>Edwardsiana flavescens</i>	leafhopper
<i>Empoasca bodenheimeri</i>	-
<i>Empoasca citrura</i>	green citrus leafhopper
<i>Empoasca decipiens</i>	green leafhopper
<i>Empoasca distinguenda</i>	-
<i>Empoasca fabae</i>	potato leafhopper
<i>Empoasca onukii</i>	tea green leafhopper
<i>Homalodisca coagulata</i>	glassy-winged sharpshooter
<i>Homalodisca lacerta</i>	-
<i>Jacobiasca lybica</i>	cotton jassid
<i>Neoliturus haematoceps</i>	leafhopper
<i>Penthimiola bella</i>	citrus leafhopper
<i>Scaphytopius nitridus</i>	leafhopper
<b>Cicadidae</b>	
<i>Cryptotympana facialis</i>	black cicada
<i>Meimuna opalifera</i>	elongate cicada
<b>Coccidae</b>	
<i>Ceroplastes floridensis</i>	Florida wax scale
<i>Ceroplastes japonicus</i>	pink wax scale
<i>Ceroplastes rubens</i>	red wax scale
<i>Ceroplastes rusci</i>	fig wax scale
<i>Coccus celatus</i>	-
<i>Coccus pseudomagnoliarum</i>	citricola scale
<i>Coccus viridis</i>	green scale
<i>Cribrolecanium andersoni</i>	white powdery scale
<i>Gascardia brevicauda</i>	white waxy scale
<i>Protopulvinaria pyriformis</i>	pyriform scale
<i>Pulvinaria aethiopica</i>	soft green scale
<i>Pulvinaria aurantii</i>	citrus cottony scale
<i>Pulvinaria cellulosa</i>	pulvinaria scale
<i>Saissetia citricola</i>	citrus string cottony scale
<i>Saissetia somereni</i>	-
<b>Dactylopiidae</b>	
<i>Dactylopius filamentosis</i>	-
<i>Dactylopius vastator</i>	-
<b>Diaspididae</b>	
<i>Aonidiella citrina</i>	yellow scale
<i>Chrysomphalus aonidum</i>	Florida red scale
<i>Chrysomphalus bifasciculatus</i>	brown scale
<i>Chrysomphalus dictyospermi</i>	dictyospermum scale
<i>Chrysomphalus pinnulifera</i>	false purple scale
<i>Ischnaspis longirostris</i>	black thread scale

<i>Lepidosaphes beckii</i>	purple scale
<i>Lepidosaphes gloverii</i>	Glover scale
<i>Parlatoria ziziphi</i>	black parlatoria scale
<i>Pseudaonidia duplex</i>	camphor scale
<i>Selenaspidus articulatus</i>	West Indian red scale
<i>Unaspis citri</i>	citrus snow scale
<i>Unaspis yanonensis</i>	Japanese citrus scale
<b>Flatidae</b>	
<i>Colgar peracuta</i>	-
<i>Geisha distinctissima</i>	green broad-winged planthopper
<i>Lawana conspersa</i>	green flatid planthopper
<i>Metcalfa pruinosa</i>	planthopper
<b>Fulgoridae</b>	
<i>Anzora unicolor</i>	-
<b>Margarodidae</b>	
<i>Drosicha howardi</i>	persimmon mealybug
<i>Icerya seychellarum</i>	Seychelles scale
<b>Ortheziidae</b>	
<i>Nipponorthezia ardisiae</i>	ensign scale
<b>Pseudococcidae</b>	
<i>Allococcus</i> spp.	-
<i>Ferrisia consobrina</i>	mealybug
<i>Ferrisia virgata</i>	striped mealybug
<i>Nipaecoccus vastator</i>	nipa mealybug
<i>Nipaecoccus viridis</i>	hibiscus mealybug
<i>Paracoccus burnerae</i>	spherical mealybug
<i>Planococcus kraunhiae</i>	Japanese wisteria mealybug
<i>Planococcus lilacinus</i>	citrus mealybug
<i>Planococcus minor</i>	passionvine mealybug
<i>Pseudococcus citriculus</i>	smaller citrus mealybug
<i>Pseudococcus commonus</i>	-
<i>Pseudococcus filamentosus</i>	mealybug
<i>Rastrococcus spinosus</i>	mealybug
<i>Rhizoecus kondonis</i>	Kondo mealybug
<b>Psyllidae</b>	
<i>Diaphorina citri</i>	citrus psyllid
<i>Trioza erytrae</i> [vector]	citrus psyllid
<b>Ricaniidae</b>	
<i>Scolypopa</i> sp.	-
<b>Tropiduchidae</b>	
<i>Tambinia</i> sp.	-
<b>Hymenoptera</b>	
<b>Aphelinidae</b>	
<i>Aphytis africanus</i> [Animals Biosecurity]	-
<i>Aphytis holoxanthus</i> [Animals Biosecurity]	-
<i>Aphytis lepidosaphes</i> [Animals Biosecurity]	-
<i>Aphytis lingnanensis</i> [Animals Biosecurity]	-
<i>Aphytis melinus</i> [Animals Biosecurity]	-
<i>Azotus platensis</i> [Animals Biosecurity]	-
<i>Cales noacki</i> [Animals Biosecurity]	-
<i>Cales orchamoplatti</i> [Animals Biosecurity]	-
<i>Centrodora penthimiae</i> [Animals Biosecurity]	-
<i>Coccophagus caridei</i> [Animals Biosecurity]	-
<i>Coccophagus pulvinariae</i> [Animals Biosecurity]	-
<i>Encarsia ectophaga</i> [Animals Biosecurity]	-
<i>Encarsia lahorensis</i> [Animals Biosecurity]	-
<i>Encarsia lounsburyi</i> [Animals Biosecurity]	-
<i>Encarsia opulenta</i> [Animals Biosecurity]	-
<i>Encarsia smithi</i> [Animals Biosecurity]	-
<i>Eretmocerus serius</i> [Animals Biosecurity]	-

<i>Marietta connecta</i> [Animals Biosecurity]	-
<i>Marietta leopardina</i> [Animals Biosecurity]	-
<b>Braconidae</b>	
<i>Apanteles aristotalilae</i> [Animals Biosecurity]	-
<i>Biosteres longicaudatus</i> [Animals Biosecurity]	-
<i>Pholetesor ornigis</i> [Animals Biosecurity]	-
<b>Encyrtidae</b>	
<i>Anicetus beneficus</i> [Animals Biosecurity]	-
<i>Comperiella bifasciata</i> [Animals Biosecurity]	-
<i>Habrolepis rouxi</i> [Animals Biosecurity]	-
<i>Leptomastix dactylopii</i> [Animals Biosecurity]	parasitic wasp
<i>Metaphycus helvolus</i> [Animals Biosecurity]	-
<i>Metaphycus luteolus</i> [Animals Biosecurity]	-
<i>Metaphycus stanleyi</i> [Animals Biosecurity]	-
<i>Metaphycus varius</i> [Animals Biosecurity]	-
<i>Psyllaephagus pulvinatus</i> [Animals Biosecurity]	-
<b>Eulophidae</b>	
<i>Aprostocetus ceroplastae</i> [Animals Biosecurity]	-
<i>Elachertus fenestratus</i> [Animals Biosecurity]	-
<i>Tamarixia radiatus</i> [Animals Biosecurity]	-
<b>Eupelmidae</b>	
<i>Anastatus biproruli</i> [Animals Biosecurity]	-
<b>Eurytomidae</b>	
<i>Bruchophagus fellis</i>	citrus gall midge
<b>Formicidae</b>	
<i>Acromyrmex octospinosus</i>	leaf-cutting ant
<i>Anoplolepis braunsi</i> [Animals Biosecurity]	-
<i>Anoplolepis custodiens</i>	ant
<i>Anoplolepis steingroeveri</i> [Animals Biosecurity]	black ant
<i>Atta cephalotes</i>	leaf-cutting ant
<i>Atta sexdens</i>	-
<i>Atta texana</i>	Texas leaf-cutting ant
<i>Camponotus rufoglaucus</i>	-
<i>Crematogaster castanea</i>	-
<i>Crematogaster liengmei</i>	-
<i>Crematogaster peringueyi</i> [Animals Biosecurity]	cocktail ant
<i>Lepisiota capensis</i> [Animals Biosecurity]	-
<i>Myrmecaria natalensis</i>	-
<i>Pheidole tenuinodis</i>	ant
<i>Polyrhachis schistaceus</i>	ant
<i>Solenopsis invicta</i> [Animals Biosecurity]	red imported fire ant
<i>Tapinoma arnoldi</i>	-
<i>Technomyrmex albipes foreli</i> [Animals Biosecurity]	-
<b>Mymaridae</b>	
<i>Chaetomyrmex gracile</i> [Animals Biosecurity]	-
<i>Chaetomyrmex lepidum</i> [Animals Biosecurity]	-
<i>Gonatocerus incomptus</i> [Animals Biosecurity]	-
<b>Platygasteridae</b>	
<i>Amitus hesperidum</i> [Animals Biosecurity]	-
<i>Amitus spiniferus</i> [Animals Biosecurity]	-
<i>Fidiobia citri</i> [Animals Biosecurity]	-
<b>Scelionidae</b>	
<i>Trissolcus oeneus</i> [Animals Biosecurity]	-
<i>Trissolcus oenone</i> [Animals Biosecurity]	-
<i>Trissolcus ogyges</i> [Animals Biosecurity]	-
<b>Signiphoridae</b>	
<i>Signiphora fax</i> [Animals Biosecurity]	-
<i>Signiphora flavella</i> [Animals Biosecurity]	-
<i>Signiphora perpauca</i> [Animals Biosecurity]	-
<b>Trichogrammatidae</b>	

<i>Trichogramma platneri</i> [Animals Biosecurity]	-
<b>Vespidae</b>	
<i>Polistes</i> spp. [Animals Biosecurity]	paper wasps
<b>Isoptera</b>	
<b>Termitidae</b>	
<i>Odontotermes lokanandi</i>	termite
<b>Lepidoptera</b>	
<b>Arctiidae</b>	
<i>Lemyra imparilis</i>	mulberry tiger moth
<b>Blastobasidae</b>	
<i>Holcocera iceryaeella</i>	-
<b>Cosmopterigidae</b>	
<i>Pyroderces rileyi</i>	pink scavenger caterpillar
<b>Geometridae</b>	
<i>Anacamptodes fragilaria</i>	koa haole looper
<i>Ascotis selenaria reciprocaria</i>	citrus looper
<i>Gymnoscelis rufifasciata</i>	geometrid moth
<i>Hyposidra talaca</i>	-
<b>Gracillariidae</b>	
<i>Phyllocnistis citrella</i>	citrus leafminer
<b>Hepialidae</b>	
<i>Endoclita excrescens</i>	Japanese swift moth
<i>Endoclita sinensis</i>	-
<b>Lycaenidae</b>	
<i>Virachola isocrates</i>	pomegranate butterfly
<b>Lymantriidae</b>	
<i>Orgyia vetusta</i>	western tussock moth
<b>Metarbelidae</b>	
<i>Indarbela tetraonis</i>	stem borer
<b>Noctuidae</b>	
<i>Arcte coerula</i>	fruit-piercing moth
<i>Eudocima fullonia</i>	fruit-piercing moth
<i>Helicoverpa assulta</i>	cape gooseberry budworm
<i>Helicoverpa punctigera</i>	oriental tobacco budworm
<i>Tiracola plagiata</i>	banana fruit caterpillar
<i>Xylomyges curialis</i>	noctuid moth
<b>Nymphalidae</b>	
<i>Charaxes jasius</i>	nymphalid butterfly
<b>Oecophoridae</b>	
<i>Psorosticha melanocrepida</i>	citrus leafroller
<i>Psorosticha zizyphi</i>	citrus leafroller
<i>Stathmopoda auriferella</i>	apple heliodinid
<b>Papilionidae</b>	
<i>Papilio aegaeus aegaeus</i>	-
<i>Papilio anactus</i>	small citrus butterfly
<i>Papilio cresphontes</i>	orange dog
<i>Papilio dardanus cenea</i>	-
<i>Papilio demodocus</i>	orange dog
<i>Papilio demoleus demoleus</i>	-
<i>Papilio helenus nicconicolens</i>	-
<i>Papilio machaon asiatica</i>	-
<i>Papilio memnon</i>	citrus swallowtail
<i>Papilio memnon thunbergii</i>	-
<i>Papilio nireus lyaeus</i>	-
<i>Papilio polytes polytes</i>	-
<i>Papilio protenor demetrius</i>	-
<i>Papilio xuthus</i>	citrus swallowtail
<i>Papilio zelicaon</i>	anise swallowtail
<b>Psychidae</b>	
<i>Eumeta hardenbergi</i>	-

<i>Eumeta japonica</i>	-
<i>Eumeta minuscula</i>	tea bagworm
<i>Eumeta moddermanni</i>	-
<i>Hyalarcta huebneri</i>	leaf case moth
<b>Pyralidae</b>	
<i>Apomyelois ceratoniae</i>	date pyralid
<b>Tortricidae</b>	
<i>Adoxophyes</i> sp.	-
<i>Amorbia cuneana</i>	leafroller
<i>Archips argyrospilus</i>	fruit tree leafroller
<i>Archips machlopi</i>	leafroller
<i>Archips occidentalis</i>	leafroller
<i>Archips rosanus</i>	rose leafroller
<i>Argyrotaenia citrana</i>	orange tortrix
<i>Cacoecimorpha pronubana</i>	carnation leafroller
<i>Cryptophlebia batrachopa</i>	-
<i>Cryptophlebia leucotreta</i>	false codling moth
<i>Homona magnanima</i>	oriental tea tortrix
<i>Isotenes miserana</i>	orange fruitborer
<i>Platynota stultana</i>	omnivorous leafroller
<i>Tortrix capensana</i>	tortricid moth
<b>Yponomeutidae</b>	
<i>Prays citri</i>	citrus flower moth
<i>Prays parilis</i>	citrus flower moth
<b>Neuroptera</b>	
<b>Chrysopidae</b>	
<i>Chrysopa oculata</i> [Animals Biosecurity]	-
<b>Coniopterygidae</b>	
<i>Coniopteryx vicina</i> [Animals Biosecurity]	-
<i>Conwentzia barretti</i> [Animals Biosecurity]	-
<b>Orthoptera</b>	
<b>Acrididae</b>	
<i>Zonocerus elegans</i>	elegant grasshopper
<b>Gryllidae</b>	
<i>Ornebius kanetataki</i>	cricket
<b>Tettigoniidae</b>	
<i>Caedicia</i> sp.	-
<i>Holochlora japonica</i>	Japanese broadwinged katydid
<i>Microcentrum retinerve</i>	smaller angular-winged katydid
<i>Scudderia furcata</i>	fork-tailed bush katydid
<b>Psocoptera</b>	
<b>Archipsocidae</b>	
<i>Archipsocus</i> sp.	bark louse
<b>Thysanoptera</b>	
<b>Aeolothripidae</b>	
<i>Frankliniopsis vespiformis</i> [Animals Biosecurity]	-
<b>Thripidae</b>	
<i>Chaetanaphothrips orchidii</i>	banana rust thrips
<i>Leptothrips mali</i>	black hunter thrips
<i>Scirtothrips aurantii</i>	citrus thrips
<i>Scirtothrips citri</i>	citrus thrips
<i>Scirtothrips dorsalis</i>	chilli thrips
<i>Scirtothrips mangiferae</i>	mango thrips
<i>Scolothrips sexmaculatus</i> [Animals Biosecurity]	-
<i>Taeniothrips kellyanus</i>	-
<i>Taeniothrips</i> sp.	-
<i>Thrips coloratus</i>	thrips
<i>Thrips flavus</i>	flower thrips
<i>Thrips palmi</i>	palm thrips
<b>Unknown Insecta</b>	



<b>Unknown Insecta</b>	
<i>Cosmophyllum pallidulum</i>	-
<b>Mite</b>	
<b>Arachnida</b>	
<b>Acarina</b>	
<b>Acaridae</b>	
<i>Thyreophagus entomophagus italicus</i> [Animals Biosecurity]	-
<b>Anystidae</b>	
<i>Anystis agilis</i> [Animals Biosecurity]	-
<b>Eriophyidae</b>	
<i>Aculops pelekassi</i>	erriophyid mite
<i>Tegolophus australis</i>	brown citrus mite
<b>Phytoseiidae</b>	
<i>Amblyseius addoensis</i> [Animals Biosecurity]	-
<i>Amblyseius citri</i> [Animals Biosecurity]	-
<i>Amblyseius swirskii</i> [Animals Biosecurity]	-
<i>Euseius hibisci</i> [Animals Biosecurity]	-
<i>Euseius scutalis</i> [Animals Biosecurity]	-
<i>Euseius stipulatus</i> [Animals Biosecurity]	-
<i>Euseius tularensis</i> [Animals Biosecurity]	-
<i>Iphiseius degenerans</i> [Animals Biosecurity]	predatory mite
<i>Typhlodromus athiasae</i> [Animals Biosecurity]	-
<b>Stigmaeidae</b>	
<i>Agistemus africanus</i> [Animals Biosecurity]	-
<i>Agistemus tranatalensis</i> [Animals Biosecurity]	-
<i>Eryngiopus siculus</i> [Animals Biosecurity]	-
<b>Tarsonemidae</b>	
<i>Tarsonemus cryptocephalus</i> [Animals Biosecurity]	-
<b>Tenuipalpidae</b>	
<i>Brevipalpus chilensis</i>	false spider mite
<i>Brevipalpus lewisi</i>	bunch mite
<i>Brevipalpus obovatus</i>	privet mite
<i>Tenuipalpus emeticae</i> [Animals Biosecurity]	-
<i>Tuckerella ornata</i>	-
<i>Ultratenuipalpus gonianaensis</i>	tenuipalpid mite
<b>Tetranychidae</b>	
<i>Calacarus citrifolii</i>	clover mite
<i>Eotetranychus kankitus</i>	tetranychid mite
<i>Eotetranychus lewisi</i>	big beaked plum mite
<i>Eotetranychus yumensis</i>	Yumi spider mite
<i>Eutetranychus africanus</i>	tetranychid mite
<i>Eutetranychus banksi</i>	Texas citrus mite
<i>Eutetranychus orientalis</i>	pear leaf blister mite
<i>Oligonychus mangiferus</i>	mango spider mite
<i>Tetranychus kanzawai</i>	kanzawa mite
<b>Tuckerellidae</b>	
<i>Tuckerella knorri</i>	hawthorn spider mite
<b>Spider</b>	
<b>Arachnida</b>	
<b>Araneae</b>	
<b>Clubionidae</b>	
<i>Cheiracanthium mildei</i> [Animals Biosecurity]	-
<b>Theridiidae</b>	
<i>Theridion</i> sp. [Animals Biosecurity]	-
<b>Mollusc</b>	
<b>Gastropoda</b>	

<b>Stylommatophora</b>	
<b>Achatinidae</b>	
<i>Achatina immaculata</i>	-
<i>Lissachatina immaculata</i>	snail
<b>Bradybaenidae</b>	
<i>Acusta despecta sieboldiana</i>	snail
<b>Subulinidae</b>	
<i>Rumina decollata</i>	snail
<b>Urocyclidae</b>	
<i>Urocyclus flavescens</i>	-
<i>Urocyclus kirkii</i>	-
<b>Fungus</b>	
<b>Ascomycota</b>	
<b>Diaporthales</b>	
<b>Valsaceae</b>	
<i>Diaporthe rudis</i> (anamorph <i>Phomopsis rudis</i> )	phomopsis canker
<b>Dothideales</b>	
<b>Elsinoaceae</b>	
<i>Elsinoe australis</i>	sweet orange scab
<b>Capnodiaceae</b>	
<i>Capnodium citri</i>	sooty mould
<b>Didymosphaeriaceae</b>	
<i>Didymosphaeria</i> sp.	--
<b>Mycosphaerellaceae</b>	
<i>Guignardia citricarpa</i> (anamorph <i>Phyllosticta citricarpa</i> ) [black spot strain]	citrus black spot
<i>Mycosphaerella citri</i> (anamorph <i>Stenella citri-grisea</i> )	rind blotch
<i>Mycosphaerella horii</i>	greasy spot
<b>Patellariales</b>	
<b>Patellariaceae</b>	
<i>Rhytidhysterium rufulum</i>	--
<b>Saccharomycetales</b>	
<b>Saccharomycetaceae</b>	
<i>Debaryomyces hansenii</i>	-
<i>Galactomyces citri-aurantii</i> (anamorph <i>Geotrichum citri-aurantii</i> )	sour rot
<b>Basidiomycota: Agaricomycetes</b>	
<b>Hymenochaetales</b>	
<b>Hymenochaetaceae</b>	
<i>Phellinus noxius</i>	brown root rot
<b>Basidiomycota: Basidiomycetes</b>	
<b>Boletales</b>	
<b>Coniophoraceae</b>	
<i>Coniophora eremophila</i>	brown wood rot
<b>Basidiomycota: Teliomycetes</b>	
<b>Septobasidiales</b>	
<b>Septobasidiaceae</b>	
<i>Septobasidium pseudopedicellatum</i>	felt fungus
<b>Mitosporic Fungi</b>	
<b>Unknown Mitosporic Fungi</b>	
<b>Unknown Mitosporic Fungi</b>	
<i>Sphaceloma fawcettii</i> var. <i>scabiosa</i>	-
<b>Mitosporic Fungi (Coelomycetes)</b>	
<b>Sphaeropsidales</b>	
<b>Sphaerioidaceae</b>	
<i>Macrophoma mantegazziana</i>	-
<i>Phoma erratica</i> var. <i>mikan</i>	--
<i>Phoma tracheiphila</i>	mal secco
<i>Phomopsis</i> sp.	rot

<i>Septoria</i> spp.	-
<i>Sphaeropsis tumefaciens</i>	stem gall
<b>Unknown Coelomycetes</b>	
<b>Unknown Coelomycetes</b>	
<i>Aschersonia placenta</i> [Animals Biosecurity]	--
<i>Gloeosporium foliicolum</i>	fruit rot
<b>Mitosporic Fungi (Hyphomycetes)</b>	
<b>Hyphomycetales</b>	
<b>Dematiaceae</b>	
<i>Alternaria limicola</i>	-
<i>Alternaria pellucida</i>	--
<i>Cercospora microsora</i>	-
<i>Phaeoramularia angolensis</i>	cercospora spot
<i>Stemphylium rosarium</i>	--
<i>Ulocladium obovoideum</i>	ulocladium rot
<b>Unknown Hyphomycetes</b>	
<b>Unknown Hyphomycetes</b>	
<i>Aureobasidium</i> sp.	-
<i>Hirsutella thompsonii</i> [Animals Biosecurity]	--
<i>Isaria</i> sp. [Animals Biosecurity]	-
<i>Oidium tingitaninum</i>	powdery mildew
<i>Sporobolomyces roseus</i>	--
<i>Stenella</i> sp.	--
<b>Zygomycota: Zygomycetes</b>	
<b>Glomales</b>	
<b>Glomaceae</b>	
<i>Glomus etunicatum</i> [Animals Biosecurity]	--
<b>Mucorales</b>	
<b>Syncephalastraceae</b>	
<i>Syncephalastrum racemosum</i>	--
<b>Bacterium</b>	
<b>Bacterium family unknown</b>	
<i>Liberobacter africanum</i>	citrus greening bacterium
<i>Liberobacter asiaticum</i>	citrus greening bacterium
<i>Liberobacter</i> sp.	citrus greening bacterium
<i>Spiroplasma citri</i>	citrus stubborn
<b>Pseudomonadaceae</b>	
<i>Burkholderia cepacia</i>	sour skin
<i>Xanthomonas axonopodis</i> pv. <i>citri</i>	citrus canker
<i>Xanthomonas campestris</i> pv. <i>aurantifolii</i>	-
<i>Xanthomonas campestris</i> pv. <i>citrumelo</i>	citrus bacterial spot
<i>Xylella fastidiosa</i>	Pierce's disease
<i>Xylella fastidiosa</i> pv. <i>citri</i>	variegated chlorosis of citrus
<b>Virus</b>	
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**

<i>Candidatus</i> Phytoplasma aurantifolia	witches' broom phytoplasma
rubbery wood	-

### **Disease of unknown aetiology**

Australian citrus dieback	-
blind pocket	-
bud union disease	-
citrus blight disease	-
citrus fatal yellows	-
citrus impietratura disease	-
citrus sunken vein disease	-
concave gum	-
cristacortis	-
gum pocket	-
gummy bark	-
kassala disease	-
lemon sieve tube necrosis	-
shell bark of lemons	-
zonate chlorosis	-

## Inspection, Testing and Treatment Requirements for *Fortunella*\*

ORGANISM TYPES	MPI-ACCEPTED METHODS
<b>Fungi</b>	Country freedom OR growing season inspection for symptom expression.
<b>Bacteria</b>	
<i>Burkholderia cepacia</i>	Growing season inspection for symptom expression.
<i>Liberobacter africanum</i>	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
<i>Liberobacter asiaticum</i>	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
<i>Spiroplasma citri</i>	Country freedom/shoot tip grafting. Graft inoculated sweet orange, 27 to 32°C. Bioassay = culture petiole new flush tissue. Collect tissue after several days at hot temperature (> 30°C) and incubate cultures at 32°C.
<i>Xanthomonas axonopodis</i> pv. <i>citri</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xanthomonas campestris</i> pv. <i>aurantifolii</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xanthomonas campestris</i> pv. <i>citrumelo</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xylella fastidiosa</i>	Country freedom/shoot tip grafting bioassay/ PCR/ELISA OR suitable citrus indicator.
<i>Xylella fastidiosa</i> pv. <i>citri</i>	Country freedom/shoot tip grafting bioassay PCR/ELISA OR suitable citrus indicator.
<b>Viruses</b>	
citrus chlorotic dwarf	Country freedom OR graft inoculated rough lemon at cool temperatures 18 to 25°C.
citrus infectious variegation ilarvirus	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow indicators at cool temperatures 18 to 25°C.
citrus infectious variegation ilarvirus [crinkly leaf strain]	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow indicators at cool temperatures 18 to 25°C.
citrus leaf rugose ilarvirus	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators at cool temperatures 18 to 25°C.
citrus leathery leaf virus	Country freedom OR Rangpur lime. Grow indicators at cool temperatures 18 to 25°C.
citrus leprosis rhabdovirus	Country freedom OR graft inoculated sweet orange. Grow indicators at cool temperatures 18 to 25°C.
citrus mosaic virus	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.
citrus ringspot virus	Country freedom OR graft inoculated dweet tangor, sweet orange, mandarin (Parson's Special). Grow indicators at cool temperatures 18 to 25°C.
citrus tatter leaf capillovirus	Country freedom OR graft inoculated Rusk citrange, rough lemon, <i>Citrus excelsa</i> , citrange (Troyer). Grow indicators at cool temperatures 18 to 25°C.
citrus tristeza closterovirus [strains not in New Zealand]	Country freedom OR ELISA, graft inoculated Mexican lime, sour orange and <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
citrus yellow mosaic badnavirus	Country freedom OR graft inoculated sweet orange, sour orange and citron.
citrus yellow mottle virus	Country freedom OR other suitable test.
Indian citrus mosaic badnavirus	Country freedom OR graft inoculated sweet orange at hot temperature 27 to 32°C.
navel orange infectious mottling virus	Country freedom OR graft inoculated Satsums. Grow indicators at cool temperatures 18 to 25°C.
satsuma dwarf nepovirus	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.
satsuma dwarf nepovirus [Natsudaikai dwarf strain]	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.

<b>ORGANISM TYPES</b>	<b>MPI-ACCEPTED METHODS</b>
yellow vein clearing of lemon	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators at cool temperatures 18 to 25°C.
<b>Viroids</b>	
citrus cachexia viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
citrus variable viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
citrus viroids (groups I-IV)	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
dwarfing factor viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
xyloporosis viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract or mandarin (Parson's Special). Grow Citron at hot temperature 27 to 32°C.
<b>Diseases of unknown aetiology</b>	
Australian citrus dieback	Country freedom OR other suitable test
blind pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa. Grow indicators at cool temperatures 18 to 25°C.
bud union disease	Country freedom OR other suitable test
citrus blight disease	None (cuttings collected from blight free area). Inspect source tree after 2 years before releasing from quarantine.
citrus fatal yellows	Country freedom OR graft inoculated Citrus macrophylla.
citrus impietratura disease	Country freedom OR graft inoculated dweet tangor or sweet orange. Growth indicators at cool temperatures 18 to 25°C.
citrus sunken vein disease	Country freedom OR other suitable test.
concave gum	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa. Grow indicators at cool temperatures 18 to 25°C.
cristacortis	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa. Grow indicators at cool temperatures 18 to 25°C.
gum pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or Citrus excelsa. Grow indicators at cool temperatures 18 to 25°C.
Gummy bark	Country freedom OR SPAGE of graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
Kassala disease	Country freedom, cuttings collected from kassala free area.
lemon sieve tube necrosis	Country freedom OR other suitable test.
shell bark of lemons	Country freedom OR other suitable test.
zonate chlorosis	Country freedom, cuttings collected from kassala free area.
<b>Phytoplasmas</b>	
<i>Candidatus</i> phytoplasma aurantifolia	Country freedom OR graft inoculated lime. Grow indicators at cool temperatures 18 to 25°C.
rubbery wood	Country freedom OR graft inoculated sweet orange or lemon. Grow citron at hot temperature 27 to 32°C.

\* Country freedom is accepted as equivalence to a treatment.

### Notes:

1. The unit for testing is defined in section 2.3.2.1.
2. With prior notification, MPI will accept other internationally recognised testing methods.

## *Fragaria*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Fragaria*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **1. Type of *Fragaria* nursery stock approved for entry into New Zealand**

Cuttings (runner tips and stem cuttings only); Plants in tissue culture

*Fragaria* can be imported into Level 2 post entry quarantine from MPI-approved facilities, or into Level 3B post entry quarantine from non-approved facilities.

### **2. Pests of *Fragaria***

Refer to the pest list.

### **3. Entry conditions for:**

#### **3.1 *Fragaria* cuttings and tissue culture from offshore MPI-approved facilities in any country**

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Fragaria*, the approved facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Fragaria*.

#### **(i) Documentation**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Fragaria* nursery stock exported to New Zealand.

**Import permit:** an import permit is required.

#### **(ii) Phytosanitary requirements**

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The *Fragaria* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

**AND**

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-approved facility].

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the approved facility, and certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section and by providing the following additional declarations to the phytosanitary certificate:

“The *Fragaria* cuttings / plants in tissue culture [choose ONE option] have been:

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-approved facility].

**AND**

- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the approved facility, and certification.”

(iv) Post-entry quarantine

**PEQ:** All *Fragaria* nursery stock must be imported under permit into post-entry quarantine in a Level 2 greenhouse facility approved to the Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**Quarantine Period and Inspection, Testing and Treatment Requirements:** The nursery stock will be grown for a minimum period of 6 months in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. These periods are indicative minimum quarantine periods and may be extended if material is slow growing, pests are detected, or treatments/tests are required.

### **3.2 *Fragaria* cuttings and tissue culture from non-approved facilities in any country**

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Fragaria* nursery stock exported to New Zealand.

**Import permit:** an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The *Fragaria* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section. No additional declarations are required.



(iv) *Post-entry quarantine*

**PEQ:** All *Fragaria* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility approved to the Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**Quarantine Period and Inspection, Testing and Treatment Requirements:** The nursery stock will be grown for a minimum period of 16 months in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. Sixteen months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/tests are required.

# Pest List for *Fragaria*

## REGULATED PESTS (actionable)

### Insect

### Insecta

#### Coleoptera

##### Attelabidae

*Rhynchites germanicus*

strawberry rhynchites

##### Bruchidae

*Zabrotes arenarius*

strawberry weevil

##### Cantharidae

*Chauliognathus lugubris*

soldier beetle

##### Carabidae

*Calathus fuscipes*

ground beetle

*Harpalus affinis*

strawberry seed beetle

*Harpalus rufipes*

strawberry seed beetle

*Nebria brevicollis*

common black ground beetle

*Pterostichus cupreus*

strawberry ground beetle

*Pterostichus madidus*

strawberry ground beetle

*Pterostichus melanarius*

strawberry ground beetle

##### Chrysomelidae

*Altica caerulea*

leaf beetle

*Chaetocnema concinna*

leaf feeding beetle

*Colaspis flavida*

grape colaspis

*Galeruca tanacetii*

strawberry leaf beetle

*Galerucella grisea*

strawberry leaf beetle

*Galerucella tenella*

strawberry leaf beetle

*Haltica corrugata*

flea beetle

*Haltica pagana*

flea beetle

*Paria fragariae*

strawberry rootworm

*Systema frontalis*

flea beetle

##### Curculionidae

*Anthonomus rubi*

strawberry blossom weevil

*Anthonomus signatus*

strawberry bud weevil

*Apiocalus spp.*

weevils

*Barypeithes pellucidus*

strawberry weevil

*Cleonus kirbyi*

radish weevil

*Conotrachelus nenuphar*

plum weevil

*Donus salviae*

strawberry weevil

*Dyslobus decoratus*

decorated strawberry root weevil

*Dyslobus ursinus*

western strawberry root weevil

*Dyslobus wilcoxi*

Lacomb strawberry root weevil

*Geoderces spp.*

root weevil

*Haplidia etrusca*

root weevil

*Hypera brunneipennis*

Egyptian alfalfa weevil

*Myllocerus undecimpustulatus*

grey weevil

*Nemocestes fragariae*

strawberry root weevil

*Nemocestes incomptus*

woods weevil

*Nemocestes longulus*

strawberry root weevil

*Nemocestes sordidus*

strawberry root weevil

*Orthorhinus aethops*

weevil

*Otiorhynchus armatus*

strawberry root weevil

*Otiorhynchus clavipes*

red-legged weevil

*Otiorhynchus cribricollis*

cribrate weevil

*Otiorhynchus meridionalis*

strawberry root weevil

*Otiorhynchus rotundatus*

strawberry root weevil

*Otiorhynchus rugifrons*

strawberry root weevil

*Otiorhynchus singularis*

strawberry root weevil

<i>Panscopus torpidus</i>	root weevil
<i>Peritelopsis globiventris</i>	grey weevil
<i>Plinthodes taeniatus</i>	root weevil
<i>Polydrusus cervinus</i>	weevil
<i>Polydrusus sericeus</i>	green leaf weevil
<i>Rhadinomus lacordairei</i>	thin strawberry weevil
<i>Rhinaria perdix</i>	strawberry weevil
<i>Rhynchites germanicus</i>	strawberry rhynchites
<i>Sciaphilus asperatus</i>	strawberry root weevil
<i>Sciopithes obscurus</i>	obscure root weevil
<i>Sitona hispidulus</i>	root weevil
<i>Strophomorphus porcellus</i>	weevil
<i>Thricolepis inornata</i>	root weevil
<i>Trigonoscuta pilosa</i>	root weevil
<i>Tyloclerma fragariae</i>	strawberry crown borer
<b>Elateridae</b>	
Agriotes spp. (species not in New Zealand)	click beetles
<b>Nitidulidae</b>	
<i>Carpophilus fumatus</i>	sap beetle
<i>Glischrochilus hortensis</i>	sap beetle
<i>Lobiopa insularis</i>	strawberry borer
<i>Stelidota</i> spp.	sap beetles
<i>Stelidota geminata</i>	strawberry sap beetle
<b>Scarabaeidae</b>	
<i>Anoplognathus porosus</i>	Christmas beetle
<i>Cetonia</i> spp.	chafers
<i>Cyclocephala borealis</i>	northern masked chafer
<i>Hoplia</i> spp.	white grubs
<i>Lepidiota frenchi</i>	French's cane grub
<i>Melolontha melolontha</i>	cockchafer
<i>Metanastes vulgivagus</i>	black beetle
<i>Phyllopertha horticola</i>	garden chafer
<i>Phyllophaga decimlineata</i>	ten-lined June beetle
<i>Phyllophaga perversa</i>	western ten-lined June beetle
<i>Popillia japonica</i>	Japanese beetle
<i>Repsimus aeneus</i>	white grub
<i>Rhopaea magnicornis</i>	large pasture scarab
<i>Serica</i> spp.	white grubs
<i>Sericesthis geminata</i>	priunose scarab
<i>Sericesthis nigrolineata</i>	dusky pasture scarab
<b>Scolytidae</b>	
<i>Poecilips cardamomi</i>	bark beetle
<b>Silphidae</b>	
<i>Heterosilpha aenescens</i>	carrion beetle
<b>Collembola</b>	
<b>Sminthuridae</b>	
<i>Bourletiella arvalis dorsobscura</i>	garden springtail
<i>Sminthurus multidentatus</i>	garden springtail
<b>Diptera</b>	
<b>Agromyzidae</b>	
<i>Agromyza fragariae</i>	strawberry leafminer
<i>Agromyza spiraeae</i>	rose leafminer
<b>Tipulidae</b>	
<i>Tipula</i> spp	leatherjackets
<b>Hemiptera</b>	
<b>Anthocoridae</b>	
<i>Orius laevigatus</i>	plant bug
<b>Lygaeidae</b>	
<i>Euander lacertus</i>	lygaeid bug
<i>Nysius clevelandensis</i>	grey cluster bug

<i>Nysius spp.</i>	bugs
<i>Nysius vinitor</i>	Rutherglen bug
<b>Miridae</b>	
<i>Calocoris hobartensis</i>	capsid
<i>Lygocoris pabulinus</i>	common green capsid
<i>Lygus elisus</i>	pale legume bug
<i>Lygus hesperus</i>	tarnished plant bug
<i>Lygus lineolaris</i>	tarnished plant bug
<i>Lygus rugulipennis</i>	tarnished plant bug
<i>Plagiognathus arbustorum</i>	stink bug
<i>Plagiognathus chrysanthemi</i>	stink bug
<i>Scolopostethus spp.</i>	plant bugs
<b>Pentatomidae</b>	
<i>Acrosternum hilare</i>	green stink bug
<i>Dolycoris baccarum</i>	stink bug
<b>Pyrrhocoridae</b>	
<i>Dindymus versicolor</i>	harlequin bug
<b>Homoptera</b>	
<b>Aleyrodidae</b>	
<i>Aleyrodes lonicerae</i>	strawberry whitefly
<i>Trialeurodes fernaldi</i>	whitefly
<i>Trialeurodes packardii</i>	strawberry whitefly
<i>Trialeurodes ruborum</i>	whitefly
<b>Aphididae</b>	
<i>Acyrtosiphon malvae rogersii</i>	strawberry aphid
<i>Amphorophora agathonica</i>	strawberry aphid
<i>Aphis fabae</i>	bean aphid
<i>Aphis forbesi</i>	strawberry root aphid
<i>Aphis gossypii</i> [vector]	cotton aphid
<i>Aphis rubifolii</i>	raspberry aphid
<i>Aulacorthum solani</i> [vector]	foxglove aphid
<i>Chaetosiphon jacobi</i>	strawberry aphid
<i>Chaetosiphon minus</i>	lesser strawberry aphid
<i>Chaetosiphon tetrarhodum</i> [vector]	strawberry aphid
<i>Chaetosiphon thomasi</i>	strawberry aphid
<i>Fimbriaphis fimbriata</i>	rose aphid
<i>Fimbriaphis wakibae</i>	rose aphid
<i>Macrosiphum pelargonii</i>	rose aphid
<i>Macrosiphum rosae</i> [vector]	rose aphid
<i>Myzaphis rosarum</i> [vector]	lesser rose aphid
<i>Myzus ascalonicus</i> [vector]	shallot aphid
<i>Myzus ornatus</i> [vector]	ornate aphid
<i>Myzus persicae</i> [vector]	green peach aphid
<i>Rhodobium porosum</i>	aphid
<b>Aphrophoridae</b>	
<i>Aphrophora alni</i>	spittlebug
<i>Aphrophora permutata</i>	rhubarb spittlebug
<b>Cercopidae</b>	
<i>Cercopis vulnerata</i>	red and black froghopper
<i>Emelyanoviana mollicula</i>	spittlebug
<i>Evacanthus interruptus</i>	spittlebug
<i>Philaenus leucophthalmus</i>	spittlebug
<b>Cicadellidae</b>	
<i>Aphrodes bicinctus</i>	strawberry leafhopper
<i>Apogonalia grossa</i>	leafhopper
<i>Coelidia olitoria</i>	leafhopper
<i>Edwardsiana spp.</i>	leafhoppers
<i>Empoasca fabae</i>	potato leafhopper
<i>Erythroneura elegantula</i>	western grape leafhopper
<i>Euscelis spp.</i>	leafhoppers

<i>Macrosteles</i> spp.	leafhoppers
<i>Scaphytopius acutus</i>	leafhopper
<i>Zygina schneideri</i>	leafhopper
<b>Pseudococcidae</b>	
<i>Chorizococcus arecae</i>	mealybug
<i>Dysmicoccus brevipes</i>	pineapple mealybug
<i>Planococcus citri</i>	citrus mealybug
<i>Rhizoecus kondonis</i>	Kondo mealybug
<b>Hymenoptera</b>	
<b>Tenthredinidae</b>	
<i>Allantus calceatus</i>	sawfly
<i>Allantus cinctus</i>	curled rose sawfly
<i>Cladius pectinicornis</i>	antler sawfly
<b>Lepidoptera</b>	
<b>Gelechiidae</b>	
<i>Aristotelia fragariae</i>	strawberry crown miner
<i>Compsolechia fragariella</i>	western strawberry leafroller
<b>Geometridae</b>	
<i>Ascotis selenaria</i>	mugwort looper
<b>Hepialidae</b>	
<i>Hepialus lupulinus</i>	swift moth
<b>Noctuidae</b>	
<i>Agrotis</i> spp. (species not in New Zealand)	cutworms
<i>Agrotis munda</i>	brown cutworm
<i>Agrotis segetum</i>	turnip moth
<i>Amphipoea interoceanica</i>	strawberry cutworm
<i>Helicoverpa punctigera</i>	oriental tobacco budworm
<i>Helicoverpa zea</i>	bollworm
<i>Hydraecia interoceanica</i>	noctuid moth
<i>Noctua pronuba</i>	large yellow underwing
<i>Orthosia hibisci</i>	speckled green fruitworm
<i>Peridroma saucia</i>	pearly underwing moth
<i>Phlogophora meticulosa</i>	angleshades moth
<i>Spodoptera exigua</i>	lesser armyworm
<i>Spodoptera sunia</i>	cluster caterpillar
<i>Xestia c-nigrum</i>	spotted cutworm
<b>Psychidae</b>	
<i>Hyalarcta huebneri</i>	leaf case moth
<b>Pyrilidae</b>	
<i>Loxostege</i> spp.	pyralid moths
<i>Udea rubigalis</i>	celery leaftier
<b>Sesiidae</b>	
<i>Synanthedon bibionipennis</i>	strawberry crown moth
<b>Tortricidae</b>	
<i>Acleris comariana</i>	strawberry tortrix moth
<i>Ancylis comptana</i>	strawberry leafroller
<i>Ancylis fragariae</i>	strawberry leafroller
<i>Argyrotaenia citrana</i>	orange tortrix
<i>Cacoecimorpha pronubana</i>	carnation leafroller
<i>Choristoneura lafauryana</i>	strawberry leafroller
<i>Choristoneura rosaceana</i>	oblique-banded leafroller
<i>Claremontia confusa</i>	leafroller
<i>Clepsis busckana</i>	cyclamen leafroller
<i>Clepsis spectrana</i>	straw coloured tortrix
<i>Cnephasia asseclana</i>	leafroller
<i>Cnephasia longana</i>	omnivorous leaftier
<i>Cnephasia stephensiana</i>	leaftier
<i>Compsolechia fragariella</i>	western strawberry leafroller
<i>Cryptoptila immersana</i>	ivy leafroller
<i>Epiphyas</i> spp.	leafrollers

<i>Lozotaenia forsterana</i>	leafroller
<i>Olethreutes lacunana</i>	fruit tree tortrix
<i>Olethreutes olivaceana</i>	fruit tree tortrix
<i>Pandemis dumetana</i>	fruit tree tortrix
<i>Platynota stultana</i>	omnivorous leafroller
<i>Ptycholoma peritana</i>	garden tortrix
<i>Sparganothis sulfureana</i>	blueberry leafroller
<b>Orthoptera</b>	
<b>Acrididae</b>	
<i>Phaulacridium vittatum</i>	wingless grasshopper
<b>Gryllotalpidae</b>	
<i>Gryllotalpa africana</i>	African mole cricket
<i>Gryllotalpa gryllotalpa</i>	mole cricket
<i>Scapteriscus acletus</i>	southern mole cricket
<i>Scapteriscus vicinus</i>	tawny mole cricket
<b>Pyrgomorphidae</b>	
<i>Atractomorpha crenaticeps</i>	grasshopper
<b>Thysanoptera</b>	
<b>Thripidae</b>	
<i>Scirtothrips dorsalis</i>	chilli thrips
<i>Scolothrips sexmaculatus</i>	
<i>Thrips atratus</i>	carnation thrips
<i>Thrips major</i>	rose thrips
<b>Mites</b>	
<b>Arachnida</b>	
<b>Acarina</b>	
<b>Diptilomiopidae</b>	
<i>Diptacus fragarifoliae</i>	false spider mite
<b>Tetranychidae</b>	
<i>Tetranychus kanzawai</i>	kanzawaii mite
<i>Tetranychus lobustus</i>	strawberry spider mite
<i>Tetranychus neocalendonicus</i>	Mexican spider mite
<i>Tetranychus pacificus</i>	Pacific spider mite
<b>Nematodes</b>	
<b>Adenophorea</b>	
<b>Dorylaimida</b>	
<b>Longidoridae</b>	
<i>Longidorus elongatus</i> [vector]	-
<i>Longidorus sylphus</i>	needle nematode
<i>Paralongidorus maximus</i>	needle nematode
<i>Xiphinema americanum</i> [Vector]	dagger nematode
<i>Xiphinema chambersi</i>	dagger nematode
<i>Xiphinema diversicaudatum</i> [vector]	dagger nematode
<b>Secernentea</b>	
<b>Tylenchida</b>	
<b>Aphelenchoididae</b>	
<i>Aphelenchoides besseyi</i>	rice white-tip nematode
<b>Belonolaimidae</b>	
<i>Belonolaimus gracilis</i>	sting nematode
<b>Criconematidae</b>	
<i>Criconemoides curvatum</i>	ring nematode
<i>Criconemoides lobatum</i>	ring nematode
<b>Dolichodoridae</b>	
<i>Tylenchorhynchus claytoni</i>	tobacco stunt nematode
<b>Heteroderidae</b>	
<i>Heterodera</i> spp.	cyst nematode
<b>Hoplolaimidae</b>	
<i>Hoplolaimus</i> spp.	crown-headed lance nematode

<i>Helicotylenchus microlobus</i>	spiral nematode
<i>Rotylenchulus buxophilus</i>	reniform nematode
<i>Rotylenchulus goodeyi</i>	reniform nematode
<i>Scutellonema brachyurus</i>	spiral nematode
<b>Paratylenchidae</b>	
<i>Paratylenchus macrophallus</i>	pin nematode
<b>Pratylenchidae</b>	
<i>Pratylenchus brachyurus</i>	root lesion nematode
<i>Pratylenchus coffeae</i>	coffee root lesion nematode
<i>Pratylenchus loosi</i>	root lesion nematode
<i>Pratylenchus scribneri</i>	Scribner's root lesion nematode
<i>Pratylenchus zeae</i>	corn root lesion nematode
<i>Radopholus similis</i>	burrowing nematode
<b>Myriapod</b>	
<b>Diplopoda</b>	
<b>Polydesmida</b>	
<b>Xystodesmidae</b>	
<i>Pleuroloma flavipes</i>	millipede
<b>Molluscs</b>	
<b>Gastropoda</b>	
<b>Stylommatophora</b>	
<b>Helicidae</b>	
<i>Trichia striolata</i>	strawberry snail
<b>Fungi</b>	
<b>Ascomycota</b>	
<b>Dothideales</b>	
<b>Mycosphaerellaceae</b>	
<i>Mycosphaerella louisianae</i>	purple leaf spot
<b>Eurotiales</b>	
<b>Trichocomaceae</b>	
<i>Byssosclamyces fulva</i>	byssosclamyces rot
<b>Hypocreales</b>	
<b>Hypocreaceae</b>	
<i>Schizoparme straminea</i> (anamorph <i>Coniella castaneicola</i> )	schizoparme fruit rot
<b>Leotiales</b>	
<b>Leotiaceae</b>	
<i>Discoghiesia oenotherae</i> (anamorph <i>Hainesia lythri</i> )	leaf spot
<b>Basidiomycota: Basidiomycetes</b>	
<b>Agaricales</b>	
<b>Tricholomataceae</b>	
<i>Armillaria bulbosa</i>	armillaria root rot
<i>Armillaria mellea</i> (anamorph <i>Rhizomorpha subcorticalis</i> )	armillaria root rot
<i>Armillaria tabescens</i>	armillaria root rot
<b>Ceratobasidiales</b>	
<b>Ceratobasidiaceae</b>	
<i>Ceratobasidium anceps</i> (anamorph <i>Sclerotium deciduum</i> )	leaf rot
<i>Rhizoctonia fragariae</i>	black root rot
<b>Chytridiomycota</b>	
<b>Chytridiales</b>	
<b>Olpidiaceae</b>	
<i>Olpidium brassicae</i> [vector]	Black root
<b>Basidiomycota: Teliomycetes</b>	
<b>Uredinales</b>	
<b>Pucciniaceae</b>	

<i>Phragmidium mexicana</i>	
<i>Phragmidium potentiallae</i>	leaf rust
<b>Chytridiomycota</b>	
<b>Chytridiales</b>	
<b>Synchytriaceae</b>	
<i>Synchytrium fragariae</i>	root gall
<b>Mitosporic Fungi (Agonomycetes)</b>	
<b>Agonomycetales</b>	
<b>Unknown Agonomycetales</b>	
<i>Rhizoctonia fragariae</i>	fruit and root rot
<b>Mitosporic Fungi (Coelomycetes)</b>	
<b>Sphaeropsidales</b>	
<b>Leptostromataceae</b>	
<i>Kabatia fragariae</i>	leaf spot
<b>Sphaerioidaceae</b>	
<i>Coniella fragariae</i>	flower spot
<i>Phyllosticta fragaricola</i>	phyllosticta leaf spot
<i>Rhabdospora fragariae</i>	leaf spot
<i>Septoria fragariae</i>	septoria spot
<i>Septoria fragariaeicola</i>	septoria spot
<i>Stagonospora fragariae</i>	stagonospora
<b>Unknown Coelomycetes</b>	
<b>Unknown Coelomycetes</b>	
<i>Colletotrichum spp.</i> (species not in New Zealand)	
<i>Glomerella cingulata</i> (anamorph <i>Colletotrichum gloeosporioides</i> )	strawberry anthracnose
<i>Marssonina canadensis</i>	leaf scorch
<i>Marssonina pakistanica</i>	leaf scorch
<i>Marssonina potentillae</i>	leaf scorch
<i>Pestalotia longisetula</i>	leaf spot
<i>Pilidiella quercola</i>	schizoparme fruit rot
<b>Mitosporic Fungi (Hyphomycetes)</b>	
<b>Hyphomycetales</b>	
<b>Dematiaceae</b>	
<i>Cercospora fragariae</i>	leaf spot
<i>Cercospora vexans</i>	cercospora leaf spot
<i>Idriella lunata</i>	root rot
<b>Moniliaceae</b>	
<i>Ramularia fragariae</i>	ramularia leaf spot
<i>Verticillium albo-atrum</i> [severe strain]	progressive wilt
<b>Tuberculariales</b>	
<b>Tuberculariaceae</b>	
<i>Fusarium oxysporum</i> f. sp. <i>fragariae</i>	stub wilt
<b>Oomycota</b>	
<b>Peronosporales</b>	
<b>Peronosporaceae</b>	
<i>Peronospora fragariae</i>	downy mildew
<i>Phytophthora capsici</i>	fruit rot of peppers
<b>Pythiales</b>	
<b>Pythiaceae</b>	
<i>Pythium debaryanum</i>	root rot
<i>Pythium dissotocum</i>	root rot
<i>Pythium hypogynum</i>	root rot
<i>Pythium perniciusum</i>	root and stem rot
<i>Pythium sylvaticum</i>	root rot
<b>Zygomycota: Zygomycetes</b>	
<b>Mucorales</b>	
<b>Mucoraceae</b>	
<i>Mucor recurvus</i>	mucor rot
<i>Rhizopus spp.</i>	



## Bacteria

-  
-

<i>Erwinia pyrifoliae</i>	
<i>Ralstonia solanacearum</i> (Race 2)	moko disease
Strawberry marginal chlorosis [ <i>'Candidatus phlomobacter fragariae'</i> ]	
Strawberry rickettsia yellows	
<i>Xanthomonas arboricola</i> pv. <i>fragariae</i>	bacterial leaf blight
<i>Xanthomonas fragariae</i>	angular leaf spot
<i>Xylella fastidiosa</i> *	Pierce's disease

## Viruses

-  
-  
-

<i>Fragaria chiloensis</i> latent virus [strains not in New Zealand]	-
<i>Raspberry ringspot virus</i>	-
<i>Strawberry chlorotic fleck virus</i>	-
<i>Strawberry latent C virus</i>	-
<i>Strawberry latent ringspot virus</i> [strains not in New Zealand]	
<i>Strawberry mild yellow edge-associated virus</i>	-
<i>Strawberry pallidosis associated virus</i>	-
<i>Strawberry pseudo mild yellow edge virus</i>	-
<i>Strawberry vein banding virus</i>	-
<i>Tobacco necrosis virus</i> [strains not in New Zealand]	-
<i>Tobacco streak virus</i> [strains not in New Zealand]	
<i>Tomato bushy stunt virus</i>	-
<i>Tomato ringspot virus</i>	-

## 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 multicapita phytoplasma	
Strawberry multiplier phytoplasma	-
Strawberry phylloid fruit phytoplasma	
Strawberry yellows phytoplasma	

## Diseases of unknown aetiology

-  
-  
-

Strawberry feather leaf disease
Strawberry lethal decline disease

## Inspection, Testing and Treatment Requirements for *Fragaria*

ORGANISM TYPES	MPI-ACCEPTED METHODS
<b>Mites</b>	Visual inspection <b>AND</b> approved miticide treatments as described in section 2.2.1.6 of the basic conditions of the Import Health Standard Nursery Stock from All countries. [cuttings only] <b>or</b> binocular microscope inspection in PEQ [plants <i>in vitro</i> only]
<b>Nematodes</b>	Growing season inspection in PEQ for symptoms of foliar nematodes
<b>Fungi</b>	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
<b>Oomycetes</b>	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
<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.
<i>Erwinia pyrifoliae</i>	Growing season inspection for symptom expression <b>AND</b> PCR
<i>Ralstonia solanacearum</i> (Race 2)	Growing season inspection for symptom expression.
Strawberry marginal chlorosis (' <i>Candidatus phlomobacter fragariae</i> ')	Growing season inspection for symptom expression <b>AND</b> PCR
Strawberry rickettsia yellows	Growing season inspection for symptom expression
<i>Xanthomonas arboricola</i> pv. <i>fragariae</i>	Growing season inspection for symptom expression <b>AND</b> PCR
<i>Xanthomonas fragariae</i>	Growing season inspection for symptom expression <b>AND</b> PCR
<i>Xylella fastidiosa</i>	Growing season inspection in PEQ for disease symptom expression <b>AND</b> PCR
<b>Viruses</b>	
<i>Fragaria chiloensis</i> latent virus [strains not in New Zealand]	Herbaceous indicators ( <i>Chenopodium quinoa</i> and <i>Cucumis sativus</i> )
<i>Raspberry ringspot virus</i>	Herbaceous indicator ( <i>Chenopodium quinoa</i> ) <b>AND</b> ELISA <b>or</b> PCR
<i>Strawberry chlorotic fleck virus</i>	Graft inoculation ( <i>Fragaria vesca</i> cl. EMB or EMK)
<i>Strawberry latent C virus</i>	Graft inoculation ( <i>Fragaria vesca</i> cl. EMC or UC5)
<i>Strawberry latent ringspot virus</i> [strains not in New Zealand]	Herbaceous indicators ( <i>Chenopodium quinoa</i> and <i>Cucumis sativus</i> ) <b>AND</b> ELISA <b>or</b> PCR
<i>Strawberry mild yellow edge-associated virus</i>	Graft inoculation (2 indicators; <i>Fragaria vesca</i> cl. UC4 or UC5, or cv. Alpine)
<i>Strawberry pallidosis associated virus</i>	Graft inoculation ( <i>Fragaria virginiana</i> cl. UC10 or UC11)
<i>Strawberry pseudo mild yellow edge virus</i>	Graft inoculation ( <i>Fragaria vesca</i> cl. UC4 or cv. Alpine. or <i>Fragaria virginiana</i> cl. UC12)
<i>Strawberry vein banding virus</i>	Graft inoculation ( <i>Fragaria vesca</i> cl. UC5 or UC6, or cv. Alpine. or <i>Fragaria virginiana</i> cl. UC12) <b>AND</b> PCR
<i>Tobacco necrosis virus</i> [strains not in New Zealand]	Herbaceous indicators ( <i>Chenopodium quinoa</i> and <i>Cucumis sativus</i> ) <b>AND</b> ELISA <b>or</b> PCR
<i>Tobacco streak virus</i> [strains not in New Zealand]	Herbaceous indicators ( <i>Chenopodium quinoa</i> and <i>Cucumis sativus</i> )
<i>Tomato bushy stunt virus</i>	Herbaceous indicator ( <i>Chenopodium quinoa</i> )
<i>Tomato ringspot virus</i>	Herbaceous indicators ( <i>Chenopodium quinoa</i> and <i>Cucumis sativus</i> ) <b>AND</b> ELISA <b>or</b> PCR
<b>Phytoplasmas</b>	Growing season inspection <b>AND</b> nested PCR <b>or</b> real time PCR
<b>Diseases of unknown aetiology</b>	
<i>Strawberry feather leaf disease</i>	Graft inoculation ( <i>Fragaria vesca</i> cl. UC1 or UC4, or cv. Alpine)
<i>Strawberry lethal decline disease</i>	Graft inoculation ( <i>Fragaria vesca</i> cv. Alpine)

**Notes:**

1. The unit for testing is defined in section 2.3.2.1.
2. Plants *in vitro*: all tissue culture plantlets must go through a period of dormancy before virus testing to increase the virus titre. Plantlets must also be potted up and grown in a greenhouse approved to facility standard PEQ.STD Post Entry Quarantine for Plants and only material from the greenhouse is to be selected for testing.
3. Virus testing is to be conducted on new spring growth.
4. Growing season is defined as an extended period of plant growth that includes environmental conditions equivalent to spring (longer wetter days and colder temperatures), summer (longer dryer days and warm temperatures), and autumn (shorter wetter days and warm but cooling temperatures).
5. Phytoplasma and bacteria testing is to be conducted at the end of the summer growth period. Plants must be sampled from at least two positions on the apical crown region.
6. Graft indexing hosts: Each *Fragaria* plant must be tested by leaf-grafting onto two replicate indicator cultivars. The indicator plants must be maintained in a vigorous state of growth before and after grafting. Grafted plants are to be inspected regularly for symptoms of disease for at least 3 months.
7. Herbaceous indicator hosts: *Chenopodium quinoa* and *Cucumis sativus*. Two plants of each herbaceous indicator species must be used in each test. Herbaceous indicator plants must be grown at 18-25°C before and after inoculation and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.
8. Enzyme linked immunosorbent assay (ELISA) tests. All ELISA tests must be validated using both positive and negative controls prior to use in quarantine testing. Positive, negative, and buffer controls must be used in all tests.
9. Polymerase chain reaction (PCR) tests. All PCR tests must be validated using positive controls prior to use in quarantine testing. Positive and no template controls must be used in all tests. Positive internal control primers and a negative plant control should also be used in PCR tests.
10. Inspection of the *Fragaria* plants by the operator of the PEQ facility for signs of pest and disease must be at least twice per week during periods of active growth.
11. Other internationally recognised testing methods may be accepted by MPI with prior notification.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Freesia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Virus diseases

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 6 months

**B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, United States of America:**

**OPTION 1:**

**No import permit is required**

**PEQ:** None

a. Additional Declaration

i) **For bulbs produced under an MPI-approved Dutch bulb propagation scheme:**

“In addition to inspection of the dormant bulbs prior to shipment, the imported bulbs meet the requirements of the NAKtuinbouw Elite (Class SEE or EE) or Select (Class A or E) [choose one] bulb certification scheme.”

**OR**

ii) **For bulbs NOT produced under an MPI-approved bulb propagation scheme:**

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

**OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

**C. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, United States of America:**

**OPTION 1:**

**PEQ:** Level 1

**Minimum Period:** 3 months

a. Additional Declaration

“The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

**AND**

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.”

**OPTION 2:**

**PEQ:** Level 2

**Minimum Period:** 3 months

**D. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

a. Conditions for virus diseases

Additional Declaration: “The cultures have been derived from parent stock tested and found free of virus diseases.”

## ***Fuchsia***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Fuchsia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Aculops fuchsiae* (Fuchsia Gall Mite), *Phytophthora ramorum*, *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants or Cuttings**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

c. Conditions for *Aculops fuchsiae*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “*Aculops fuchsiae* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

**OR**

ii) “The plants have been dipped in Carbaryl at the rate of 0.5g a.i. per litre of water”.

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)

**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Gaultheria*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States of America.

**Quarantine Pests:** *Chrysomyxa ledi*, *Microsphaera* spp, *Phytophthora ramorum*

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Chrysomyxa ledi* and *Microsphaera* spp.

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “*Chrysomyxa ledi* and *Microsphaera* spp. are not known to occur in \_\_\_\_\_[the country or state of where the plants were grown]”.

**OR**

- ii) “The plants were inspected during the growing season and no *Chrysomyxa ledi* or *Microsphaera* spp. was detected”.

- b. Additional Declaration

“The plants have been dipped prior to export in propiconazole at the rate of 0.5g a.i. per litre of water.”

- c. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

## *Gentiana*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Gentiana*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** Japan

**Quarantine Pests:** *Cronartium flaccidum*, *Tetranychus kanzawai*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. **Additional Declaration**

“The plants have been dipped in oxycarboxin at 1.5g a.i. per litre of water, prior to export”.

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.



## Gerbera

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Gerbera*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Frankliniella occidentalis*, *Liriomyza* spp., *Phytophthora capsici*, *Phytophthora palmivora*, *Phytophthora tentaculata*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Frankliniella occidentalis* and *Liriomyza* spp.

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*

**Note:** Only applies to the following genus: *Gypsophila*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

- c. Conditions for *Phytophthora palmivora*

**Note:** Only applies to the following genus: *Gerbera*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

d. Conditions for *Phytophthora tentaculata*

**Note:** Only applies to the following genus: *Gerbera*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*”.

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora tentaculata*”.

**OR**

iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora tentaculata*”.

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

## *Gladiolus*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Gladiolus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Puccinia gladioli*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 6 months

##### a. Conditions for *Puccinia gladioli*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “*Puccinia gladioli* is not known to occur in \_\_\_\_\_ [the country or state where the plants were grown]”.

**OR**

- ii) “The plants were inspected during the growing season and *Puccinia gladioli* was not detected”.

**B. For Dormant Bulbs (Corms) from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, United States of America**

#### **OPTION 1:**

**No import permit is required**

**PEQ:** None

**Cleanliness:** Bulbs (corms) must be free of leafy coverings.

##### a. Additional Declaration

- i) **For bulbs produced under an MPI-approved Dutch bulb propagation scheme:**  
“In addition to inspection of the dormant bulbs prior to shipment, the imported bulbs meet the requirements of the BKD Class 1 bulb certification scheme.”

**OR**

- ii) **For bulbs NOT produced under an MPI-approved bulb propagation scheme:**  
“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

**OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

**Cleanliness:** Bulbs (corms) must be free of leafy coverings.

**C. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, United States of America:**

**OPTION 1:**

**PEQ:** Level 1

**Minimum Period:** 3 months

**Cleanliness:** Bulbs (corms) must be free of leafy coverings.

a. Additional Declaration

“The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

**AND**

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.”

**OPTION 2:**

**PEQ:** Level 2

**Minimum Period:** 3 months

**Cleanliness:** Bulbs (corms) must be free of leafy coverings.

**D. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

## ***Glycyrrhiza***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Glycyrrhiza*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Uromyces* spp.

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Uromyces* spp.

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “*Uromyces* spp. are not known to occur on *Glycyrrhiza* in \_\_\_\_\_[the country or state where the plants were grown]”.

**OR**

- ii) “The plants were inspected during the growing season and no *Uromyces* spp. were detected”.

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

## ***Helianthus***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Helianthus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Alternaria helianthi*, *Phymatotrichopsis omnivora*, *Plasmopara halstedii*, *Pseudomonas* spp., *Septoria helianthi*, Uredinales, *Xylella fastidiosa*

**Entry Conditions:** **Basic;** with variations and additional conditions as specified below:

#### **For Dormant Tubers Only:**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be 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.

## *Hippeastrum*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Hippeastrum*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **1. Type of *Hippeastrum* nursery stock approved for entry into New Zealand**

Dormant bulbs

Plants in tissue culture

### **2. Pests of *Hippeastrum***

Refer to the pest list.

### **3. Entry conditions for:**

#### **3.1 *Hippeastrum* dormant bulbs from any country**

##### **(i) Documentation**

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** an import permit is required.

##### **(ii) Phytosanitary requirements**

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Hippeastrum* dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated bacteria.

**AND**

- treated for regulated mites as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification

##### **(iii) Additional declarations to the phytosanitary certificate**

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section, and by providing the following additional declaration to the phytosanitary certificate:

“The *Hippeastrum* dormant bulbs in this consignment have been:

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated nematodes and fungi [if applicable].

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated bacteria and phytoplasmas.”

(iv) Post-entry quarantine

**PEQ:** Level 1

**Quarantine Period:** This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/tests are required.

### 3.2 *Hippeastrum* dormant bulbs from the Netherlands

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Hippeastrum* dormant bulbs have been:

- produced in accordance with the requirements of the BKD Class 1 bulb certification scheme and inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pest.

**AND**

- The bulbs are free from *Armillaria mellea* and *Pratylenchus scribneri*.

**AND**

- Sourced from a pest free production site for *Hippeastrum* free from regulated nematodes and fungi and held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section, and by providing the following additional declaration to the phytosanitary certificate:

- “The *Hippeastrum* dormant bulbs have been produced in accordance with the requirements of the BKD Class 1 bulb certification scheme and inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pest.

**AND**

- The bulbs are free from *Armillaria mellea* and *Pratylenchus scribneri*.

**AND**



- Sourced from a pest free production site for *Hippeastrum* free from regulated nematodes and fungi and held in a manner to ensure that infestation/reinfestation does not occur following certification.”

(iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed.

### 3.3 *Hippeastrum* plants in tissue culture from any country

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

(ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Hippeastrum* plants in tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- derived from parent stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declaration to the phytosanitary certificate:

“The *Hippeastrum* plants in tissue culture have been derived from parent stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests”.

(iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed overseas. Alternatively, the inspection and testing may be completed in post-entry quarantine upon arrival in New Zealand according to the following conditions:

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** an import permit is required.

**PEQ:** Level 3B

**Quarantine Period:** This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/tests are required

## Pest List for *Hippeastrum*

### REGULATED PESTS (actionable)

#### Mite

#### Arachnida

#### Acarina

#### Tarsonemidae

*Steneotarsonemus laticeps*

bulb scale mite

#### Nematode

#### Secernentea

#### Tylenchida

#### Pratylenchidae

*Pratylenchus coffeae*

coffee root lesion nematode

*Pratylenchus scribneri*

Scribner's root lesion nematode

#### Fungus

#### Basidiomycota: Basidiomycetes

#### Agaricales

#### Tricholomataceae

*Armillaria mellea* (anamorph *Rhizomorpha subcorticalis*)

armillaria root rot

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under ‘*Hoya*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Hoya* undetermined tobamoviruses

**Entry Conditions:** **Basic;** with variations and additional conditions as specified below:

**A. For Cuttings and Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Hoya* undetermined tobamoviruses  
Pre-determined testing in PEQ: refer to ‘Inspection, Testing and Treatment Requirements for *Hoya*’

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 2 greenhouse

**Minimum Period:** 3 months

- a. Conditions for *Hoya* undetermined tobamoviruses  
Pre-determined testing in PEQ: refer to ‘Inspection, Testing and Treatment Requirements for *Hoya*’

**Inspection, Testing and Treatment Requirements for *Hoya***

ORGANISM	MPI-ACCEPTED METHODS	Comments
<b>Viruses</b>		
<i>Hoya</i> undetermined tobamoviruses	Growing season inspection in PEQ for symptom expression <b>AND</b> RT-PCR	Applies to whole plants, cuttings and tissue culture plants

**Notes:**

1. All *Hoya* plants within a consignment will need to be tested for *Hoya* undetermined tobamoviruses.
2. Samples for the screening of *Hoya* undetermined tobamoviruses should be taken as close to the end of the PEQ period as practically possible.
3. Screening for *Hoya* undetermined tobamoviruses can be done on unbulked material or bulked samples of up to five plants.
4. If a single positive sample is detected within a consignment, the whole consignment must be either reshipped or destroyed at the expense of the importer.

## *Humulus*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Humulus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Pseudoperonospora humuli*, *Tetranychus kanzawai*, *Verticillium albo-atrum*, *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 3B

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

## *Hydrangea*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Hydrangea*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Phellinus noxius*, *Tetranychus kanzawai*, *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

- b. Conditions for *Phellinus noxius* (section 2.2.1.13)

**Note:** Only applies to the following species: *Hydrangea chinensis* and *Morus alba*

#### **B. For Cuttings**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

#### **C. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

- a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)

**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*

## *Ipomoea batatas*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Ipomoea batatas*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine pests:** *Helicobasidium mompa*, *Streptomyces ipomoea*, virus diseases, *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 3B

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Iris*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **1. Type of *Iris* nursery stock approved for entry into New Zealand**

Whole plants

Dormant bulbs

Plants in tissue culture

### **2. Pests of *Iris***

Refer to the pest list.

### **3. Entry conditions for:**

#### **3.1 *Iris* whole plants and dormant bulbs from any country**

##### **(i) Documentation**

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** an import permit is required.

##### **(ii) Phytosanitary requirements**

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Iris* dormant bulbs or whole plants have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section or section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated bacteria and viruses.

**AND**

- treated for regulated insects and mites as described in section 2.2.1.6 [whole plants] or section 2.2.1.7 [dormant bulbs] of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

##### **(iii) Additional declarations to the phytosanitary certificate**

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection

Treatment” section, and by providing the following additional declaration to the phytosanitary certificate:

“The *Iris* dormant bulbs or whole plants [choose one] in this consignment have been:

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated nematodes and fungi [if applicable].

**AND**

- sourced from a ‘Pest free area’, ‘Pest free place of production’ or ‘Pest free production site’, free from regulated bacteria and viruses.”

(iv) Post-entry quarantine

### **Whole plants and dormant bulbs**

**PEQ:** Level 1

**Quarantine Period:** This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/tests are required. Cut flowers may receive biosecurity clearance while the imported plants remain in post-entry quarantine following inspection of the parent plants and with prior approval from an MPI Inspector.

## **3.2 *Iris* whole plants and dormant bulbs from the Netherlands**

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Iris* dormant bulbs or whole plants have been:

- produced in accordance with the requirements of the Bloembollenkeuringsdienst (BKD) Class 1 bulb certification scheme.

**AND**

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section or section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated bacteria and viruses.

**AND**

- treated for regulated insects and mites as described in section 2.2.1.6 [whole plants] or section 2.2.1.7 [dormant bulbs] of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

**AND**



- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section, and by providing the following additional declaration to the phytosanitary certificate:

“The *Iris* dormant bulbs or whole plants [choose one] in this consignment have been:

- produced in accordance with the requirements of the BKD Class 1 bulb certification scheme.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated nematodes and fungi [if applicable].

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated bacteria and viruses.”

(iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed.

### 3.3 *Iris* plants in tissue culture from any country

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

(ii) 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/tests are required.

# Pest List for *Iris*

## REGULATED PESTS (actionable)

### Insect

#### Insecta

##### Coleoptera

##### Scarabaeidae

*Popillia japonica*

Japanese beetle

##### Homoptera

##### Pseudococcidae

*Aleyrodes spiraeoides* [whole plants only]

-

##### Pseudococcidae

*Phenacoccus avenae*

-

*Phenacoccus emansor*

-

*Pseudococcus jackbeardsleyi* [whole plants only]

Jack Beardsley mealybug

*Rhizococcus palestineae*

root mealybug

##### Lepidoptera

##### Hepialidae

*Hepialus humuli*

ghost swift moth

*Hepialus lupulinus*

swift moth

##### Noctuidae

*Hydraecia micacea*

potato stem borer

*Macronoctua onusta*

iris borer

##### Thysanoptera

##### Thripidae

*Frankliniella iridis*

iris thrips

### Mite

#### Arachnida

##### Acarina

##### Tarsonemidae

*Steneotarsonemus laticeps*

bulb scale mite

### Nematode

#### Secernentea

##### Tylenchida

##### Criconematidae

*Hemicycliophora typica*

sheath nematode

##### Dolichodoridae

*Tylenchorhynchus gaudialis*

-

##### Hoplolaimidae

*Rotylenchus goodeyi*

spiral nematode

##### Meloidogynidae

*Meloidogyne arenaria*

peanut root knot nematode

*Meloidogyne ichinohei*

-

### Fungus

#### Ascomycota

##### Dothideales

##### Leptosphaeriaceae

*Trematosphaeria heterospora*

--

##### Leotiales

##### Sclerotiniaceae

*Botryotinia convoluta* (anamorph *Botrytis convallariae*)

stem rot

*Botryotinia polyblastis* (anamorph *Botrytis polyblastis*)

fire disease

*Sclerotinia bulborum*

black slime

#### Basidiomycota: Basidiomycetes

##### Agaricales

<b>Tricholomataceae</b>	
<i>Armillaria mellea</i> (anamorph <i>Rhizomorpha subcorticalis</i> )	armillaria root rot
<b>Lachnocladales</b>	
<b>Lachnocladiaceae</b>	
<i>Scytinostroma eurasiaticogalactinum</i>	white root rot
<b>Phallales</b>	
<b>Hysterangiaceae</b>	
<i>Hysterangium boudieri</i>	--
<b>mitosporic fungi (Agonomycetes)</b>	
<b>Agonomycetales</b>	
<b>unknown Agonomycetales</b>	
<i>Rhizoctonia tuliparum</i>	basal rot
<i>Sclerotium rolfsii</i> var. <i>delphinii</i>	sclerotium rot
<b>Bacterium</b>	
<b>Pseudomonadaceae</b>	
<i>Burkholderia gladioli</i> pv. <i>gladioli</i>	bacterial rot
<b>Virus</b>	
<i>Broad bean wilt virus</i>	-
<i>Iris fulva mosaic virus</i>	-
<i>Iris germanica leaf stripe virus</i>	-
<i>Japanese iris necrotic ring virus</i>	-
<i>Tobacco rattle virus</i> [strains not in New Zealand]	-

## *Juglans*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Juglans*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States of America.

**Quarantine Pests:** *Ceratocystis fimbriata*, *Erwinia nigrifluens*, *Erwinia quercina* pv. *rubrifaciens*, *Gnomonia leptostyla*, Walnut blackline, Walnut bunch/brooming disease, *Xylella fastidiosa*

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)

**Note:** Only applies to members of the *Juglans* genus

- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 3B

**Minimum Period:** 6 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)

**Note:** Only applies to members of the *Juglans* genus

## *Juniperus*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Juniperas*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Bursaphelenchus* spp., *Lophodermium* spp., Uredinales, *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 6 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Note:** Only applies to the members of the *Juniperus* genus

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Kalmia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States of America.

**Quarantine Pests:** *Chrysomyxa ledi*, *Microsphaera* spp., *Phytophthora ramorum*

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

**A. For Cuttings and Whole Plants from Australia (these commodities may not be imported from other countries)**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Additional Declaration

“The plants have been dipped prior to export in propiconazole at the rate of 0.5g a.i. per litre of water.”

b. Conditions for *Chrysomyxa ledi* and *Microsphaera* spp.

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “*Chrysomyxa ledi* and *Microsphaera* spp. are not known to occur in \_\_\_\_\_[the country or state of where the plants were grown]”.

**OR**

ii) “The plants were inspected during the growing season and no *Chrysomyxa ledi* or *Microsphaera* spp. was detected”.

c. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

**B. For Tissue Cultures:**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Liatris*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom, United States of America.

**Quarantine Pests:** *Phymatotrichopsis omnivora*, Uredinales

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for Uredinales

Additional Declaration: “Rust diseases of genus *Coleosporium* and *Cronatium* are not known to occur on \_\_\_\_\_[the host species being imported] in \_\_\_\_\_[the country in which the plants were grown]”.

**B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom:**

**OPTION 1:**

**No import permit is required**

**PEQ:** None

- a. Additional Declaration

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

**OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

**C. For Dormant Bulbs from the United States of America**

**No import permit is required unless the bulbs require post-entry quarantine.**

**PEQ:** None or Level 2 (see below)

- a. Additional Declarations

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the



bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests”.

b. Conditions for *Phymatotrichopsis omnivora*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The dormant tubers have been sourced from a ‘pest free area’, free from *Phymatotrichopsis omnivora*”.

**OR**

- ii) “The dormant bulbs have been sourced from a ‘pest free place of production’, free from *Phymatotrichopsis omnivora*”.

**AND**

- the consignment must be treated for fungi as described in Section 2.2.1.7 “Pesticide treatments for dormant bulbs”. If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section of the phytosanitary certificate.

**AND**

- Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine.

**D. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Lilium*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **1. Type of *Lilium* nursery stock approved for entry into New Zealand**

Dormant bulbs

Plants in tissue culture

### **2. Pests of *Lilium***

Refer to the pest list.

### **3. Entry conditions for:**

#### **3.1 *Lilium* dormant bulbs from the Netherlands**

##### **(i) Documentation**

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

##### **(ii) Phytosanitary requirements**

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Lilium* dormant bulbs have been:

- produced in accordance with the requirements of the Bloembollenkeuringsdienst (BKD) Class 1 bulb certification scheme.

**AND**

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated bacteria and viruses.

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

##### **(iii) Additional declarations to the phytosanitary certificate**

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section, and by providing the following additional declaration to the phytosanitary certificate:

“The *Lilium* dormant bulbs in this consignment have been:

- produced in accordance with the requirements of the BKD Class 1 bulb certification scheme.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated nematodes and fungi [if applicable].

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated bacteria and viruses.”

**AND**

One of the following Additional Declarations for *Phytophthora capsici*:

- “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

- “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

(iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed.

### **3.2 *Lilium* dormant bulbs from any country other than the Netherlands**

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Lilium* dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated bacteria and viruses.

**AND**

- treated for regulated insects and mites as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section, and by providing the following additional declaration to the phytosanitary certificate:

“The *Lilium* dormant bulbs in this consignment have been:

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated nematodes and fungi [if applicable].

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated bacteria and viruses.”

**AND**

One of the following Additional Declarations for *Phytophthora capsici*:

- “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

- “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

(iv) Post-entry quarantine

**PEQ:** Level 1

**Quarantine Period:** This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/tests are required. Cut flowers may receive biosecurity clearance while the imported plants remain in post-entry quarantine following inspection of the parent plants (including inspection for bulbils) and with prior approval from an MPI Inspector.

### 3.3 *Lilium* plants in tissue culture from any country

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

(ii) 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/tests are required.

# Pest List for *Lilium*

## REGULATED PESTS (actionable)

### Insect

#### Insecta

##### Collembola

##### Entomobryidae

*Entomobrya multifasciata*

Springtail

##### Lepidoptera

##### Yponomeutidae

*Acrolepiopsis liliivora*

-

### Mite

#### Arachnida

##### Acarina

##### Acaridae

*Schwiebea cuncta*

-

*Schwiebea taiwanensis*

-

##### Tenuipalpidae

*Brevipalpus lilium*

false spider mite

### Nematode

#### Adenophorea

##### Dorylaimida

##### Longidoridae

*Xiphinema insigne*

dagger nematode

##### Trichodoridae

*Paratrichodorus* spp. (except *P. lobatus*, *P. minor*, *P. pachydermus*, *P. porosus*)

-

*Trichodorus* spp. (except *T. christiei*, *T. cottieri*, *T. porosus*, *T. primitivus*)

-

#### Secernentea

##### Tylenchida

##### Meloidogynidae

*Meloidogyne* spp. (except *M. ardenensis*, *M. hapla*, *M. incognita*, *M. javanica*, *M. naasi*)

-

##### Pratylenchidae

*Pratylenchus brachyurus*

root lesion nematode

### Fungus

#### Ascomycota

##### Dothideales

##### Mycosphaerellaceae

*Didymellina intermedia*

black rot

*Mycosphaerella martagonis*

black blotch

#### Basidiomycota: Basidiomycetes

##### Agaricales

##### Tricholomataceae

*Armillaria mellea* (anamorph *Rhizomorpha subcorticalis*)

armillaria root rot

##### Auriculariales

##### Auriculariaceae

*Helicobasidium mompa*

violet root rot

#### Basidiomycota: Teliomycetes

##### Uredinales

##### Pucciniaceae

*Puccinia sporoboli* (anamorph *Aecidium lili*)

Rust

*Uromyces aecidiiformis*

rust fungi

<i>Uromyces holwayi</i>	-
<b>mitosporic fungi (Agonomycetes)</b>	
<b>Agonomycetales</b>	
<b>unknown Agonomycetales</b>	
<i>Rhizoctonia tuliparum</i>	basal rot
<i>Sclerotium rolfsii</i> var. <i>delphinii</i>	sclerotium rot
<i>Sclerotium wakkeri</i>	Blackleg
<b>mitosporic fungi (Coelomycetes)</b>	
<b>Sphaeropsidales</b>	
<b>Sphaerioidaceae</b>	
<i>Macrophoma lili</i>	black root rot
<i>Phyllosticta liliicola</i>	black rot
<b>unknown Coelomycetes</b>	
<b>unknown Coelomycetes</b>	
<i>Colletotrichum lili</i>	-
<b>mitosporic fungi (Hyphomycetes)</b>	
<b>Hyphomycetales</b>	
<b>Moniliaceae</b>	
<i>Botrytis hyacinthi</i>	hyacinth blight
<i>Ramularia vallisumbrosae</i>	white mould
<b>Oomycota</b>	
<b>Peronosporales</b>	
<b>Peronosporaceae</b>	
<i>Phytophthora capsici</i>	Fruit rot of peppers
<b>Tuberculariales</b>	
<b>Tuberculariaceae</b>	
<i>Fusarium oxysporum</i> f. sp. <i>lilii</i>	basal rot
<b>unknown Hyphomycetes</b>	
<b>unknown Hyphomycetes</b>	
<i>Aureobasidium microstictum</i>	-
<b>Bacterium</b>	
<b>Enterobacteriaceae</b>	
<i>Erwinia lili</i>	-
<b>Virus</b>	
<i>Apple stem grooving virus</i> [strains not in New Zealand]	-
<i>Lily rosette virus</i>	-
<i>Tobacco rattle virus</i> [strains not in New Zealand]	-
<i>Tomato ringspot virus</i>	-

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *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. Conditions for *Aceria litchii* and members of the Xyloryctidae family  
Additional Declaration: “The plants were grown on a nursery that has been inspected for the presence of *Aceria litchii* and members of the Xyloryctidae family and none were found”.

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.



## *Lithocarpus densiflorus*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Lithocarpus densiflorus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States of America.

**Quarantine Pests:** *Ceratocystis fagacearum*, *Cronartium quercuum*, *Phytophthora ramorum*, Tortricidae

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

#### **A. For Whole Plants (dormant) and Cuttings (dormant)**

##### **OPTION 1:**

**PEQ:** Level 2

**Minimum Period:** 6 months

##### **a. Conditions for *Ceratocystis fagacearum***

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “*Ceratocystis fagacearum* is not known to occur in \_\_\_\_\_[the country or state where the plants/cuttings were grown]”.

**OR, for cuttings:**

ii) “The tree(s), from which this material was taken, was inspected during the previous growing season and no *Ceratocystis fagacearum* was detected”.

**OR, for young plants:**

iii) “The plants were inspected during the previous growing season and no *Ceratocystis fagacearum* was detected”.

##### **b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)**

##### **c. Additional Declaration**

“The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water”.

##### **OPTION 2:**

**PEQ:** Level 3B

**Minimum Period:** 6 months

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer.

## ***Lophophora williamsii***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Lophophora williamsii*, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Entry Conditions:** **Basic;** with variations and additional conditions as specified below:

**Import permit:** an import permit is required. Before applying for an import permit, the importer must obtain written approval to import from:

**Director General of Health  
Ministry of Health  
PO Box 5013  
Wellington  
Attention: Advisor, Controlled Drug Licensing  
Telephone: 04 496 2438**

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Malus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**1. Type of *Malus* nursery stock approved for entry into New Zealand**

Cuttings (dormant); plants in tissue culture

*Malus* can be imported into Level 2 or Level 3A post entry quarantine from MPI-approved facilities, or into Level 3B post entry quarantine from non-approved facilities.

**2. Pests of *Malus***

Refer to the pest list.

**3. Entry conditions for:**

**3.1 *Malus* cuttings and tissue culture from offshore MPI-approved facilities in any country**

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Malus*, the approved facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Malus*. Refer to the “Inspection, Testing and Treatment Requirements for *Malus*”.

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Malus* nursery stock exported to New Zealand.

**Import permit:** an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Malus* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

**AND**

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-approved facility].

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the approved facility, and certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section [cuttings only] and by providing the following additional declarations to the phytosanitary certificate:

“The *Malus* cuttings / plants in tissue culture [choose ONE option] have been:

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-approved facility].

**AND**

- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the approved facility, and certification.”

(iv) Post-entry quarantine

**PEQ:** All *Malus* nursery stock must be imported under permit into post-entry quarantine in a Level 2 or Level 3A greenhouse facility approved to the Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**Quarantine Period and Inspection, Testing and Treatment Requirements:** The nursery stock will be grown:

(a) for a minimum period of six months (of active continuous growth) in a Level 2 post-entry quarantine greenhouse, following a minimum period of two growing seasons in an offshore MPI-approved facility. Plants will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer.

**OR**

(b) for a minimum period of 12 months of active growth (including at least one period of six months of active continuous growth) in a Level 3A post-entry quarantine greenhouse, following a minimum period of one growing season in an offshore MPI-approved facility. Plants will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer.

**Special requirements for plants imported into a Level 3A quarantine facility:**

- Plants must be irrigated using a method which prevents water coming into contact with plant foliage (such as drip irrigation). Overhead irrigation must not be used.
- Contingency plans must be developed to identify actions that will be taken to contain the propagules of any fungal or oomycete disease organisms in the event of disease symptoms becoming evident during the quarantine period. These plans must be recorded in the facility operating manual.

For tissue cultures, the post-entry quarantine period begins when tissue cultures are deflasked into the PEQ greenhouse. The total quarantine period in New Zealand is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/tests are required.

**Guidance:**

The import permit will identify the length of the quarantine period and level of post-entry quarantine for plants imported from an offshore MPI-approved facility. This will depend on how long plants are held at the offshore facility before they are exported to New Zealand, as follows:

- If plants are held at the offshore facility for a minimum of two growing seasons prior to export, the minimum quarantine requirements will be six months active continuous growth in a Level 2 post-entry quarantine facility.
- If plants are held at the offshore facility for a minimum of one growing season prior to export, the minimum quarantine requirements will be 12 months active growth (including at least one period of six months active continuous growth) in a Level 3A post-entry quarantine facility.

### 3.2 *Malus* cuttings and tissue culture from non-approved facilities in any country

#### (i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Malus* nursery stock exported to New Zealand.

**Import permit:** an import permit is required.

#### (ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Malus* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

#### (iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section [cuttings only]. No additional declarations are required.

#### (iv) Post-entry quarantine

**PEQ:** All *Malus* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility approved to the Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**Quarantine Period and Inspection, Testing and Treatment Requirements:** The nursery stock will be grown for a minimum period of 24 months in a post-entry quarantine greenhouse. For tissue cultures, the quarantine period begins when tissue cultures are deflasked into the PEQ greenhouse. During this time, imported material will be inspected, treated and/or tested for regulated pests as specified in the “Inspection, Testing and Treatment Requirements for *Malus*”, at the expense of the importer. These times are indicative minimum quarantine periods and may be extended if material is slow growing, pests are detected, or treatments/tests are required.

## Pest List for *Malus*

### REGULATED PESTS (actionable)

Insect	
Insecta	
<b>Coleoptera</b>	
<b>Attelabidae</b>	
<i>Rhynchites caeruleus</i>	apple twig cutter
<b>Bostrichidae</b>	
<i>Amphicerus bicaudatus</i>	apple twig borer
<i>Apate monachus</i>	black borer
<b>Buprestidae</b>	
<i>Agrilus mali</i>	apple wood borer
<i>Agrilus</i> spp.	bark borers
<i>Chrysobothris femorata</i>	flatheaded apple tree borer
<i>Chrysobothris mali</i>	Pacific flatheaded borer
<i>Chrysobothris</i> spp.	flat-headed borers
<i>Sphenoptera lafertei</i>	flatheaded peach tree borer
<b>Cerambycidae</b>	
<i>Aeolesthes sarta</i>	Quetta borer
<i>Apriona germarii</i>	mulberry longicorn beetle
<i>Apriona japonica</i>	mulberry borer
<i>Bacchisa fortunei</i>	pear borer
<i>Batocera rufomaculata</i>	red-spotted longhorn beetle
<i>Phrynetes spinator</i>	
<b>Curculionidae</b>	
<i>Anthonomus piri</i>	apple bud weevil
<i>Eremnus atratus</i>	black weevil
<i>Eremnus cerealis</i>	western province grain worm
<i>Eremnus setulosus</i>	grey weevil
<b>Scolytidae</b>	
<i>Hypothenemus obscurus</i>	apple twig borer
<i>Scolytus japonicus</i>	Japanese bark beetle
<i>Scolytus rugulosus</i>	fruit bark borer
<b>Diptera</b>	
<b>Cecidomyiidae</b>	
<i>Resseliella oculiperda</i>	red bud borer
<i>Thomasiniana oculiperda</i>	red bud borer
<b>Hymenoptera</b>	
<b>Aphididae</b>	
<i>Aphis spiraeicola</i>	spiraea aphid
<b>Diaspididae</b>	
<i>Chrysomphalus aonidum</i>	Florida red scale
<i>Chrysomphalus dictyospermi</i>	Spanish red scale
<i>Diaspidiotus africanus</i>	grey scale
<b>Lepidoptera</b>	
<b>Cossidae</b>	
<i>Coryphodema tristis</i>	quince trunk borer
<b>Gelechiidae</b>	
<i>Recurvaria syrtictis</i>	bud moth
<b>Gracillariidae</b>	
<i>Marmara elotella</i>	apple barkminer
<i>Marmara pomonella</i>	apple fruitminer
<b>Oecophoridae</b>	
<i>Cryptophasa melanostigma</i>	fruit tree borer
<b>Pyalidae</b>	
<i>Euzophera semifuneralis</i>	American plum borer
<i>Ostrinia nubilalis</i>	European corn borer

<b>Sesiidae</b>	
<i>Thamnosphaeria pyri</i>	apple bark borer
<i>Synanthedon scitula</i>	pecan tree borer
<b>Mite</b>	
<b>Arachnida</b>	
<b>Acarina</b>	
<b>Eriophyidae</b>	
<i>Aculops malus</i>	eriphyid mite
<i>Eriophyes mali</i>	Willamette spider mite
<i>Phyllocoptes mali</i>	eriphyid mite
<i>Cenopalpus chitraliensis</i>	bryobia mite
<i>Cenopalpus haqii</i>	banana mite
<i>Cenopalpus orakiensis</i>	Bailey's apple rust mite
<i>Cenopalpus pulcher</i>	flat scarlet mite
<b>Tenuipalpidae</b>	
<i>Brevipalpus lilium</i>	false spider mite
<i>Brevipalpus obovatus</i>	privet mite
<i>Tenuipalpus taonicus</i>	Pacific mite
<i>Rhinotergum schestovici</i>	mite
<b>Tetranychidae</b>	
<i>Eotetranychus carpini</i>	false spider mite
<i>Eotetranychus uncatus</i>	Lewis spider mite
<i>Eotetranychus willamettei</i>	hazel mite
<i>Oligonychus gossypii</i>	tetranychid mite
<i>Oligonychus newcomeri</i>	spider mite
<i>Oligonychus yothersi</i>	avocado red mite
<i>Tetranychus canadensis</i>	four spotted spider mite
<i>Tetranychus kanzawai</i>	Kanzawa spider mite
<i>Tetranychus mcdanieli</i>	McDaniel spider mite
<i>Tetranychus schoenei</i>	Schoenei spider mite
<i>Amphitetranychus viennensis</i>	hawthorn spider mite
<b>Tydeidae</b>	
<i>Tydeus</i> spp.	tydeid mites
<b>Fungus</b>	
<b>Ascomycota: Ascomycetes</b>	
<b>Diaporthales</b>	
<b>Valsaceae</b>	
<i>Diaporthe tanakae</i> (anamorph <i>Phomopsis tanakae</i> )	pear canker
<i>Leucostoma auerswaldii</i>	leucostoma canker
<b>Diatrypales</b>	
<b>Diatrypaceae</b>	
<i>Eutypella sorbi</i>	stem disease
<b>Dothideales</b>	
<b>Mycosphaerellaceae</b>	
<i>Mycosphaerella pyri</i> (anamorph <i>Septoria pyricola</i> )	leaf fleck of pear
<i>Mycosphaerella tulasnei</i>	rot
<b>Schizothyriaceae</b>	
<i>Schizothyrium perexiguum</i>	greasy blotch
<b>Erysiphales</b>	
<b>Erysiphaceae</b>	
<i>Pleochaeta mali</i>	powdery mildew
<b>Heotiales</b>	
<b>Dermateaceae</b>	
<i>Diplocarpon mali</i>	black spot
<i>Pezicula perennans</i>	perennial canker
<b>Sclerotiniaceae</b>	
<i>Grovesinia pyramidalis</i> (anamorph <i>Cristulariella moricola</i> )	target spot
<i>Monilinia laxa</i> f. sp. mali	brown rot
<i>Monilinia mali</i>	monilinia leaf blight
<i>Monilinia fructigena</i> (anamorph <i>Monilia fructigena</i> )	European brown rot

<i>Sclerotinia</i> spp.	neck rot
<b>Rhytismatales</b>	
<b>Cryptomycetaceae</b>	
<i>Potebniamyces pyri</i> (anamorph <i>Phacidiopycnis piri</i> )	Phacidiopycnis rot
<b>Sordariales</b>	
<b>Chaetomiaceae</b>	
<i>Chaetomium</i> spp.	fruit rot
<b>Taphrinales</b>	
<b>Taphrinaceae</b>	
<i>Taphrina bullata</i>	leaf blister
<b>Xylariales</b>	
<b>Xylariaceae</b>	
<i>Biscogniauxia marginata</i>	nailhead canker
<i>Daldinia vernicosa</i>	wood rot
<i>Xylaria mali</i>	black root rot
<b>Ascomycota: Saccharomycetes</b>	
<b>Saccharomycetales</b>	
<b>Endomycetaceae</b>	
<i>Endomycopsis mali</i>	rot
<b>Basidiomycota: Basidiomycetes</b>	
<b>Agaricales</b>	
<b>Coprinaceae</b>	
<i>Coprinus psychromorbidus</i>	coprinus rot
<b>Tricholomataceae</b>	
<i>Armillaria mellea</i>	armillaria root rot
<i>Armillaria ostoyae</i>	armillaria root rot
<i>Armillaria tabescens</i>	armillaria root rot
<b>Ceratobasidiales</b>	
<b>Ceratobasidiaceae</b>	
<i>Ceratobasidium stevensii</i>	thread blight
<b>Ganodermatales</b>	
<b>Ganodermataceae</b>	
<i>Ganoderma lucidum</i>	wood rot
<b>Hymenochaetales</b>	
<b>Hymenochaetaceae</b>	
<i>Phellinus pomaceus</i>	white heart rot
<b>Lachnocladiiales</b>	
<b>Lachnocladiaceae</b>	
<i>Scytinostroma galactinum</i>	white root rot
<b>Polyporales</b>	
<b>Corticaceae</b>	
<i>Corticium koleroga</i>	thread blight
<b>Cyphellaceae</b>	
<i>Maireina marginata</i>	wood decay
<b>Meripilaceae</b>	
<i>Phlebia radiata</i>	wood decay
<i>Trametes ochracea</i>	wood decay
<b>Poriales</b>	
<b>Coriolaceae</b>	
<i>Ceriporia spissa</i>	wood rot
<i>Coriolopsis gallica</i>	white rot
<i>Fomes fomentarius</i>	wood decay
<i>Fomitopsis pinicola</i>	brown cubical rot
<i>Laetiporus sulphureus</i> (anamorph <i>Sporotrichum versisporum</i> )	brown cubical rot
<i>Lenzites betulina</i>	wood decay
<i>Oxyporus latemarginatus</i>	wood decay
<i>Oxyporus similis</i>	wood decay
<b>Stereales</b>	
<b>Atheliaceae</b>	
<i>Buiterelfia eustacei</i>	storage rot



<b>Sistotremataceae</b>	
<i>Phymatotrichopsis omnivorum</i>	Texas root rot
<b>Basidiomycota: Urediniomycetes</b>	
<b>Uredinales</b>	
<b>Pucciniaceae</b>	
<i>Gymnosporangium clavipes</i>	quince rust
<i>Gymnosporangium cornutum</i>	rust
<i>Gymnosporangium fuscum</i>	European pear rust
<i>Gymnosporangium globosum</i>	American hawthorn rust
<i>Gymnosporangium hemisphaericum</i>	rust
<i>Gymnosporangium libocedri</i>	Pacific Coast pear rust
<i>Gymnosporangium nelsonii</i>	Rocky Mountain pear rust
<i>Gymnosporangium nidus-avis</i>	rust
<i>Gymnosporangium nootkatense</i>	yellow cypress rust
<i>Gymnosporangium shiraianum</i>	rust
<i>Gymnosporangium</i> spp.	cedar apple rust
<i>Gymnosporangium tremelloides</i>	common juniper gall rust
<i>Gymnosporangium yamadae</i>	Japanese apple rust
<i>Gymnosporangium juniperi-virginianae</i>	cedar apple rust
<b>Unknown Uredinales</b>	
<i>Roestelia fenzeliana</i>	rust
<i>Roestelia levis</i>	rust
<b>Basidiomycota: Ustomycetes</b>	
<b>Platyglloeales</b>	
<b>Platyglloeaceae</b>	
<i>Helicobasidium mompa</i>	violet root rot
<b>Mitosporic Fungi (Coelomycetes)</b>	
<b>Sphaeropsidales</b>	
<b>Sphaerioidaceae</b>	
<i>Cytospora schulzeri</i>	bark disease
<i>Dothiorella mali</i>	fruit rot
<i>Phomopsis truncicola</i>	blight
<i>Phyllosticta solitaria</i>	apple blotch
<i>Phyllosticta</i> spp.	leaf spot
<i>Pyrenochaeta mali</i>	fruit rot
<i>Sphaeropsis pyriputrescens</i>	Sphaeropsis rot
<b>Mitosporic Fungi (Hyphomycetes)</b>	
<b>Hyphomycetales</b>	
<b>Dematiaceae</b>	
<i>Alternaria mali</i>	alternaria blotch
<i>Alternaria</i> spp.	
<i>Helminthosporium papulosum</i>	black pox
<i>Cladosporium</i> spp.	mouldy core
<i>Epicoccum</i> spp.	mouldy core
<i>Stemphylium</i> spp.	
<i>Ulocladium</i> spp.	cladosporium rot
<b>Moniliaceae</b>	
<i>Aspergillus</i> spp.	coloured moulds
<i>Botrytis mali</i>	fruit rot
<i>Cephalosporium carpogenum</i>	fruit rot
<i>Cephalosporium</i> spp.	
<i>Penicillium</i> spp.	rot
<i>Ramularia macrospora</i>	bellflower leaf spot
<i>Verticillium</i> spp.	verticillium wilt
<b>Tuberculariales</b>	
<b>Tuberculariaceae</b>	
<i>Fusarium</i> spp.	
<b>Unknown Hyphomycetes</b>	
-	
<i>Oidium</i> 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’

Apple sessile leaf phytoplasma

‘*Candidatus* Phytoplasma mali’

Apple proliferation phytoplasma

**Disease of unknown aetiology**

Apple blister bark agent

Apple brown ringspot agent

Apple bumpy fruit agent

Apple bunchy top agent

Apple dead spur agent

Apple decline

Apple freckle scurf agent

Apple green dimple and ring blotch agent

Apple junction necrotic pitting agent

Apple McIntosh depression agent

Apple narrow leaf agent

Apple Newton wrinkle agent

Apple pustule canker agent

Apple red ring agent

Apple rosette agent

Apple rough skin agent

Apple russet wart agent

Apple star crack agent

Apple transmissible internal bark necrosis agent

## Inspection, Testing and Treatment Requirements for *Malus*

ORGANISM TYPES	MPI-ACCEPTED METHODS
<b>Mites</b>	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]
<b>Fungi</b>	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
<b>Oomycetes</b>	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
<b>Bacteria</b>	
<i>Pseudomonas syringae</i> pv. <i>papulans</i>	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
<b>Viruses</b>	
<i>Cherry rasp leaf virus</i>	Herbaceous indexing ( <i>Chenopodium quinoa</i> and <i>Chenopodium amaranticolor</i> ) <b>AND</b> PCR
<i>Tomato bushy stunt virus</i>	Herbaceous indexing ( <i>Chenopodium quinoa</i> and <i>Chenopodium amaranticolor</i> )
<i>Tomato ringspot virus</i>	Herbaceous indexing ( <i>Chenopodium quinoa</i> and <i>Chenopodium amaranticolor</i> ) <b>AND</b> ELISA <b>or</b> PCR
<b>Viroids</b>	
<i>Apple dimple fruit viroid</i>	PCR
<i>Apple fruit crinkle viroid</i>	PCR
<i>Apple scar skin viroid</i>	PCR
<b>Phytoplasmas</b>	
‘ <i>Candidatus</i> Phytoplasma asteris’ (Apple sessile leaf phytoplasma)	Nested PCR <b>or</b> real time PCR using universal phytoplasma primers
‘ <i>Candidatus</i> Phytoplasma mali’ (Apple proliferation phytoplasma)	Nested PCR <b>or</b> real time PCR using universal phytoplasma primers
<b>Diseases of unknown aetiology</b>	
Apple blister bark agent	Growing season inspection
Apple brown ringspot agent	Growing season inspection
Apple bumpy fruit agent	Growing season inspection
Apple bunchy top agent	Growing season inspection
Apple dead spur agent	Growing season inspection
Apple decline	Growing season inspection
Apple freckle scurf agent	Growing season inspection
Apple green dimple and ring blotch agent	Growing season inspection
Apple junction necrotic pitting agent	Growing season inspection
Apple McIntosh depression agent	Growing season inspection
Apple narrow leaf agent	Growing season inspection
Apple Newton wrinkle agent	Growing season inspection
Apple pustule canker agent	Growing season inspection
Apple red ring agent	Growing season inspection
Apple rosette agent	Growing season inspection
Apple rough skin agent	Growing season inspection
Apple russet wart agent	Growing season inspection
Apple star crack agent	Growing season inspection
Apple transmissible internal bark necrosis agent	Growing season inspection

**Notes:**

1. **‘Pest free area’ or ‘pest free place of production’** endorsements for regulated viruses, viroids, phytoplasmas, and diseases of unknown aetiology must be assessed by MPI prior to permit issue. The exporting NPPO must endorse additional declarations on the phytosanitary certificate, to be considered equivalent to testing in post entry quarantine.
2. The **unit for testing** is defined in section 2.3.2.1.
3. **Tissue culture plantlets** must be deflasked and grown in a post entry quarantine greenhouse, only material from the greenhouse is to be selected for testing.
4. **Growing season** is defined as an extended period of plant growth that includes environmental conditions equivalent to spring (longer wetter days and colder temperatures), summer (longer dryer days and warm temperatures), and autumn (shorter wetter days and warm but cooling temperatures).
5. **Virus testing** is to be conducted on new spring growth.
6. **Phytoplasma and bacteria testing** is to be conducted at the end of the summer growth period.
7. **Herbaceous indicator hosts:** *Chenopodium quinoa* and *Chenopodium amaranticolor*. Two plants of each herbaceous indicator species must be used in each test. Herbaceous indicator plants must be grown at 18-25°C before and after inoculation and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.
8. **Testing protocols** for tests completed in New Zealand are described in the Malus (Apple) Post-Entry Quarantine Testing Manual, which can be viewed on the website:  
<http://www.mpi.govt.nz/protection-and-response/laboratories/plant-health-and-environment-laboratory/publications/>
9. **Inspection** of the *Malus* plants by the operator of the PEQ facility for signs of pest and disease must be at least twice per week for the first three months of active growth, and during spring and autumn. All other times of active growth (summer), plants should be inspected once per week. A record of inspections carried out by the Operator is to be kept and made available to the MPI Inspector on request.
10. **Other internationally recognised testing methods** may be accepted by MPI with prior notification.

## *Mangifera*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Mangifera*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** Australia, India, Mexico, Pakistan, Philippines

**Quarantine Pests:** *Ceratocystis fimbriata*, *Phellinus noxius*, *Phytophthora palmivora*, *Xanthomonas campestris* pv. *mangiferae-indicae*

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 6 months

a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)

b. Conditions for *Phellinus noxius* (section 2.2.1.13)

**Note:** Only applies to the following species: *Mangifera indica*

c. Conditions for *Phytophthora palmivora*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

d. Conditions for *Xanthomonas campestris* pv. *mangiferae-indicae*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “*Xanthomonas campestris* pv. *mangiferae-indicae* is not known to occur in \_\_\_\_\_ [the country or state where the plants were grown]”.

**OR**

ii) “The plants were inspected during the growing season and no *Xanthomonas campestris* pv. *mangiferae-indicae* was detected”.

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 2

**Minimum Period:** 6 months

a. Conditions for *Xanthomonas campestris* pv. *mangiferae-indicae*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “*Xanthomonas campestris* pv. *mangiferae-indicae* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

**OR**

- ii) “The plants were inspected during the growing season and no *Xanthomonas campestris* pv. *mangiferae-indicae* was detected”.

## ***Metrosideros***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Metrosideros*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Ceratocystis fimbriata*, *Phellinus noxius*, *Phytophthora palmivora*, *Puccinia psidii* sensu lato (s.l.) complex (including *Uredo rangelii*), *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

##### **OPTION 1:**

**PEQ:** Level 2

**Minimum Period:** 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)  
**Note:** Only applies to members of the *Metrosideros* and *Pimenta* genera
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)  
**Note:** Only applies to members of the *Leptospermum*, *Metrosideros* and *Myrtus* genera
- c. Conditions for *Phellinus noxius* (section 2.2.1.13)  
**Note:** Only applies to the following species: *Melaleuca leucadendra*
- d. Conditions for *Phytophthora palmivora*  
**Note:** Only applies to members of the *Psidium* genus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

- e. Conditions for *Puccinia psidii* s.l. complex (including *Uredo rangelii*)  
**Additional Declaration:** “*Puccinia psidii* s.l. complex (including *Uredo rangelii*) is not known to occur in \_\_\_\_\_[the country of origin]”.

##### **OPTION 2:**

**PEQ:** Level 3B

**Minimum Period:** 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)  
**Note:** Only applies to members of the *Metrosideros* and *Pimenta* genera

- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Note:** Only applies to members of the *Leptospermum*, *Metrosideros* and *Myrtus* genus

## **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

### **PLUS**

- a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)

**Note:** Only applies to members of the *Leptospermum*, *Metrosideros* and *Myrtus* genus

- b. Conditions for *Puccinia psidii* s.l. complex (including *Uredo rangelii*)

### **OPTION 1:**

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “*Puccinia psidii* s.l. complex (including *Uredo rangelii*) is not known to occur in \_\_\_\_\_[the country of origin]”.

### **OR**

- ii) “The tissue cultures in this consignment have been actively growing in the culture container for at least four weeks at temperatures between 15-23°C (59-73.4°F)”.

### **OPTION 2:**

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 2 Tissue culture laboratory

**Minimum Period:** 4 weeks

- The cultures containers are not to be opened during the quarantine period.

**Guidance for importers:** Tissue cultures imported under this option must complete the PEQ requirements for *Puccinia psidii* before being deflasked into the PEQ greenhouse.



## ***Miscanthus x giganteus***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Miscanthus x giganteus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

1. **Approved Countries:** United Kingdom and United States of America

2. **Type of material permitted entry:** Plants *in-vitro*

3. **Pests of *Miscanthus x giganteus***  
Refer to the enclosed pest list.

4. **Entry conditions:**

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Miscanthus x giganteus* nursery stock exported to New Zealand.

**Import permit:** an import permit is required.

(ii) Phytosanitary requirements

The full botanical name of *Miscanthus x giganteus* must be identified upon the phytosanitary certificate.

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Miscanthus x giganteus* plants in tissue culture have been:

- derived from mother plants which were not expressing symptoms of infection by regulated pests prior to the excision of the in-vitro plantlets.  
**AND**
- derived from explant material which has been surface sterilised in a solution of 0.5% sodium hypochlorite and sterile water, or MPI approved alternative treatment.  
**AND**
- propagated in culture media which is clear.  
**AND**
- prepared by asexual reproduction (clonal techniques) under sterile conditions.  
**AND**
- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.  
**AND**
- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection

Treatment” section. The following additional declarations must be identified on the phytosanitary certificate.

“The *Miscanthus x giganteus* plants in-vitro in this consignment have been:

- derived from mother plants sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from *Leifsonia xyli* subsp. *xyli*, Miscanthus streak virus, and Sugarcane mosaic virus

**AND**

- derived from mother plants sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from *Ustilago scitaminea* **OR** derived from explants that have been subjected to two consecutive hot water treatments at a minimum temperature of 50°C for 3 hours per treatment **OR** two consecutive hot water treatments at a minimum temperature of 52°C for 1 hour per treatment”

(iv) Inspection, Testing and Treatment of the consignment

Where an additional declaration cannot be attested to on the phytosanitary certificate by the NPPO, testing of material shall be completed in post-entry quarantine upon arrival in New Zealand as specified within the testing and treatment requirements in this schedule.

(v) Post-entry quarantine

**PEQ:** Level 2

**Quarantine Period:** A minimum post entry quarantine period of 60 days of active continuous growth, within environmental conditions comprising a minimum average daily temperature of 20°C, and 8 hour light period shall be required to complete inspections and/or testing for pests as specified within the enclosed Regulated Pest List.

The quarantine period may be extended if material is slow growing, environmental requirements are not met, pests are detected, or additional treatments/tests are required. Sub-culturing is not to be undertaken during the PEQ period without prior approval from MPI. The costs of all inspections, tests and treatments while the *Miscanthus x giganteus* plant material is in PEQ shall be borne by the importer.

## Regulated Pest List for *Miscanthus x giganteus*:

### Bacteria

*Acidovorax avenae* ssp. *avenae*  
*Leifsonia xyli* subsp. *Xyli*

Bacterial leaf blight  
 Sugarcane ratoon stunting disease

### Fungi

*Acremonium* sp.  
*Colletotrichum* sp.  
*Diaporthe* sp.  
*Diplodia* sp.  
*Drechslera gigantea*  
*Fusarium miscanthi*  
*Fusarium pallidoroseum*  
*Glomerella* sp.  
*Glomerella tucumanensis*  
*Helminthosporium* sp.  
*Leptosphaeria* sp.  
*Magnaporthe salvinii*  
*Mycosphaerella recutita*  
*Mycosphaerella striatiformans*  
*Nigrospora* sp.  
*Passalora koepkei*  
*Peronosclerospora* sp.  
*Phlyctema* sp.  
*Phoma* sp.  
*Phomopsis* sp.  
*Phyllachora* sp.  
*Puccinia melanocephala*  
*Ramularia* sp.  
*Rhizoctonia* sp.  
*Stagonospora* sp.  
*Thanatephorus cucumeris*  
*Ustilago scitaminea*  
*Verticillium* sp.

Black bundle disease  
 Leaf spot  
 Canker  
 Blight  
 Eyespot  
 Rot  
 Rot  
 Leaf spot  
 Leaf spot  
 Eyespot  
 Canker  
 Stem rot  
 Leaf blight  
 Leaf spot  
 Stalk rot  
 Yellow spot  
 Downy mildew  
 Canker  
 Blight  
 Blight  
 Leaf spot  
 Sugarcane rust  
 Anthracnose  
 Root rot  
 Scorch  
 Blight  
 Sugarcane smut  
 Verticillium wilt

### Mites

*Schizotetranychus celarius*

Bamboo mite

### Viruses

*Miscanthus streak virus*  
*Sugarcane mosaic virus*

## Treatment and Testing Requirements during post entry quarantine:

### Guidance:

Treatment and testing requirements identified within this table are required to be undertaken when official assurances specified in this schedule cannot be provided by the exporting country's NPPO.

ORGANISM TYPES	MPI ACCEPTED MEASURES
<b>Fungi</b>	
<i>Ustilago scitaminea</i>	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.
<b>Bacteria</b>	
<i>Leifsonia xyli</i> subsp. <i>xyli</i>	PCR/BIO-PCR, <b>OR</b> fluorescent-antibody staining of sap extracts, concentrated on membrane filters by filtration with observation by epifluorescence microscopy.
<b>Viruses</b>	
<i>Miscanthus streak virus</i>	PCR
<i>Sugarcane mosaic virus</i>	PCR or ELISA

### Notes:

- Unit for testing:** The unit for testing is defined in section 2.3.2.1.
- Sample size for testing:** Sample size required for testing will be determined by MPI based on the specific test to be undertaken.
- 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.
- 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.
- 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.
- Other internationally recognised testing methods:** May be accepted by MPI with prior notification.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Musa*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Bunchy top virus, *Cosmopolites sordidus*, *Fusarium oxysporum* f.sp. *cubense*, *Mycosphaerella fijiensis*, *Pseudomonas solanacearum*, *Radopholus similis*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

**A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 3 months

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2, but subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer.

**PLUS**

- a. Conditions for Bunchy top virus

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. Conditions for *Alternanthera mosaic virus* and *Plantago asiatica mosaic virus*  
Additional Declaration: “*Alternanthera mosaic virus* and *Plantago asiatica mosaic virus* are not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)  
**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*
- b. Conditions for *Alternanthera mosaic virus* and *Plantago asiatica mosaic virus*  
Additional Declaration: “The cultures have been derived from parent stock tested and found free of *Alternanthera mosaic virus* and *Plantago asiatica mosaic virus*”.

## *Narcissus*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Narcissus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Frankliniella occidentalis*, *Hepialus lupulinus*, *Lilioceris lili*, *Pratylenchus scribneri*, *Ramularia vallisumbrosae*, *Sclerotinia polyblastis*, *Steneotarsonemus laticeps*, virus diseases.

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 6 months

**B. For Dormant Bulbs from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, United States of America:**

#### **OPTION 1:**

**No import permit is required**

**PEQ:** None

##### **a. Additional Declaration**

##### **i) For bulbs produced under an MPI-approved Dutch bulb propagation scheme:**

“In addition to inspection of the dormant bulbs prior to shipment, the imported bulbs meet the requirements of the BKD Class 1 bulb certification scheme.”

**OR**

##### **ii) For bulbs NOT produced under an MPI-approved bulb propagation scheme:**

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

#### **OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

**C. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, United States of America:**

**OPTION 1:**

**PEQ:** Level 1

**Minimum Period:** 3 months

a. Additional Declarations

“The dormant bulbs in this consignment have been:

- i) derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

**AND**

- ii) treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.”

**OPTION 2:**

**PEQ:** Level 2

**Minimum Period:** 3 months

**D. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

a. Conditions for virus diseases

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) Post-entry quarantine

**PEQ:** All *Olea* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility approved to the Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**Quarantine Period and Inspection, Testing and Treatment Requirements:** The nursery stock will be grown for a minimum period of 12 months in post-entry quarantine and will be inspected, treated and/or tested for regulated pests as specified in the “Inspection, Testing and Treatment Requirements for *Olea*”, at the expense of the importer. Twelve months is an

indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/tests are required.

# Pest List for *Olea*

## REGULATED PESTS (actionable)

### Insect

### Insecta

### Insecta

#### Coccidae

*Saissetia privigna*

black scale

#### Coleoptera

##### Attelabidae

*Rhynchites cribripennis*

twig cutter

##### Buprestidae

*Anthaxia ariadna*

wood-boring beetle

##### Scolytidae

*Hylesinus fraxini*

bark beetle

*Hylesinus oleiperda*

bark beetle

*Hylesinus toranio*

bark beetle

*Phloeotribus oleae*

bark beetle

*Phloeotribus scarabaeiodes*

bark beetle

*Xylosandrus compactus*

black twig borer

### Diptera

#### Cecidomyiidae

*Thomasiniana* sp.

olive bark midge

#### Asterolecaniidae

*Pollinia pollini*

globe shaped olive scale

#### Coccidae

*Ceroplastes rusci*

fig wax scale

*Lichtensia viburni*

scale

*Metacaronema japonica*

scale insect

#### Diaspididae

*Aonidomytilus espinosai*

scale

*Hemiberlesia palmarum*

palm scale

*Leucaspis riccae*

scale

*Lindingaspis ferrisi*

scale

*Parlatoria oleae*

olive scale

*Pseudaulacaspis pentagona*

white peach scale

*Selenaspis articulatus*

West Indian red scale

### Lepidoptera

#### Pyralidae

*Euzophera pinguis*

bark borer

### Mite

### Arachnida

#### Acarina

##### Eriophyidae

*Aceria cretica*

mite

*Aceria oleae*

olive mite

*Aculops benakii*

olive yellow spot mite

*Aculus olearius*

olive mite

*Ditrymacus athiasellus*

olive mite

*Eriophyes oleae*

olive bud mite

*Eriophyes olivi*

olive mite

*Oxycenus maxwelli*

olive leaf and flower mite

*Oxycenus niloticus*

olive leaf and flower mite

*Oxycenus noloticus*

olive leaf and flower mite

*Tegonotus hassani*

olive rust mite

#### Tenuipalpidae

*Brevipalpus chalkidicus*

false spider mite

<i>Brevipalpus macedonicus</i>	false spider mite
<i>Brevipalpus oleae</i>	false spider mite
<i>Brevipalpus olearius</i>	false spider mite
<i>Brevipalpus olivicola</i>	false spider mite
<i>Raoiella macfarlanei</i>	false spider mite
<i>Tenuipalpus caudatus</i>	false spider mite
<b>Tetranychidae</b>	
<i>Eotetranychus lewisi</i>	big beaked plum mite
<b>Fungus</b>	
<b>Ascomycota</b>	
<b>Dothideales</b>	
<b>Capnodiaceae</b>	
<i>Capnodium elaeophilum</i>	sooty mould
<b>Elsinoaceae</b>	
<i>Elsinoe oleae</i>	olive scab
<b>Unknown Dothideales</b>	
<i>Massariella oleae</i>	bark canker
<i>Massariella zambettakiana</i>	canker
<i>Zukalia purpurea</i>	black mildew
<b>Xylariales</b>	
<b>Xylariaceae</b>	
<i>Xylaria sicula</i>	root rot
<b>Basidiomycota</b>	
<b>Agaricales</b>	
<b>Agaricaceae</b>	
<i>Armillaria mellea</i> (anamorph <i>Rhizomorpha subcorticalis</i> )	armillaria root rot
<b>Boletales</b>	
<b>Paxillaceae</b>	
<i>Omphalotus olearius</i>	wood rot
<b>Ganodermatales</b>	
<b>Ganodermataceae</b>	
<i>Ganoderma lucidum</i> (anamorph <i>Polyporus lucidus</i> )	wood rot
<b>Hymenochaetales</b>	
<b>Hymenochaetaceae</b>	
<i>Phellinus igniarius</i>	wood rot
<b>Oomycota</b>	
<b>Peronosporales</b>	
<b>Peronosporaceae</b>	
<i>Phytophthora palmivora</i>	Coconut budrot
<i>Phytophthora ramorum</i>	Sudden oak death disease
<b>Poriales</b>	
<b>Coriolaceae</b>	
<i>Fomes fomentarius</i>	
<i>Fomes fulvus</i>	
<i>Fomes salicinus</i>	
<i>Fomes torulosus</i>	wood rot
<i>Fomes yucatonensis</i>	wood rot
<b>Polyporaceae</b>	
<i>Polyporus biennis</i>	wood rot
<i>Polyporus oleae</i>	wood rot
<b>Stereales</b>	
<b>Sistotremataceae</b>	
<i>Trechispora brinkmanii</i> (anamorph <i>Phymatotrichopsis omnivorum</i> )	Texas root rot
<b>Mitosporic Fungi (Coelomycetes)</b>	
<b>Sphaeropsidales</b>	
<b>Sphaerioidaceae</b>	
<i>Camarosporium dalmatica</i>	brown spot
<i>Cytospora oleina</i>	canker

<i>Macrophoma dalmatica</i>	fruit rot
<i>Phoma incompta</i>	stem blight
<i>Phyllosticta oleae</i>	phyllosticta leaf spot
<i>Septoria obesa</i>	leaf spot
<i>Septoria oleae</i>	leaf spot
<i>Septoria oleagina</i>	leaf spot
<i>Septoria serpentaria</i>	leaf spot
<i>Sphaeropsis dalmatica</i>	stem gall
<i>Sphaeropsis oleae</i>	stem gall
<b>Unknown Coelomycetes</b>	
<b>Unknown Coelomycetes</b>	
<i>Cylindrosporium olivae</i>	leaf spot
<b>Bacterium</b>	
<b>Pseudomonadaceae</b>	
<i>Pseudomonas syringae</i> pv. <i>garcae</i>	twig blight
<i>Xylella fastidiosa</i>	
<b>Virus</b>	
<i>Cherry leaf roll virus</i> [strains not in New Zealand]	-
<i>Olive latent 1 virus</i>	-
<i>Olive latent 2 virus</i>	-
<i>Olive latent ringspot virus</i>	-
<i>Olive leaf yellowing-associated virus</i>	-
<i>Olive vein yellow virus</i>	-
<i>Strawberry latent ringspot virus</i> [strains not in New Zealand]	-
<b>Phytoplasma</b>	
Olive witches' broom phytoplasma	-
<b>Disease of unknown aetiology</b>	
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)
<b>Mites</b>	Visual inspection <b>AND</b> approved miticide treatments (Refer to section 2.2.1.6 of the basic conditions) [cuttings only] <b>or</b> binocular microscope inspection in PEQ [plants in tissue culture only].
<b>Fungi</b>	Growing season inspection in PEQ for disease symptom expression.
<b>Oomycete</b>	Growing season inspection in PEQ for disease symptom expression.
<b>Bacteria</b>	
<i>Pseudomonas syringae</i> pv. <i>garcae</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Xylella fastidiosa</i>	Growing season inspection in PEQ for disease symptom expression <b>AND</b> PCR
<b>Viruses</b>	
<i>Cherry leaf roll virus</i> [strains not in New Zealand]	ELISA <b>or</b> PCR <b>AND</b> herbaceous indicators Ca, Cq and Nb.
<i>Olive latent 1 virus</i>	Herbaceous indicators Ca, Cq and Nb.
<i>Olive latent 2 virus</i>	Herbaceous indicators Ca, Cq and Nb.
<i>Olive latent ringspot virus</i>	Herbaceous indicators Ca and Cq.
<i>Olive leaf yellowing-associated virus</i>	Woody indicators ( <i>Olea europaea</i> cv. Biancolilla)
<i>Olive vein yellow virus</i>	Herbaceous indicators Cq
<i>Strawberry latent ringspot virus</i> [strains not in New Zealand]	ELISA <b>or</b> PCR <b>AND</b> herbaceous indicators Ca and Cq.
<b>Phytoplasmas</b>	Woody indicators <b>AND</b> nested PCR <b>or</b> real time PCR using universal phytoplasma primers.
<b>Diseases of unknown aetiology</b>	Growing season inspection in PEQ for disease symptom expression.

### Notes:

- The unit for testing is defined in section 2.3.2.1.
- 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.
- 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.
- Enzyme linked immunosorbent assay (ELISA); Polymerase chain reaction (PCR).
- 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.
- PCR and ELISA must be validated using positive controls/reference material prior to use in quarantine testing.
- Positive and negative controls must be used in ELISA tests.
- 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.
- 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.
- With prior notification, MPI will accept other internationally recognised testing methods.

## ***Paeonia* (herbaceous species)**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Paeonia* (herbaceous)”.

### **GENERAL CONDITIONS:**

**Approved Countries:** Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom, United States of America

**Quarantine Pests:** *Cronartium flaccidum*, *Phymatotrichopsis omnivora*

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

#### **For Dormant Tubers:**

**PEQ:** Level 1 or Level 2 (see below)

**Minimum Period:** 3 months

- a. Conditions for *Cronartium flaccidum*

Additional Declaration: “The dormant tubers have been sourced from a ‘pest free area’ or ‘pest free place of production’, free from *Cronartium flaccidum*”.

- b. Conditions for *Phymatotrichopsis omnivora*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The dormant tubers have been sourced from a ‘pest free area’, free from *Phymatotrichopsis omnivora*”.

**OR**

- ii) “The dormant bulbs have been sourced from a ‘pest free place of production’, free from *Phymatotrichopsis omnivora*”.

**AND**

- The consignment must be treated for fungi as described in Section 2.2.1.7 “Pesticide treatments for dormant bulbs”. If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section of the phytosanitary certificate.

**AND**

- Post-entry quarantine: Upon arrival in New Zealand the dormant bulbs will require a period of at least 3 months in Level 2 post-entry quarantine.

## ***Paeonia* (tree species)**

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Paeonia* (tree species)”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, United Kingdom, United States of America

**Quarantine Pests:** *Cronartium flaccidum*

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 1

**Minimum Period:** 3 months

**Isolation:** open ground - 400m from any *Pinus* tree

##### **a. Conditions for *Cronartium flaccidum***

- i) Additional Declaration: “*Cronartium flaccidum* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

**AND**

- ii) Additional Declaration: “The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water”.

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.



*Papaver somniferum*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Papaver somniferum*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Entry Conditions:** **Basic;** with variations and additional conditions as specified below:

**Import permit:** an import permit is required. Before applying for an import permit, the importer must obtain written approval to import from:

**Director General of Health  
Ministry of Health  
PO Box 5013  
Wellington  
Attention: Advisor, Controlled Drug Licensing  
Telephone: 04 496 2438**

## *Paulownia*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Paulownia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** Australia

**Quarantine Pests:** *Phytophthora palmivora*, Witches broom phytoplasma

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for Witches broom phytoplasma

Additional Declaration: “Witches broom phytoplasma is not known to occur in \_\_\_\_\_ [the country or state where the plants were grown]”.

- b. Conditions for *Phytophthora palmivora*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

- a. Conditions for Witches broom phytoplasma

Additional Declaration: “The cultures have been derived from parent stock tested and found free of Witches broom phytoplasma”.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Persea*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**1. Type of *Persea* nursery stock approved for entry into New Zealand**

Cuttings (dormant); Plants in tissue culture

**2. Pests of *Persea***

Refer to the pest list.

**3. Entry conditions for:**

**3.1 *Persea* cuttings and tissue culture from any country**

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Persea* nursery stock exported to New Zealand.

**Import permit:** an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Persea* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- sourced from a ‘pest free area’ or ‘pest free place of production’, free from *Avocado cryptic virus 3*, *Potato spindle tuber viroid* and Avocado black streak disease.

**AND**

- treated for regulated insects and mites as described in section 2.2.1.6 within 7 days prior to shipment [cuttings only].

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section [cuttings only] and by providing the following additional declaration to the phytosanitary certificate:

“The *Persea* cuttings / plants in tissue culture [choose ONE option] have been:

- sourced from a ‘pest free area’ and/or a ‘pest free place of production’, free from *Avocado cryptic virus 3*, *Potato spindle tuber viroid* and Avocado black streak disease.”

(iv) Post-entry quarantine

**PEQ:** All *Persea* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility approved to the Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**Quarantine Period and Inspection, Testing and Treatment Requirements:** The nursery stock will be grown for a minimum period of 12 months in post-entry quarantine and will be inspected, treated and/or tested for regulated pests as specified in the “Inspection, Testing and Treatment Requirements for *Persea*”, at the expense of the importer. Twelve months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/tests are required.

# Pest List for *Persea*

## REGULATED PESTS (actionable)

### Insect

### Insecta

#### Coleoptera

##### Chrysomelidae

*Monolepta apicalis*

monolepta beetle

*Monolepta australis*

red-shouldered leaf beetle

##### Curculionidae

*Copturus aguacatae*

branch boring weevil

*Diaprepes abbreviatus*

citrus weevil

*Heilipus squamosus*

-

*Naupactus xanthographus*

fruit tree weevil

#### Hemiptera

##### Coreidae

*Amblypelta lutescens*

banana spotting bug

*Amblypelta nitida*

fruit-spotting bug

*Pseudotheraptus wayi*

coreid bug

##### Lygaeidae

*Nysius ericae*

false chinch bug

##### Tingidae

*Pseudacysta perseae*

avocado lace bug

#### Homoptera

##### Aleyrodidae

*Aleurocanthus woglumi*

citrus blackfly

*Parabemisia myricae*

Japanese bayberry whitefly

*Paraleyrodes minei*

whitefly

*Paraleyrodes perseae*

plumeria whitefly

*Tetraleurodes perseae*

whitefly

*Trialeurodes floridensis*

avocado whitefly

##### Coccidae

*Ceroplastes floridensis*

Florida wax scale

*Ceroplastes rubens*

red wax scale

*Ceroplastes rusci*

fig wax scale

*Chloropulvinaria psidii*

guava scale

*Protopulvinaria pyriformis*

pyriform scale

*Pulvinaria mammeae*

-

##### Diaspididae

*Aonidiella orientalis*

oriental yellow scale

*Aspidiotus destructor*

coconut scale

*Chrysomphalus aonidum*

Florida red scale

*Chrysomphalus dictyospermi*

dictyospermum scale

*Fiorinia fioriniae*

fiorinia scale

*Pinaspis strachani*

hibiscus snow scale

*Selenaspidus articulatus*

West Indian red scale

##### Margarodidae

*Icerya seychellarum*

Seychelles scale

##### Pseudococcidae

*Dysmicoccus brevipes*

pineapple mealybug

*Ferrisia virgata*

striped mealybug

*Nipaecoccus nipae*

coconut mealybug

*Planococcus citri*

citrus mealybug

##### Psyllidae

*Trioza aguacate*

psyllid

*Trioza anceps*

psyllid

*Trioza godoyae*

psyllid

*Trioza perseae*

psyllid

<b>Hymenoptera</b>	
<b>Formicidae</b>	
<i>Atta cephalotes</i>	leaf-cutting ant
<b>Lepidoptera</b>	
<b>Geometridae</b>	
<i>Ascotis selenaria</i>	mugwort looper
<i>Sabulodes aegrotata</i>	omnivorous looper
<b>Hesperiidae</b>	
<i>Pyrrhopyge chalybea</i>	swift moth
<b>Noctuidae</b>	
<i>Peridroma margaritosa</i>	-
<i>Prodenia eridania</i>	-
<i>Pseudoplusia includens</i>	soybean looper
<b>Oecophoridae</b>	
<i>Stenoma catenifer</i>	stenomid moth
<b>Pyralidae</b>	
<i>Cryptoblabes gnidiella</i>	Christmas berry webworm
<i>Stericta albifasciata</i>	-
<b>Tortricidae</b>	
<i>Amorbia cuneana</i>	leafroller
<i>Amorbia emigratella</i>	Mexican leafroller
<i>Amorbia essigana</i>	leafroller
<i>Argyrotaenia citrana</i>	orange tortrix
<i>Cacoecimorpha pronubana</i>	carnation leafroller
<i>Cryptophlebia leucotreta</i>	false codling moth
<i>Homona spargotis</i>	avocado leafroller
<i>Isotenes miserana</i>	orange fruitborer
<i>Platynota stultana</i>	omnivorous leafroller
<b>Thysanoptera</b>	
<b>Thripidae</b>	
<i>Retithrips syriacus</i>	black vine thrips
<i>Selenothrips rubrocinctus</i>	red-banded thrips
<b>Mite</b>	
<b>Arachnida</b>	
<b>Acarina</b>	
<b>Tetranychidae</b>	
<i>Oligonychus coffeae</i>	tea red spider mite
<i>Oligonychus perseae</i>	spider mite
<i>Oligonychus punicae</i>	avocado brown mite
<i>Oligonychus yothersi</i>	avocado red mite
<b>Fungus</b>	
<b>Ascomycota</b>	
<b>Phyllachorales</b>	
<b>Phyllachoraceae</b>	
<i>Glomerella cingulata</i> var. <i>minor</i> (anamorph	anthracnose
<i>Colletotrichum gloeosporioides</i> var. <i>minus</i> )	
<b>Xylariales</b>	
<b>Xylariaceae</b>	
<i>Rosellinia bunodes</i>	-
<i>Rosellinia pepo</i>	-
<b>Basidiomycota</b>	
<b>Hymenochaetales</b>	
<b>Hymenochaetaceae</b>	
<i>Phellinus noxius</i>	brown root rot
<b>Oomycota</b>	
<b>Pythiales</b>	
<b>Pythiaceae</b>	
<i>Phytophthora palmivora</i>	black rot

<b>Dothideomycetes</b>	
<b>Myriangiales</b>	
<b>Elsinoeaceae</b>	
<i>Sphaceloma perseae</i>	Avocado scab
<b>mitosporic fungi (Coelomycetes)</b>	
<b>Sphaeropsidales</b>	
<b>Sphaerioidaceae</b>	
<i>Phomopsis perseae</i>	fruit rot
<b>mitosporic fungi (Hyphomycetes)</b>	
<b>Hyphomycetales</b>	
<b>Dematiaceae</b>	
<i>Pseudocercospora purpurea</i>	cercospora spot blotch
<b>unknown Hyphomycetes</b>	
<b>unknown Hyphomycetes</b>	
<i>Stilbella cinnabarina</i>	-
<b>Bacteria</b>	
<b>Pseudomonadaceae</b>	
<i>Xylella fastidiosa</i>	Pierce's disease
<b>Virus</b>	
<i>Avocado cryptic virus 3</i>	-
<b>Viroid</b>	
<i>Avocado sunblotch viroid</i> [strains not in New Zealand]	-
<i>Potato spindle tuber viroid</i>	-
<b>Disease of unknown aetiology</b>	
Avocado black streak	-

## Inspection, Testing and Treatment Requirements for *Persea*

ORGANISM TYPES	MPI-ACCEPTED METHODS (See notes below)
<b>Mites</b>	Visual inspection <b>AND</b> approved miticide treatments (Refer to section 2.2.1.6 of the basic conditions) [cuttings only] <b>or</b> binocular microscope inspection in PEQ [plants in tissue culture only].
<b>Fungi</b>	Growing season inspection in PEQ for disease symptom expression.
<b>Bacteria</b>	
<i>Xylella fastidiosa</i>	Growing season inspection in PEQ for disease symptom expression <b>AND</b> PCR
<b>Viruses</b>	
<i>Avocado cryptic virus 3</i>	‘pest free area’ <b>or</b> ‘pest free place of production’ <b>AND</b> Growing season inspection in PEQ for disease symptom expression.
<b>Viroids</b>	
<i>Avocado sunblotch viroid</i> [strains not in New Zealand]	Hybridisation <b>or</b> PAGE <b>or</b> PCR (two sets).
<i>Potato spindle tuber viroid</i>	‘pest free area’ <b>or</b> ‘pest free place of production’ <b>AND</b> Growing season inspection in PEQ for disease symptom expression.
<b>Diseases of unknown aetiology</b>	
Avocado black streak	‘pest free area’ <b>or</b> ‘pest free place of production’ <b>AND</b> Growing season inspection in PEQ for disease symptom expression.

### Notes:

1. The unit for testing is defined in section 2.3.2.1.
2. Testing must be carried out on *Persea* plants while they are in active growth.
3. Polymerase chain reaction (PCR), Polyacrylamide gel electrophoresis (PAGE) and hybridisation must be validated using positive controls prior to use in quarantine testing. Positive and negative controls (including a blank water control) must be used in molecular tests. Ideally positive internal controls and a negative plant control should be used.
4. Inspect *Persea* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy.
5. With prior notification, MPI will accept other internationally recognised testing methods.



**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Petunia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Phytophthora palmivora*, *Potato spindle tuber viroid*, *Tomato chlorotic dwarf viroid*

**Entry Conditions:** **Basic;** with variations and additional conditions as specified below:

**A. For Whole Plants and Cuttings**

**Import Permit:** An import permit is required

**GM Testing Certificate or Non-GMO Declaration:** A copy of the GM testing certificate or signed non-GMO declaration must be submitted with the import permit application and with the imported whole plants and cuttings upon arrival in New Zealand

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Phytophthora palmivora*

**Note:** Only applies to members of the *Petunia* genus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

b. Conditions for *Potato spindle tuber viroid*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Potato spindle tuber viroid* is not known to occur”.

**OR**

- ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*”.

**OR**

- iii) Pre-determined testing in PEQ: refer to “Inspection, Testing and Treatment Requirements for *Petunia*”.

c. Conditions for *Tomato chlorotic dwarf viroid*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Tomato chlorotic dwarf viroid* is not known to occur”.

**OR**

- ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*”.

**OR**

- iii) Pre-determined testing in 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 level 2 PEQ greenhouse for a minimum period of 3 months to undergo testing for the presence of *Potato spindle tuber viroid* during the quarantine period.

b. Conditions for *Tomato chlorotic dwarf viroid*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Tomato chlorotic dwarf viroid* is not known to occur”.

**OR**

- ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*”.

**OR**

- iii) Pre-determined testing in PEQ: refer to “Inspection, Testing and Treatment Requirements for *Petunia*”.

**Guidance for importers:** Tissue culture imported under this option must be imported into a level 2 PEQ greenhouse for a minimum period of 3 months to undergo testing for the presence of *Tomato chlorotic dwarf viroid* during the quarantine period.

### Requirements for *Petunia* nursery stock:

All varieties of *Petunia* nursery stock imported into New Zealand must meet one of the following requirements:

- i. A non-GMO declaration, signed by the importer and exporter, that the *Petunia* nursery stock is free from genetically modified material must be submitted (for a copy of the 'Declaration Form' refer to the end of this schedule).

#### OR

- 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 <http://mpi.govt.nz/importing/plants/seeds-for-sowing/genetically-modified-seeds/>

### Inspection, Testing and Treatment Requirements for *Petunia*

ORGANISM	MPI-ACCEPTED METHODS	Comments
<b>Viroids</b>		
<i>Potato spindle tuber viroid</i>	PCR based methods	Applies to whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility
<i>Tomato chlorotic dwarf viroid</i>	PCR based methods	Applies to whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility

**Guidance for importers:** Testing in PEQ for the presence of *Potato spindle tuber viroid* and *Tomato chlorotic dwarf viroid* is only necessary when an importer has been unable to secure one of the alternative declarations.

# Declaration Form

## To be completed and signed by the exporter and importer.

As defined by the New Zealand HSNO Act 1996, Genetically modified organism means, unless expressly provided otherwise by regulations, any organism in which any of the genes or any other genetic material (a) have been modified by in vitro techniques; or (b) are inherited or otherwise derived, through any number of replications, from any genes or other genetic material which has been modified by in vitro techniques.

Note that under the Hazardous Substances and New Organisms (HSNO) Act 1996, the import and release of any genetically modified crop without approval from the Environmental Protection Authority (EPA) is unlawful.

I, (**Exporter's** name and address)...

--

declare that according to the requirements set out in the Nursery Stock Import Health Standard (MPI Import Health Standard: 155.02.06: Importation of Nursery Stock - <https://www.biosecurity.govt.nz/dmsdocument/1152-Nursery-Stock-Import-Health-Standard>,

Insert species name and lot/line number or unique identifier as stated on all the other import documentation
--

was produced neither "from" nor "by" genetically modified crops.

I undertake to inform immediately the importer and the Ministry for Primary Industries, MPI, New Zealand of any information that can undermine the accuracy of this declaration.

Note that MPI may request evidence as to how production, handling and transport of these nursery stock is performed in the field, or require and audit as a way to provide quality to the production system.

I, (**Importer's** name and address)...

--

declare to the best of my knowledge that according to the requirements set out in the Nursery Stock Import Health Standard (MPI Import Health Standard: 155.02.06: Importation of Nursery Stock - <https://www.biosecurity.govt.nz/dmsdocument/1152-Nursery-Stock-Import-Health-Standard>,

Insert species name and lot/line number or unique identifier as stated on all the other import documentation
--

was produced neither "from" nor "by" genetically modified crops.

Signed by <b>Exporter</b> and Company Name (details) and date	Signed by <b>Importer</b> and Company Name (details) and date
---	---

Warning: Any person who knowingly makes a statement of information or a declaration that is false or misleading in a material particular may on summary conviction, be sentenced to a term of imprisonment and/or fined not exceeding \$500,000.00.

## *Phalaenopsis*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Phalaenopsis*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Basella rugose mosaic virus*, *Capsicum chlorosis virus*, *Phytophthora palmivora*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

##### **a. Conditions for *Phytophthora palmivora***

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

#### **B. For Whole Plants in growing media from Taiwan**

**No import permit is required**

**PEQ:** None

**Specific Requirements:** Sections 2.2.1.6 and 2.2.1.9 of the Basic Conditions are not required.

**Additional Declarations:**

##### **a. Additional Declaration**

- i) “The *Phalaenopsis* spp. whole plants in MPI-approved growing media in this consignment:
  - have been sourced from mother stock that has been tested for, and found free from *Capsicum chlorosis virus* and *Basella rugose mosaic virus*,  
**AND**
  - comply with the requirements of the Offshore Assurance Programme (OAP) implemented by New Zealand MPI and Taiwan BAPHIQ,  
**AND**

- have been inspected and found free from regulated viruses, insects, mites, fungi and bacteria,
- AND**
- have been treated with appropriate broad-spectrum insecticide and miticide drench no more than 14 days prior to export to New Zealand.”

b. Conditions for *Phytophthora palmivora*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

**C. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

## ***Philodendron***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Philodendron*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Entry Conditions:** **Basic;** with variations and additional conditions as specified below:

#### **A. For Cuttings and Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

## Phoenix

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Phoenix*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** Australia, Hawaii, mainland United States of America

**Quarantine Pests:** Cadang-cadang, Fusarium wilt, Lethal yellowing, *Phytophthora palmivora*, *Xylella fastidiosa*

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

#### **A. For Whole Plants and Cuttings**

**PEQ:** Level 2

**Minimum Period:** 3 months

**Height Limit:** Plants must not exceed 1.5m in height

##### **a. Conditions for *Phytophthora palmivora***

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

##### **b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)**

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*.

##### **c. Conditions for Cadang cadang, lethal yellowing and *Fusarium oxysporum* f.sp. *canariensis***

**Additional Declaration:** “Cadang cadang, lethal yellowing and *Fusarium oxysporum* f.sp. *canariensis* are not known to occur in \_\_\_\_\_ [the country or state where the plants were grown]”.

#### **B. For Tissue Culture**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 2

**Minimum Period:** 3 months



a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)

**Guidance for importers:** The minimum quarantine period will be 6 months for tissue cultures sourced from countries not recognised by MPI as free from *Xylella fastidiosa*.

b. Conditions for Cadang cadang and lethal yellowing

Additional Declaration: “Cadang cadang and lethal yellowing are not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Photinia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Gymnosporangium* spp., *Phytophthora ramorum*, *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

c. Conditions for *Gymnosporangium* spp.

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “*Gymnosporangium* spp. are not known to occur on \_\_\_\_\_ [name of plant species] in \_\_\_\_\_ [the country or state where the plants were produced]”.

**OR**

ii) “The plants were from a crop inspected during the growing season and no rust diseases were detected.

**AND**

- The plants have been dipped in propiconazole at the rate of 0.5g a.i. per litre of water, prior to export”.

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)

**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

## *Planera*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Planera*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Elm mosaic virus, Elm phloem necrosis, *Phellinus noxius*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 3 months

- a. Conditions for *Phellinus noxius* (section 2.2.1.13)

**Note:** Only applies to the following species: *Zelkova serrata*

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 3B

**Minimum Period:** 3 months

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Platanus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Ceratocystis platani*, *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

**A: For Cuttings and Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)  
**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

- b. Conditions for *Ceratocystis platani*:

**OPTION 1: For countries where *Ceratocystis platani* is not known to be present**

- i) **Additional Declaration:** “The plants have been sourced from a country free from *Ceratocystis platani*”

**OPTION 2: For countries where *Ceratocystis platani* is known to be present**

- i) **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.

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

- a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)  
**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

## ***Polyscias***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Polyscias*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**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.

## *Poncirus*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Poncirus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **1. Type of *Poncirus* nursery stock approved for entry into New Zealand**

Cuttings (dormant); Plants in tissue culture

### **2. Pests of *Poncirus***

Refer to the pest list.

### **3. Entry conditions for:**

#### **3.1 *Poncirus* cuttings from offshore MPI-approved facilities (quarantine stations)**

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Poncirus*, the approved facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Poncirus*.

##### **(i) Documentation**

#### **Import permit is required**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Poncirus* cuttings exported to New Zealand.

##### **(ii) Inspection, Testing and Treatments of the consignment**

The inspection, testing and treatment requirements for specified regulated pests must be undertaken at the approved facility as specified in the agreement between MPI and the approved facility operator. Refer to *Poncirus* Inspection, Testing and Treatment Requirements following the *Poncirus* pest list.

##### **(iii) Phytosanitary requirements**

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The *Poncirus* cuttings have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI (refer to the pest list).

**AND**

- sourced from either mother plants that have been kept in insect proof plant houses or from open ground mother plants

**AND**

- held and tested for/classified free from specified regulated pests at an MPI-approved facility

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the approved facility.

##### **(iv) Additional declarations to the phytosanitary certificate**

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO

must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Poncirus* cuttings in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI, and to conform with New Zealand's current phytosanitary requirements.

**AND**

- sourced from mother plants that have been kept in insect proof plant houses/sourced from open ground mother plants [choose one].

**AND**

- held and tested for/classified free from specified regulated pests at the approved facility as required in the agreement between MPI and the approved facility operator.

**AND**

- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the approved facility."

(v) Post-entry quarantine

**PEQ:** Level 2. Plants must be held at 18-25°C throughout the quarantine period.

**Quarantine Period:**

This is the time required to complete inspections and/or indexing to detect regulated pathogens. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/tests are required.

Indicative minimum quarantine periods are:

- 6 months for *Poncirus* cuttings sourced from mother plants that have been kept in insect proof plant houses, which may be extended to 12 months to allow for testing to be completed; or
- 16 months for *Poncirus* cuttings sourced directly from open ground mother plants.

### **3.2 *Poncirus* cuttings from non-approved facilities in any country**

(i) Documentation

**Import permit is required**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Poncirus* cuttings exported to New Zealand.

(ii) 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 approved to the standard BMG-STD-TREAT: *Approval of Suppliers Providing Treatment of Imported Risk Goods and Forestry/Plant Related Material for Export*, to be sprayed/dipped in MPI-approved miticide and insecticides as described in section 2.2.1.6 of the basic conditions.

Following treatment, testing for specified regulated pests must be undertaken at a New Zealand Level 3B MPI-approved facility. Refer to *Poncirus* Inspection, Testing and Treatment Requirements following the *Poncirus* pest list.

(v) Post-entry quarantine

**PEQ:** Level 3B

**Quarantine Period:** This is the time required to complete inspections and/or indexing to detect regulated pathogens. 16 months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments are required.

### 3.3 *Poncirus* plants in tissue culture from offshore MPI-approved facilities

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Poncirus*, the approved facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Poncirus*.

(i) Documentation

**Import permit is required**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Poncirus* tissue culture exported to New Zealand.

(ii) 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 approved facility as specified in the arrangement between MPI and the approved facility operator. Refer to *Poncirus* Inspection, Testing and Treatment Requirements following the *Poncirus* pest list.

(iv) 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 an MPI-approved facility and,  
**AND**
- held in a manner to ensure that infestation/reinfestation does not occur, following testing (and certification) at the approved facility.

(v) 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 approved facility as specified in the agreement between MPI and the approved facility operator.  
**AND**
- held in a manner to ensure infestation/reinfestation does not occur following testing (and certification), at the approved facility."

(vi) Post-entry quarantine

**PEQ:** Level 2

**Quarantine Period:** This is the time required to complete inspections and/or indexing to detect regulated pests. Six months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments are required.

### 3.4 *Poncirus* plants in tissue culture from non-approved facilities in any country

(i) Documentation

**Import permit is required**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country national plant protection organisation (NPPO) must accompany all *Poncirus* nursery stock exported to New Zealand.

(ii) Pest proof container and growing media for tissue culture

Cultures imported in a growing media must have been grown in the vessel in which they are imported. The container must be rigid, and either clear plastic or clear glass. The tissue culture media must not contain charcoal.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The *Poncirus* tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI (refer to the pest list).

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO

must confirm this by providing the following additional declarations to the phytosanitary certificate:

"The *Poncirus* tissue culture in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests specified by MPI, and to conform with the current phytosanitary requirements of MPI."

(v) Inspection, Testing and Treatments of the consignment

Upon arrival, the inspection, treatment and testing requirements for specified pests must be undertaken at a New Zealand Level 3B MPI-approved facility. Refer to *Poncirus* Inspection, Testing and Treatment Requirements following the *Poncirus* pest list.

(vi) Post-entry quarantine

**PEQ:** Level 3B

**Quarantine Period:** This is the time required to complete inspections and or indexing to detect regulated pests. 16 months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected or treatments required.

# Pest List for *Poncirus*

## REGULATED PESTS (actionable)

### Insect

### Insecta

#### Coleoptera

##### Bostrichidae

*Apate indistincta*

shot-hole borer

*Apate terebrans*

shot-hole borer

##### Buprestidae

*Agrilus alesi*

flatheaded citrus borer

*Agrilus auriventris*

citrus flatheaded borer

##### Cerambycidae

*Anoplophora malasiaca*

white-spotted longicorn beetle

*Chelidonium gibbicolle*

-

*Dihammus vastator*

fig longhorn

*Melanauster chinensis*

-

*Paradisterna plumifera*

speckled longicorn

*Promeces linearis*

-

*Skeletodes tetrops*

longhorn beetle

*Strongylurus thoracicus*

pittosporum longicorn

*Uracanthus cryptophagus*

citrus branch borer

##### Chrysomelidae

*Colasposoma fulgidum*

bluegreen citrus nibbler

*Colasposoma scutellare*

-

*Geloptera porosa*

pitted apple beetle

*Luperomorpha funesta*

mulberry flea beetle

*Monolepta australis*

red-shouldered leaf beetle

*Sebaethe fulvipennis*

flea beetle

##### Coccinellidae

*Cheilomenes lunata* [Animals Biosecurity]

-

*Chilocorus cacti* [Animals Biosecurity]

-

*Chilocorus distigma* [Animals Biosecurity]

-

*Chilocorus nigrita* [Animals Biosecurity]

-

*Exochomus flavipes* [Animals Biosecurity]

-

*Pentilia castanea* [Animals Biosecurity]

-

*Rhyzobius lophanthae* [Animals Biosecurity]

-

*Scymnus nanus* [Animals Biosecurity]

-

*Serangium parcesetosum* [Animals Biosecurity]

-

*Stethorus aethiops* [Animals Biosecurity]

-

*Stethorus histrio* [Animals Biosecurity]

-

*Stethorus punctata picipes* [Animals Biosecurity]

-

##### Curculionidae

*Amystax fasciatus* [Animals Biosecurity]

-

*Artipus* sp.

-

*Brachycerus citriperda*

-

*Callirhopalus bifasciatus*

two-banded Japanese weevil

*Dereodus recticollis*

-

*Diaprepes abbreviatus*

citrus weevil

*Diaprepes* spp.

-

*Eutinophaea bicristata*

citrus leaf-eating weevil

*Leptopius squalidus*

fruit tree root weevil

*Naupactus xanthographus*

fruit tree weevil

*Otiorhynchus cribricollis*

cribrate weevil

*Pachnaeus citri*

-

*Pachnaeus litus*

citrus root weevil

*Perperus lateralis*

white-striped weevil

*Prepodes* spp.

-

<i>Protoctrophus avidus</i>	weevil
<i>Sciobius marshalli</i>	citrus snout beetle
<i>Sympiezomias lewisi</i>	-
<b>Lucanidae</b>	
<i>Prosopocoilus spencei</i>	-
<b>Scarabaeidae</b>	
<i>Hypopholis indistincta</i>	scarab beetle
<i>Maladera matrida</i>	scarab beetle
<b>Scolytidae</b>	
<i>Salagena</i> sp.	-
<i>Xylosandrus germanus</i>	alnus ambrosia beetle
<b>Diptera</b>	
<b>Cecidomyiidae</b>	
<i>Contarinia citri</i>	leafcurling midge
<i>Contarinia okadai</i>	citrus flower gall midge
<i>Trisopsis</i> sp.	-
<b>Chamaemyiidae</b>	
<i>Leucopis alticeps</i> [Animals Biosecurity]	-
<b>Drosophilidae</b>	
<i>Drosophila paulistorum</i>	-
<i>Drosophila pseudoobscura</i>	-
<i>Drosophila simulans</i>	-
<i>Drosophila willistoni</i>	-
<b>Tephritidae</b>	
<i>Dirioxa pornia</i>	island fruit fly
<b>Hemiptera</b>	
<b>Anthocoridae</b>	
<i>Orius thripoborus</i> [Animals Biosecurity]	-
<i>Thripheps thripoborus</i> [Animals Biosecurity]	-
<b>Coreidae</b>	
<i>Acanthocoris striicornis</i>	larger squash bug
<i>Anoplocnemis curvipes</i>	coreid bug
<i>Leptoglossus membranaceus</i>	coreid bug
<i>Mictis profana</i>	crusader bug
<i>Paradasynus spinosus</i>	squash bug
<i>Veneza phyllopus</i>	leaf-footed bug
<b>Lygaeidae</b>	
<i>Nysius vinitor</i>	Rutherglen bug
<b>Miridae</b>	
<i>Austropeplus</i> sp.	citrus blossom bug
<b>Pentatomidae</b>	
<i>Antestia variegata</i>	antestia bug
<i>Antestiopsis orbitalis</i>	-
<i>Antestiopsis variegata</i>	antestia bug
<i>Biprorulus bibax</i>	spined citrus bug
<i>Glaucias subpunctatus</i>	polished green stink bug
<i>Halyomorpha mista</i>	brown-marmorated stink bug
<i>Musgraveia sulciventris</i>	bronze orange bug
<i>Plautia stali</i>	oriental stink bug
<i>Rhynchoris humeralis</i>	pentatomid bug
<b>Unknown Hemiptera</b>	
<i>Holopterna vulga</i>	bug
<b>Homoptera</b>	
<b>Aleyrodidae</b>	
<i>Aleurocanthus citripertus</i>	whitefly
<i>Aleurocanthus spiniferus</i>	orange spiny whitefly
<i>Aleurocanthus</i> spp.	whiteflies
<i>Aleurocanthus woglumi</i>	citrus blackfly
<i>Aleurodicus dispersus</i>	spiralling whitefly
<i>Aleurolobus marlatti</i>	Marlatt whitefly

<i>Aleuroplatus</i> sp.	whitefly
<i>Aleurothrixus floccosus</i>	woolly whitefly
<i>Aleurotuba jelinekii</i>	-
<i>Aleurotuberculatus aucubae</i>	aucuba whitefly
<i>Bemisia citricola</i>	-
<i>Dialeurodes citri</i>	citrus whitefly
<i>Dialeurodes citrifolii</i>	cloudywinged whitefly
<i>Dialeurolonga</i> sp.	-
<i>Parabemisia myricae</i>	Japanese bayberry whitefly
<i>Siphoninus phillyreae</i>	phillyrea whitefly
<b>Aphididae</b>	
<i>Aphis fabae</i>	bean aphid
<i>Aulacorthum magnoliae</i>	Japanese elder aphid
<b>Cicadellidae</b>	
<i>Asymmetrasca decedens</i>	leafhopper
<i>Circulifer opacipennis</i>	-
<i>Circulifer tenellus</i>	beet leafhopper
<i>Cuerna costalis</i>	leafhopper
<i>Edwardsiana flavescens</i>	leafhopper
<i>Empoasca bodenheimeri</i>	-
<i>Empoasca citrura</i>	green citrus leafhopper
<i>Empoasca decipiens</i>	green leafhopper
<i>Empoasca distinguenda</i>	-
<i>Empoasca fabae</i>	potato leafhopper
<i>Empoasca onukii</i>	tea green leafhopper
<i>Homalodisca coagulata</i>	glassy-winged sharpshooter
<i>Homalodisca lacerta</i>	-
<i>Jacobiasca lybica</i>	cotton jassid
<i>Neoliturus haematoceps</i>	leafhopper
<i>Penthimiola bella</i>	citrus leafhopper
<i>Scaphytopius nitridus</i>	leafhopper
<b>Cicadidae</b>	
<i>Cryptotympana facialis</i>	black cicada
<i>Meimuna opalifera</i>	elongate cicada
<b>Coccidae</b>	
<i>Ceroplastes floridensis</i>	Florida wax scale
<i>Ceroplastes japonicus</i>	pink wax scale
<i>Ceroplastes rubens</i>	red wax scale
<i>Ceroplastes rusci</i>	fig wax scale
<i>Coccus celatus</i>	-
<i>Coccus pseudomagnoliarum</i>	citricola scale
<i>Coccus viridis</i>	green scale
<i>Cribrolecanium andersoni</i>	white powdery scale
<i>Gascardia brevicauda</i>	white waxy scale
<i>Protopulvinaria pyriformis</i>	pyriform scale
<i>Pulvinaria aethiopica</i>	soft green scale
<i>Pulvinaria aurantii</i>	citrus cottony scale
<i>Pulvinaria cellulosa</i>	pulvinaria scale
<i>Saissetia citricola</i>	citrus string cottony scale
<i>Saissetia somereni</i>	-
<b>Dactylopiidae</b>	
<i>Dactylopius filamentosis</i>	-
<i>Dactylopius vastator</i>	-
<b>Diaspididae</b>	
<i>Aonidiella citrina</i>	yellow scale
<i>Chrysomphalus aonidum</i>	Florida red scale
<i>Chrysomphalus bifasciculatus</i>	brown scale
<i>Chrysomphalus dictyospermi</i>	dictyospermum scale
<i>Chrysomphalus pinnulifera</i>	false purple scale
<i>Ischnaspis longirostris</i>	black thread scale

<i>Lepidosaphes beckii</i>	purple scale
<i>Lepidosaphes gloverii</i>	Glover scale
<i>Parlatoria ziziphi</i>	black parlatoria scale
<i>Pseudaonidia duplex</i>	camphor scale
<i>Selenaspidus articulatus</i>	West Indian red scale
<i>Unaspis citri</i>	citrus snow scale
<i>Unaspis yanonensis</i>	Japanese citrus scale
<b>Flatidae</b>	
<i>Colgar peracuta</i>	-
<i>Geisha distinctissima</i>	green broad-winged planthopper
<i>Lawana conspersa</i>	green flatid planthopper
<i>Metcalfa pruinosa</i>	planthopper
<b>Fulgoridae</b>	
<i>Anzora unicolor</i>	-
<b>Margarodidae</b>	
<i>Drosicha howardi</i>	persimmon mealybug
<i>Icerya seychellarum</i>	Seychelles scale
<b>Ortheziidae</b>	
<i>Nipponorthezia ardisiae</i>	ensign scale
<b>Pseudococcidae</b>	
<i>Allococcus</i> spp.	-
<i>Ferrisia consobrina</i>	mealybug
<i>Ferrisia virgata</i>	striped mealybug
<i>Nipaecoccus vastator</i>	nipa mealybug
<i>Nipaecoccus viridis</i>	hibiscus mealybug
<i>Paracoccus burnerae</i>	spherical mealybug
<i>Planococcus kraunhiae</i>	Japanese wisteria mealybug
<i>Planococcus lilacinus</i>	citrus mealybug
<i>Planococcus minor</i>	passionvine mealybug
<i>Pseudococcus citriculus</i>	smaller citrus mealybug
<i>Pseudococcus commonus</i>	-
<i>Pseudococcus filamentosus</i>	mealybug
<i>Rastrococcus spinosus</i>	mealybug
<i>Rhizoecus kondonis</i>	Kondo mealybug
<b>Psyllidae</b>	
<i>Diaphorina citri</i>	citrus psyllid
<i>Trioza erytreae</i> [vector]	citrus psyllid
<b>Ricaniidae</b>	
<i>Scolypopa</i> sp.	-
<b>Tropiduchidae</b>	
<i>Tambinia</i> sp.	-
<b>Hymenoptera</b>	
<b>Aphelinidae</b>	
<i>Aphytis africanus</i> [Animals Biosecurity]	-
<i>Aphytis holoxanthus</i> [Animals Biosecurity]	-
<i>Aphytis lepidosaphes</i> [Animals Biosecurity]	-
<i>Aphytis lingnanensis</i> [Animals Biosecurity]	-
<i>Aphytis melinus</i> [Animals Biosecurity]	-
<i>Azotus platensis</i> [Animals Biosecurity]	-
<i>Cales noacki</i> [Animals Biosecurity]	-
<i>Cales orchamoplatis</i> [Animals Biosecurity]	-
<i>Centrodora penthimiae</i> [Animals Biosecurity]	-
<i>Coccophagus caridei</i> [Animals Biosecurity]	-
<i>Coccophagus pulvinariae</i> [Animals Biosecurity]	-
<i>Encarsia ectophaga</i> [Animals Biosecurity]	-
<i>Encarsia lahorensis</i> [Animals Biosecurity]	-
<i>Encarsia lounsburyi</i> [Animals Biosecurity]	-
<i>Encarsia opulenta</i> [Animals Biosecurity]	-
<i>Encarsia smithi</i> [Animals Biosecurity]	-
<i>Eretmocerus serius</i> [Animals Biosecurity]	-

<i>Marietta connecta</i> [Animals Biosecurity]	-
<i>Marietta leopardina</i> [Animals Biosecurity]	-
<b>Braconidae</b>	
<i>Apanteles aristotalilae</i> [Animals Biosecurity]	-
<i>Biosteres longicaudatus</i> [Animals Biosecurity]	-
<i>Pholetesor ornigis</i> [Animals Biosecurity]	-
<b>Encyrtidae</b>	
<i>Anicetus beneficus</i> [Animals Biosecurity]	-
<i>Comperiella bifasciata</i> [Animals Biosecurity]	-
<i>Habrolepis rouxi</i> [Animals Biosecurity]	-
<i>Leptomastix dactylopii</i> [Animals Biosecurity]	parasitic wasp
<i>Metaphycus helvolus</i> [Animals Biosecurity]	-
<i>Metaphycus luteolus</i> [Animals Biosecurity]	-
<i>Metaphycus stanleyi</i> [Animals Biosecurity]	-
<i>Metaphycus varius</i> [Animals Biosecurity]	-
<i>Psyllaephagus pulvinatus</i> [Animals Biosecurity]	-
<b>Eulophidae</b>	
<i>Aprostocetus ceroplastae</i> [Animals Biosecurity]	-
<i>Elachertus fenestratus</i> [Animals Biosecurity]	-
<i>Tamarixia radiatus</i> [Animals Biosecurity]	-
<b>Eupelmidae</b>	
<i>Anastatus biproruli</i> [Animals Biosecurity]	-
<b>Eurytomidae</b>	
<i>Bruchophagus fellis</i>	citrus gall midge
<b>Formicidae</b>	
<i>Acromyrmex octospinosus</i>	leaf-cutting ant
<i>Anoplolepis braunsi</i> [Animals Biosecurity]	-
<i>Anoplolepis custodiens</i>	ant
<i>Anoplolepis steingroeveri</i> [Animals Biosecurity]	black ant
<i>Atta cephalotes</i>	leaf-cutting ant
<i>Atta sexdens</i>	-
<i>Atta texana</i>	Texas leaf-cutting ant
<i>Camponotus rufoglaucus</i>	-
<i>Crematogaster castanea</i>	-
<i>Crematogaster liengmei</i>	-
<i>Crematogaster peringueyi</i> [Animals Biosecurity]	cocktail ant
<i>Lepisiota capensis</i> [Animals Biosecurity]	-
<i>Myrmecaria natalensis</i>	-
<i>Pheidole tenuinodis</i>	ant
<i>Polyrhachis schistaceus</i>	ant
<i>Solenopsis invicta</i> [Animals Biosecurity]	red imported fire ant
<i>Tapinoma arnoldi</i>	-
<i>Technomyrmex albipes foreli</i> [Animals Biosecurity]	-
<b>Mymaridae</b>	
<i>Chaetomyrmex gracile</i> [Animals Biosecurity]	-
<i>Chaetomyrmex lepidum</i> [Animals Biosecurity]	-
<i>Gonatocerus incomptus</i> [Animals Biosecurity]	-
<b>Platygasteridae</b>	
<i>Amitus hesperidum</i> [Animals Biosecurity]	-
<i>Amitus spiniferus</i> [Animals Biosecurity]	-
<i>Fidiobia citri</i> [Animals Biosecurity]	-
<b>Scelionidae</b>	
<i>Trissolcus oeneus</i> [Animals Biosecurity]	-
<i>Trissolcus oenone</i> [Animals Biosecurity]	-
<i>Trissolcus ogyges</i> [Animals Biosecurity]	-
<b>Signiphoridae</b>	
<i>Signiphora fax</i> [Animals Biosecurity]	-
<i>Signiphora flavella</i> [Animals Biosecurity]	-
<i>Signiphora perpauca</i> [Animals Biosecurity]	-
<b>Trichogrammatidae</b>	

<i>Trichogramma platneri</i> [Animals Biosecurity]	-
<b>Vespidae</b>	
<i>Polistes</i> spp. [Animals Biosecurity]	paper wasps
<b>Isoptera</b>	
<b>Termitidae</b>	
<i>Odontotermes lokanandi</i>	termite
<b>Lepidoptera</b>	
<b>Arctiidae</b>	
<i>Lemyra imparilis</i>	mulberry tiger moth
<b>Blastobasidae</b>	
<i>Holcocera iceryaeella</i>	-
<b>Cosmopterigidae</b>	
<i>Pyroderces rileyi</i>	pink scavenger caterpillar
<b>Geometridae</b>	
<i>Anacamptodes fragilaria</i>	koa haole looper
<i>Ascotis selenaria reciprocata</i>	citrus looper
<i>Gymnoscelis rufifasciata</i>	geometrid moth
<i>Hyposidra talaca</i>	-
<b>Gracillariidae</b>	
<i>Phyllocnistis citrella</i>	citrus leafminer
<b>Hepialidae</b>	
<i>Endoclita excrescens</i>	Japanese swift moth
<i>Endoclita sinensis</i>	-
<b>Lycaenidae</b>	
<i>Virachola isocrates</i>	pomegranate butterfly
<b>Lymantriidae</b>	
<i>Orgyia vetusta</i>	western tussock moth
<b>Metarbelidae</b>	
<i>Indarbela tetraonis</i>	stem borer
<b>Noctuidae</b>	
<i>Arcte coerula</i>	fruit-piercing moth
<i>Eudocima fullonia</i>	fruit-piercing moth
<i>Helicoverpa assulta</i>	cape gooseberry budworm
<i>Helicoverpa punctigera</i>	oriental tobacco budworm
<i>Tiracola plagiata</i>	banana fruit caterpillar
<i>Xylomyges curialis</i>	noctuid moth
<b>Nymphalidae</b>	
<i>Charaxes jasius</i>	nymphalid butterfly
<b>Oecophoridae</b>	
<i>Psorosticha melanocrepida</i>	citrus leafroller
<i>Psorosticha zizyphi</i>	citrus leafroller
<i>Stathmopoda auriferella</i>	apple heliodinid
<b>Papilionidae</b>	
<i>Papilio aegaeus aegaeus</i>	-
<i>Papilio anactus</i>	small citrus butterfly
<i>Papilio cresphontes</i>	orange dog
<i>Papilio dardanus cenea</i>	-
<i>Papilio demodocus</i>	orange dog
<i>Papilio demoleus demoleus</i>	-
<i>Papilio helenus nicconicolens</i>	-
<i>Papilio machaon asiatica</i>	-
<i>Papilio memnon</i>	citrus swallowtail
<i>Papilio memnon thunbergii</i>	-
<i>Papilio nireus lyaeus</i>	-
<i>Papilio polytes polytes</i>	-
<i>Papilio protenor demetrius</i>	-
<i>Papilio xuthus</i>	citrus swallowtail
<i>Papilio zelicaon</i>	anise swallowtail
<b>Psychidae</b>	
<i>Eumeta hardenbergi</i>	-



<i>Eumeta japonica</i>	-
<i>Eumeta minuscula</i>	tea bagworm
<i>Eumeta moddermanni</i>	-
<i>Hyalarcta huebneri</i>	leaf case moth
<b>Pyralidae</b>	
<i>Apomyelois ceratoniae</i>	date pyralid
<b>Tortricidae</b>	
<i>Adoxophyes</i> sp.	-
<i>Amorbia cuneana</i>	leafroller
<i>Archips argyrospilus</i>	fruit tree leafroller
<i>Archips machlopi</i>	leafroller
<i>Archips occidentalis</i>	leafroller
<i>Archips rosanus</i>	rose leafroller
<i>Argyrotaenia citrana</i>	orange tortrix
<i>Cacoecimorpha pronubana</i>	carnation leafroller
<i>Cryptophlebia batrachopa</i>	-
<i>Cryptophlebia leucotreta</i>	false codling moth
<i>Homona magnanima</i>	oriental tea tortrix
<i>Isotenes miserana</i>	orange fruitborer
<i>Platynota stultana</i>	omnivorous leafroller
<i>Tortrix capensana</i>	tortricid moth
<b>Yponomeutidae</b>	
<i>Prays citri</i>	citrus flower moth
<i>Prays parilis</i>	citrus flower moth
<b>Neuroptera</b>	
<b>Chrysopidae</b>	
<i>Chrysopa oculata</i> [Animals Biosecurity]	-
<b>Coniopterygidae</b>	
<i>Coniopteryx vicina</i> [Animals Biosecurity]	-
<i>Conwentzia barretti</i> [Animals Biosecurity]	-
<b>Orthoptera</b>	
<b>Acrididae</b>	
<i>Zonocerus elegans</i>	elegant grasshopper
<b>Gryllidae</b>	
<i>Ornebius kanetataki</i>	cricket
<b>Tettigoniidae</b>	
<i>Caedicia</i> sp.	-
<i>Holochlora japonica</i>	Japanese broadwinged katydid
<i>Microcentrum retinerve</i>	smaller angular-winged katydid
<i>Scudderia furcata</i>	fork-tailed bush katydid
<b>Psocoptera</b>	
<b>Archipsocidae</b>	
<i>Archipsocus</i> sp.	bark louse
<b>Thysanoptera</b>	
<b>Aeolothripidae</b>	
<i>Franklinothrips vespiformis</i> [Animals Biosecurity]	-
<b>Thripidae</b>	
<i>Chaetanaphothrips orchidii</i>	banana rust thrips
<i>Leptothrips mali</i>	black hunter thrips
<i>Scirtothrips aurantii</i>	citrus thrips
<i>Scirtothrips citri</i>	citrus thrips
<i>Scirtothrips dorsalis</i>	chilli thrips
<i>Scirtothrips mangiferae</i>	mango thrips
<i>Scolothrips sexmaculatus</i> [Animals Biosecurity]	-
<i>Taeniothrips kellyanus</i>	-
<i>Taeniothrips</i> sp.	-
<i>Thrips coloratus</i>	thrips
<i>Thrips flavus</i>	flower thrips
<i>Thrips palmi</i>	palm thrips
<b>Unknown Insecta</b>	

<b>Unknown Insecta</b>	
<i>Cosmophyllum pallidulum</i>	-
<b>Mite</b>	
<b>Arachnida</b>	
<b>Acarina</b>	
<b>Acaridae</b>	
<i>Thyreophagus entomophagus italicus</i> [Animals Biosecurity]	-
<b>Anystidae</b>	
<i>Anystis agilis</i> [Animals Biosecurity]	-
<b>Eriophyidae</b>	
<i>Aculops pelekassi</i>	erriophyid mite
<i>Tegolophus australis</i>	brown citrus mite
<b>Phytoseiidae</b>	
<i>Amblyseius addoensis</i> [Animals Biosecurity]	-
<i>Amblyseius citri</i> [Animals Biosecurity]	-
<i>Amblyseius swirskii</i> [Animals Biosecurity]	-
<i>Euseius hibisci</i> [Animals Biosecurity]	-
<i>Euseius scutalis</i> [Animals Biosecurity]	-
<i>Euseius stipulatus</i> [Animals Biosecurity]	-
<i>Euseius tularensis</i> [Animals Biosecurity]	-
<i>Iphiseius degenerans</i> [Animals Biosecurity]	predatory mite
<i>Typhlodromus athiasae</i> [Animals Biosecurity]	-
<b>Stigmaeidae</b>	
<i>Agistemus africanus</i> [Animals Biosecurity]	-
<i>Agistemus tranatalensis</i> [Animals Biosecurity]	-
<i>Eryngiopus siculus</i> [Animals Biosecurity]	-
<b>Tarsonemidae</b>	
<i>Tarsonemus cryptocephalus</i> [Animals Biosecurity]	-
<b>Tenuipalpidae</b>	
<i>Brevipalpus chilensis</i>	false spider mite
<i>Brevipalpus lewisi</i>	bunch mite
<i>Brevipalpus obovatus</i>	privet mite
<i>Tenuipalpus emeticae</i> [Animals Biosecurity]	-
<i>Tuckerella ornata</i>	-
<i>Ultratenuipalpus gonianaensis</i>	tenuipalpid mite
<b>Tetranychidae</b>	
<i>Calacarus citrifolii</i>	clover mite
<i>Eotetranychus kankitus</i>	tetranychid mite
<i>Eotetranychus lewisi</i>	big beaked plum mite
<i>Eotetranychus yumensis</i>	Yumi spider mite
<i>Eutetranychus africanus</i>	tetranychid mite
<i>Eutetranychus banksi</i>	Texas citrus mite
<i>Eutetranychus orientalis</i>	pear leaf blister mite
<i>Oligonychus mangiferus</i>	mango spider mite
<i>Tetranychus kanzawai</i>	kanzawa mite
<b>Tuckerellidae</b>	
<i>Tuckerella knorri</i>	hawthorn spider mite
<b>Spider</b>	
<b>Arachnida</b>	
<b>Araneae</b>	
<b>Clubionidae</b>	
<i>Cheiracanthium mildei</i> [Animals Biosecurity]	-
<b>Theridiidae</b>	
<i>Theridion</i> sp. [Animals Biosecurity]	-
<b>Mollusc</b>	
<b>Gastropoda</b>	

<b>Stylommatophora</b>	
<b>Achatinidae</b>	
<i>Achatina immaculata</i>	-
<i>Lissachatina immaculata</i>	snail
<b>Bradybaenidae</b>	
<i>Acusta despecta sieboldiana</i>	snail
<b>Subulinidae</b>	
<i>Rumina decollata</i>	snail
<b>Urocyclidae</b>	
<i>Urocyclus flavescens</i>	-
<i>Urocyclus kirkii</i>	-
<b>Fungus</b>	
<b>Ascomycota</b>	
<b>Diaporthales</b>	
<b>Valsaceae</b>	
<i>Diaporthe rudis</i> (anamorph <i>Phomopsis rudis</i> )	phomopsis canker
<b>Dothideales</b>	
<b>Elsinoaceae</b>	
<i>Elsinoe australis</i>	sweet orange scab
<b>Capnodiaceae</b>	
<i>Capnodium citri</i>	sooty mould
<b>Didymosphaeriaceae</b>	
<i>Didymosphaeria</i> sp.	--
<b>Mycosphaerellaceae</b>	
<i>Guignardia citricarpa</i> (anamorph <i>Phyllosticta citricarpa</i> ) [black spot strain]	citrus black spot
<i>Mycosphaerella citri</i> (anamorph <i>Stenella citri-grisea</i> )	rind blotch
<i>Mycosphaerella horii</i>	greasy spot
<b>Patellariales</b>	
<b>Patellariaceae</b>	
<i>Rhytidhysterium rufulum</i>	--
<b>Saccharomycetales</b>	
<b>Saccharomycetaceae</b>	
<i>Debaryomyces hansenii</i>	-
<i>Galactomyces citri-aurantii</i> (anamorph <i>Geotrichum citri-aurantii</i> )	sour rot
<b>Basidiomycota: Agaricomycetes</b>	
<b>Hymenochaetales</b>	
<b>Hymenochaetaceae</b>	
<i>Phellinus noxius</i>	brown root rot
<b>Basidiomycota: Basidiomycetes</b>	
<b>Boletales</b>	
<b>Coniophoraceae</b>	
<i>Coniophora eremophila</i>	brown wood rot
<b>Basidiomycota: Teliomycetes</b>	
<b>Septobasidiales</b>	
<b>Septobasidiaceae</b>	
<i>Septobasidium pseudopedicellatum</i>	felt fungus
<b>Mitosporic Fungi</b>	
<b>Unknown Mitosporic Fungi</b>	
<b>Unknown Mitosporic Fungi</b>	
<i>Sphaceloma fawcettii</i> var. <i>scabiosa</i>	-
<b>Mitosporic Fungi (Coelomycetes)</b>	
<b>Sphaeropsidales</b>	
<b>Sphaerioidaceae</b>	
<i>Macrophoma mantegazziana</i>	-
<i>Phoma erratica</i> var. <i>mikan</i>	--
<i>Phoma tracheiphila</i>	mal secco
<i>Phomopsis</i> sp.	rot

<i>Septoria</i> spp.	-
<i>Sphaeropsis tumefaciens</i>	stem gall
<b>Unknown Coelomycetes</b>	
<b>Unknown Coelomycetes</b>	
<i>Aschersonia placenta</i> [Animals Biosecurity]	--
<i>Gloeosporium foliicolum</i>	fruit rot
<b>Mitosporic Fungi (Hyphomycetes)</b>	
<b>Hyphomycetales</b>	
<b>Dematiaceae</b>	
<i>Alternaria limicola</i>	-
<i>Alternaria pellucida</i>	--
<i>Cercospora microsora</i>	-
<i>Phaeoramularia angolensis</i>	cercospora spot
<i>Stemphylium rosarium</i>	--
<i>Ulocladium obovoideum</i>	ulocladium rot
<b>Unknown Hyphomycetes</b>	
<b>Unknown Hyphomycetes</b>	
<i>Aureobasidium</i> sp.	-
<i>Hirsutella thompsonii</i> [Animals Biosecurity]	--
<i>Isaria</i> sp. [Animals Biosecurity]	-
<i>Oidium tingitaninum</i>	powdery mildew
<i>Sporobolomyces roseus</i>	--
<i>Stenella</i> sp.	--
<b>Zygomycota: Zygomycetes</b>	
<b>Glomales</b>	
<b>Glomaceae</b>	
<i>Glomus etunicatum</i> [Animals Biosecurity]	--
<b>Mucorales</b>	
<b>Syncephalastraceae</b>	
<i>Syncephalastrum racemosum</i>	--
<b>Bacterium</b>	
<b>Bacterium family unknown</b>	
<i>Liberobacter africanum</i>	citrus greening bacterium
<i>Liberobacter asiaticum</i>	citrus greening bacterium
<i>Liberobacter</i> sp.	citrus greening bacterium
<i>Spiroplasma citri</i>	citrus stubborn
<b>Pseudomonadaceae</b>	
<i>Burkholderia cepacia</i>	sour skin
<i>Xanthomonas axonopodis</i> pv. <i>citri</i>	citrus canker
<i>Xanthomonas campestris</i> pv. <i>aurantifolii</i>	-
<i>Xanthomonas campestris</i> pv. <i>citrumelo</i>	citrus bacterial spot
<i>Xylella fastidiosa</i>	Pierce's disease
<i>Xylella fastidiosa</i> pv. <i>citri</i>	variegated chlorosis of citrus
<b>Virus</b>	
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 [Natsudaiddai dwarf strain]	-
xyloporosis viroid	-
yellow vein clearing of lemon	-
<b>Phytoplasma</b>	
<i>Candidatus</i> Phytoplasma aurantifolia	witches' broom phytoplasma
rubbery wood	-
<b>Disease of unknown aetiology</b>	
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-ACCEPTED METHODS
<b>Fungi</b>	Country freedom OR growing season inspection for symptom expression.
<b>Bacteria</b>	
<i>Burkholderia cepacia</i>	Growing season inspection for symptom expression.
<i>Liberobacter africanum</i>	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
<i>Liberobacter asiaticum</i>	Country freedom OR graft-inoculated sweet oranges, orange pineapple, 18 to 25°C.
<i>Spiroplasma citri</i>	Country freedom/shoot tip grafting. Graft inoculated sweet orange, 27 to 32°C. Bioassay = culture petiole new flush tissue. Collect tissue after several days at hot temperature (> 30°C) and incubate cultures at 32°C.
<i>Xanthomonas axonopodis</i> pv. <i>citri</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xanthomonas campestris</i> pv. <i>aurantifolii</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xanthomonas campestris</i> pv. <i>citrumelo</i>	Country freedom/shoot tip grafting bioassay/detached leaf bioassay/ PCR OR suitable citrus indicator.
<i>Xylella fastidiosa</i>	Country freedom/shoot tip grafting bioassay/ PCR/ELISA OR suitable citrus indicator.
<i>Xylella fastidiosa</i> pv. <i>citri</i>	Country freedom/shoot tip grafting bioassay PCR/ELISA OR suitable citrus indicator.
<b>Viruses</b>	
citrus chlorotic dwarf	Country freedom OR graft inoculated rough lemon at cool temperatures 18 to 25°C.
citrus infectious variegation ilarvirus	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow indicators at cool temperatures 18 to 25°C.
citrus infectious variegation ilarvirus [crinkly leaf strain]	Country freedom OR graft inoculated citron, sour orange, lemon, cidro etrog. Grow indicators at cool temperatures 18 to 25°C.
citrus leaf rugose ilarvirus	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators at cool temperatures 18 to 25°C.
citrus leathery leaf virus	Country freedom OR Rangpur lime. Grow indicators at cool temperatures 18 to 25°C.
citrus leprosis rhabdovirus	Country freedom OR graft inoculated sweet orange. Grow indicators at cool temperatures 18 to 25°C.
citrus mosaic virus	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.
citrus ringspot virus	Country freedom OR graft inoculated dweet tangor, sweet orange, mandarin (Parson's Special). Grow indicators at cool temperatures 18 to 25°C.
citrus tatter leaf capillovirus	Country freedom OR graft inoculated Rusk citrange, rough lemon, <i>Citrus excelsa</i> , citrange (Troyer). Grow indicators at cool temperatures 18 to 25°C.
citrus tristeza closterovirus [strains not in New Zealand]	Country freedom OR ELISA, graft inoculated Mexican lime, sour orange and <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
citrus yellow mosaic badnavirus	Country freedom OR graft inoculated sweet orange, sour orange and citron.
citrus yellow mottle virus	Country freedom OR other suitable test.
Indian citrus mosaic badnavirus	Country freedom OR graft inoculated sweet orange at hot temperature 27 to 32°C.
navel orange infectious mottling virus	Country freedom OR graft inoculated Satsums. Grow indicators at cool temperatures 18 to 25°C.
satsuma dwarf nepovirus	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.
satsuma dwarf nepovirus [Natsudaiddai dwarf strain]	Country freedom OR graft inoculated satsums. Grow indicators at cool temperatures 18 to 25°C.
yellow vein clearing of lemon	Country freedom OR graft inoculated Mexican lime or sour orange. Grow indicators at cool temperatures 18 to 25°C.

ORGANISM TYPES	MPI-ACCEPTED METHODS
<b>Viroids</b>	
citrus cachexia viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
citrus variable viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
citrus viroids (groups I-IV)	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
dwarfing factor viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
xyloporosis viroid	Country freedom OR SPAGE and PCR on graft inoculated citron extract or mandarin (Parson's Special). Grow Citron at hot temperature 27 to 32°C.
<b>Diseases of unknown aetiology</b>	
Australian citrus dieback	Country freedom OR other suitable test
blind pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
bud union disease	Country freedom OR other suitable test
citrus blight disease	None (cuttings collected from blight free area). Inspect source tree after 2 years before releasing from quarantine.
citrus fatal yellows	Country freedom OR graft inoculated <i>Citrus macrophylla</i> .
citrus impietratura disease	Country freedom OR graft inoculated dweet tangor or sweet orange. Growth indicators at cool temperatures 18 to 25°C.
citrus sunken vein disease	Country freedom OR other suitable test.
concave gum	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
cristacortis	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
gum pocket	Country freedom OR graft inoculated dweet tangor, sweet orange or <i>Citrus excelsa</i> . Grow indicators at cool temperatures 18 to 25°C.
gummy bark	Country freedom OR SPAGE of graft inoculated citron extract. Grow citron at hot temperature 27 to 32°C.
kassala disease	Country freedom, cuttings collected from kassala free area.
lemon sieve tube necrosis	Country freedom OR other suitable test.
shell bark of lemons	Country freedom OR other suitable test.
zonate chlorosis	Country freedom, cuttings collected from kassala free area.
<b>Phytoplasmas</b>	
<i>Candidatus</i> phytoplasma aurantifolia	Country freedom OR graft inoculated lime. Grow indicators at cool temperatures 18 to 25°C.
rubbery wood	Country freedom OR graft inoculated sweet orange or lemon. Grow citron at hot temperature 27 to 32°C.

\* Country freedom is accepted as equivalence to a treatment.

**Notes:**

1. The unit for testing is defined in section 2.3.2.1.
2. With prior notification, MPI will accept other internationally recognised testing methods.

## ***Populus***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Populus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States of America

**Quarantine Pests:** *Ceratocystis fimbriata*, *Marssonina* spp., *Phellinus noxius*, *Phytophthora ramorum*, Uredinales, virus diseases, *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 3 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)  
**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*
- d. Conditions for *Phellinus noxius* (section 2.2.1.13)

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

- a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)  
**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.
- b. Subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer.



## *Prunus*

**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/dmsdocument/39488-Prunus-Plants-for-Planting-Import-Health-Standard>

## *Pseudotsuga*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Pseudotsuga*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Bursaphelenchus* spp., *Lophodermium* spp., *Phytophthora ramorum*, Uredinales, *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 6 months

- a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

#### **B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

- a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)  
**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.
- b. Subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer.

***Pyrus***

<b>Scientific name</b>	<b>Commodity Sub-class</b>	<b>Date Issued</b>
<i>Pyrus communis</i>	Cuttings (dormant)	12 June 1998

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Quercus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States of America.

**Quarantine Pests:** *Ceratocystis fagacearum*, *Ceratocystis fimbriata*, *Cronartium quercuum*, *Cryphonectria parasitica*, *Phytophthora ramorum*, *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

**A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 3 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)  
**Note:** Only applies to members of the *Quercus* genus
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)  
**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

- 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 transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Ranunculus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard. These conditions do not apply to *Ranunculus arvensis*, *Ranunculus repens* and *Ranunculus sardous*, for which there is currently no import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Phymatotrichopsis omnivora*, Virus diseases, *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 6 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**B. For Dormant Bulbs from Australia and South Africa**

**OPTION 1:**

**No import permit is required**

**PEQ:** None

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Note:** Only nursery stock sourced from a country recognised by MPI as free from *Xylella fastidiosa* can be imported under this option.

- b. Additional Declaration

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

**OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Note:** Only nursery stock sourced from a country recognised by MPI as free from *Xylella fastidiosa* can be imported under this option

**C. For Dormant Bulbs from the United States of America**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

- b. Conditions for virus diseases

Additional Declaration: “In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

c. Conditions for *Phymatotrichopsis omnivora*

**OPTION 1**

- i) Additional Declaration: “The dormant bulbs have been sourced from a ‘Pest free area’, free from *Phymatotrichopsis omnivora*”.

**OPTION 2**

- i) Additional Declaration: “The dormant bulbs have been sourced from a ‘Pest free place of production’, free from *Phymatotrichopsis omnivora*”.

**AND**

- ii) the consignment must be treated for fungi as described in section 2.2.1.7 “Pesticide treatments for dormant bulbs”. If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section of the phytosanitary certificate.

**D. For Dormant Bulbs from all other Countries**

**OPTION 1:**

**PEQ:** Level 1

**Minimum Period:** 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Note:** Only nursery stock sourced from a country recognised by MPI as free from *Xylella fastidiosa* can be imported under this option.

b. Conditions for *Phymatotrichopsis omnivora*:

Additional Declaration: “The dormant bulbs have been sourced from a ‘Pest free area’, free from *Phymatotrichopsis omnivora*”

c. Additional Declaration

“The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests;

**AND**

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold storage or shipment”.

**OPTION 2:**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Conditions for *Phymatotrichopsis omnivora*

- i) Additional Declaration: “The dormant bulbs have been sourced from a ‘Pest free area’, free from *Phymatotrichopsis omnivora*”.

**AND**

- ii) the consignment must be treated for fungi as described in section 2.2.1.7 “Pesticide treatments for dormant bulbs”. If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section of the phytosanitary certificate.

c. Additional Declaration

“The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests
- AND**
- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold storage or shipment”.

**E. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)

**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

b. Conditions for virus diseases

Additional Declaration: “The cultures have been derived from parent stock tested and found free of virus diseases.”

## *Rhododendron*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Rhododendron*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Microsphaera* spp., *Ovulinia azalea*, *Phellinus noxius*, *Phytophthora ramorum*, Uredinales

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Phellinus noxius* (section 2.2.1.13)

**Note:** Only applies to the following species: *Rhododendron xobtusum*

c. Conditions for *Microsphaera* spp. and rust diseases

i) Additional Declaration: “*Microsphaera* spp., and the following rust diseases are not known to occur on *Rhododendron* spp. in \_\_\_\_\_ [the country or state where the plants were grown]”.

**Note:** Applies to the following rust diseases: *Aecidium rhododendri*, *Aecidium sinorhododendri*, *Chrysomyxa ledi*, *Chrysomyxa ledicola*, *Chrysomyxa dieteli*, *Chrysomyxa expansa*, *Chrysomyxa himalensis*, *Chrysomyxa komarovii*, *Chrysomyxa piperiana*, *Chrysomyxa roanensis*, *Chrysomyxa succinea*, *Chrysomyxa taghishae*, *Puccinia rhododendri*, *Pucciniastrum vaccinii*

#### **OR**

ii) All visible flower buds are to be removed prior to export;

#### **AND**

- On arrival in New Zealand the plant material is to be treated, under the supervision of an Inspector, at an MPI-registered transitional facility by dipping in Benomyl, Carbendazim or Thiophanate methyl [choose one] at a rate of 250mg a.i. per litre.

#### **B. For Cuttings**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

b. Conditions for *Microsphaera* spp. and rust diseases

i) Additional declaration: “*Microsphaera* spp., and the following rust diseases are not known to occur on *Rhododendron* spp. in \_\_\_\_\_ [the country or state where the plants were grown]”.

**Note:** Applies to the following rust diseases: *Aecidium rhododendri*, *Aecidium sinorhododendri*, *Chrysomyxa ledi*, *Chrysomyxa ledicola*, *Chrysomyxa dieteli*, *Chrysomyxa expansa*, *Chrysomyxa*



*himalensis*, *Chrysomyxa komarovii*, *Chrysomyxa piperiana*, *Chrysomyxa roanensis*, *Chrysomyxa succinea*, *Chrysomyxa taghishae*, *Puccinia rhododendri*, *Pucciniastrum vaccinii*

**OR**

ii) All visible flower buds are to be removed prior to export;

**AND**

- On arrival in New Zealand the plant material is to be treated, under the supervision of an Inspector, at an MPI-registered transitional facility by dipping in Benomyl, Carbendazim or Thiophanate methyl [choose one] at a rate of 250mg a.i. per litre.

**C. For Tissue Cultures:**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

## ***Ribes***

<b>Scientific name</b>	<b>Commodity Sub-class</b>	<b>Date Issued</b>
<i>Ribes nigrum</i>	Whole Plants	19 June 1998
<i>Ribes uva-crispa</i>	Whole Plants	19 June 1998

## ***Rosa***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Rosa*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **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**

<b>Fungi</b>	<i>Phellinus noxius</i> , Pucciniales
<b>Oomycetes</b>	<i>Phytophthora ramorum</i>
<b>Bacteria</b>	<i>Ralstonia pseudosolanacearum</i> , <i>Xylella fastidiosa</i>
<b>Viruses</b>	<i>Blackberry chlorotic ringspot virus</i> , <i>Grapevine Pinot gris virus</i> , <i>Raspberry ringspot virus</i> (strains not in New Zealand), <i>Rose rosette virus</i>
<b>Phytoplasmas</b>	‘ <i>Candidatus</i> Phytoplasma asteris’, ‘ <i>Candidatus</i> Phytoplasma aurantifolia’, ‘ <i>Candidatus</i> Phytoplasma mali’, ‘ <i>Candidatus</i> Phytoplasma prunorum’, ‘ <i>Candidatus</i> Phytoplasma rubi’

**3. Approved Countries:** Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 6 months

a. Conditions for *Ralstonia pseudosolanacearum*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants were sourced from a ‘pest free area’, free from *Ralstonia pseudosolanacearum*”.

**OR**

- ii) “The [insert plant species] plants have been sourced from a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*”.

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

c. Conditions for *Phellinus noxius* (section 2.2.1.13)

d. Conditions for viruses

- i) Additional Declaration: “[*Virus name*] is absent/not known to occur in \_\_\_\_\_ [name of country]”

**OR**

- ii) Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Rosa*”

e. Conditions for *Grapevine Pinot gris virus*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The *Rosa* plants in this consignment were produced in a ‘pest free area’ for *Grapevine Pinot gris virus*”.

**OR**

- ii) “The *Rosa* plants in this consignment were produced in a ‘pest free place of production’ for *Grapevine Pinot gris virus*”.

f. Conditions for phytoplasmas

Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Rosa*”.

g. Conditions for Pucciniales

- i) 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 not approved; additional declaration: “The plants have been [dipped/sprayed until dripping] in [fungicide active ingredient]; a broad range systemic fungicide suitable for treating rust fungi from the Pucciniales order at the rate of [specify rate] at least 48 hours prior to shipment”.

**OR**

- iii) With prior arrangement with MPI, the plants may be dipped on arrival in New Zealand in propiconazole (5g a.i. per 10 litres of water); refer to section 2.3.2 “Treatment and Testing of the Consignment”.

h. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

**Note:** Only applies to the following species and cultivars: *Rosa gymnocarpa*, *Rosa rugosa*, *Rosa sempervirens*, *Rosa* cultivar Pink Meidiland, *Rosa* cultivar Pink Sevillana, *Rosa* cultivar Royal Bonica

**B. For Non-dormant Cuttings**

**PEQ:** Level 2

**Minimum Period:** 6 months

a. Conditions for *Ralstonia pseudosolanacearum*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants were sourced from a ‘pest free area’, free from *Ralstonia pseudosolanacearum*”.

**OR**

- ii) “The [insert plant species] plants have been sourced from a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*”.

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

c. Conditions for viruses

- i) Additional Declaration: “[*Virus name*] is absent/not known to occur in \_\_\_\_\_ [name of country]”.

**OR**

- ii) Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Rosa*”.

d. Conditions for *Grapevine Pinot gris virus*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The *Rosa* plants in this consignment were produced in a ‘pest free area’ for *Grapevine Pinot gris virus*”.

**OR**

- ii) “The *Rosa* plants in this consignment were produced in a ‘pest free place of production’ for *Grapevine Pinot gris virus*”.

e. Conditions for phytoplasmas

Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Rosa*”.

f. Conditions for Pucciniales

- i) Additional declaration: “The plants have been dipped in propiconazole at the rate of 5g a.i. per 10 litres of water”.

**OR**

- ii) For countries where propiconazole is not approved; additional declaration: “The plants have been [dipped/sprayed until dripping] in [fungicide active ingredient]; a broad range systemic fungicide suitable for treating rust fungi from the Pucciniales order at the rate of [specify rate] at least 48 hours prior to shipment”.

**OR**

- iii) With prior arrangement with MPI, the plants may be dipped on arrival in New Zealand in propiconazole (5g a.i. per 10 litres of water); refer to section 2.3.2 “Treatment and Testing of the Consignment”.

g. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

**Note:** Only applies to the following species and cultivars: *Rosa gymnocarpa*, *Rosa rugosa*, *Rosa sempervirens*, *Rosa* cultivar Pink Meidiland, *Rosa* cultivar Pink Sevillana, *Rosa* cultivar Royal Bonica

## C. For Dormant Cuttings

**PEQ:** Level 2

**Minimum Period:** 6 months

a. Conditions for *Ralstonia pseudosolanacearum*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants were sourced from a ‘pest free area’, free from *Ralstonia pseudosolanacearum*”.

**OR**

- ii) “The [insert plant species] plants have been sourced from a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*”.

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

c. Conditions for viruses

- i) Additional Declaration: “[*Virus name*] is absent/not known to occur in \_\_\_\_\_[name of country]”.

**OR**

- ii) Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Rosa*”.

d. Conditions for *Grapevine Pinot gris virus*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The *Rosa* plants in this consignment were produced in a ‘pest free area’ for *Grapevine Pinot gris virus*”.

**OR**

- ii) “The *Rosa* plants in this consignment were produced in a ‘pest free place of production’ for *Grapevine Pinot gris virus*”.

e. Conditions for phytoplasmas:

Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Rosa*”.

f. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

**Note:** Only applies to the following species and cultivars: *Rosa gymnocarpa*, *Rosa rugosa*, *Rosa sempervirens*, *Rosa* cultivar Pink Meidiland, *Rosa* cultivar Pink Sevilana, *Rosa* cultivar Royal Bonica

**D. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 2

**Minimum Period:** 6 months

a. Conditions for *Ralstonia pseudosolanacearum*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants were sourced from a ‘pest free area’, free from *Ralstonia pseudosolanacearum*”.

**OR**

- ii) “The [insert plant species] plants have been sourced from a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Ralstonia pseudosolanacearum*”.

b. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)

c. Conditions for viruses

- i) Additional Declaration: “[*Virus name*] is absent/not known to occur in \_\_\_\_\_[name of country]”.

**OR**

- ii) Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Rosa*”.

d. Conditions for *Grapevine Pinot gris virus*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The *Rosa* plants in this consignment were produced in a ‘pest free area’ for *Grapevine Pinot gris virus*”.

**OR**

- ii) “The *Rosa* plants in this consignment were produced in a ‘pest free place of production’ for *Grapevine Pinot gris virus*”.

## **E. For Whole Plants imported into a level 3A PEQ facility**

**Guidance for importers:** This option is for importers that have been unsuccessful at securing a PFA or PFPP declaration for *Ralstonia pseudosolanacearum*.

**PEQ:** Level 3A

**Minimum Period:** 6 months

- a. Conditions for *Ralstonia pseudosolanacearum*  
Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Rosa*”.
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
- c. Conditions for *Phellinus noxius* (section 2.2.1.13)
- d. Conditions for viruses

- i) Additional Declaration: “[*Virus name*] is absent/not known to occur in \_\_\_\_\_[name of country]”.

**OR**

- ii) Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Rosa*”.

- e. Conditions for *Grapevine Pinot gris virus*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The *Rosa* plants in this consignment were produced in a ‘pest free area’ for *Grapevine Pinot gris virus*”.

**OR**

- ii) “The *Rosa* plants in this consignment were produced in a ‘pest free place of production’ for *Grapevine Pinot gris virus*”.

- f. Conditions for phytoplasmas

Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Rosa*”.

- g. Conditions for Pucciniales

- i) 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 not approved; additional declaration: “The plants have been [dipped/sprayed until dripping] in [fungicide active ingredient]; a

broad range systemic fungicide suitable for treating rust fungi from the Pucciniales order at the rate of [specify rate] at least 48 hours prior to shipment”.

**OR**

iii) With prior arrangement with MPI, the plants may be dipped on arrival in New Zealand in propiconazole (5g a.i. per 10 litres of water); refer to section 2.3.2 “Treatment and Testing of the Consignment”.

h. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

**Note:** Only applies to the following species and cultivars: *Rosa gymnocarpa*, *Rosa rugosa*, *Rosa sempervirens*, *Rosa* cultivar Pink Meidiland, *Rosa* cultivar Pink Sevilana, *Rosa* cultivar Royal Bonica

## **F. For Non-dormant Cuttings or Dormant Cuttings imported into a level 3A PEQ facility**

**Guidance for importers:** This option is for importers that have been unsuccessful at securing a PFA or PFPP declaration for *Ralstonia pseudosolanacearum*.

**PEQ:** Level 3A

**Minimum Period:** 6 months

a. Conditions for *Ralstonia pseudosolanacearum*

Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Rosa*”.

b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

c. Conditions for viruses

i) Additional Declaration: “[*Virus name*] is absent/not known to occur in \_\_\_\_\_ [name of country]”.

**OR**

ii) Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Rosa*”.

d. Conditions for *Grapevine Pinot gris virus*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The *Rosa* plants in this consignment were produced in a ‘pest free area’ for *Grapevine Pinot gris virus*”.

**OR**

ii) “The *Rosa* plants in this consignment were produced in a ‘pest free place of production’ for *Grapevine Pinot gris virus*”.

f. Conditions for phytoplasmas

Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Rosa*”.

g. Conditions for Pucciniales

**Note:** Only applies to non-dormant cuttings

i) Additional Declaration: “The plants have been dipped in propiconazole at the rate of 5g a.i. per 10 litres of water”.

**OR**



- ii) For countries where propiconazole is not approved; additional declaration: “The plants have been [dipped/sprayed until dripping] in [fungicide active ingredient]; a broad range systemic fungicide suitable for treating rust fungi from the Pucciniales order at the rate of [specify rate] at least 48 hours prior to shipment”.

**OR**

- iii) With prior arrangement with MPI, the plants may be dipped on arrival in New Zealand in propiconazole (5g a.i. per 10 litres of water); refer to section 2.3.2 “Treatment and Testing of the Consignment”.

- h. Conditions for *Phytophthora ramorum* (section 2.2.1.11)

**Note:** Only applies to the following species and cultivars: *Rosa gymnocarpa*, *Rosa rugosa*, *Rosa sempervirens*, *Rosa* cultivar Pink Meidiland, *Rosa* cultivar Pink Sevilana, *Rosa* cultivar Royal Bonica

**G. For Tissue cultures imported into a level 3A PEQ facility**

**Guidance for importers:** This option is for importers that have been unsuccessful at securing a PFA or PFPP declaration for *Ralstonia pseudosolanacearum*.

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 3A

**Minimum Period:** 6 months

- a. Conditions for *Ralstonia pseudosolanacearum*  
Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Rosa*”.
- b. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)
- c. Conditions for viruses
- i) Additional Declaration: “[*Virus name*] is absent/not known to occur in \_\_\_\_\_ [name of country]”.

**OR**

- ii) Pre-determined testing in PEQ; refer to “Inspection, Testing and Treatment Requirements for *Rosa*”.

- d. Conditions for *Grapevine Pinot gris virus*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The *Rosa* plants in this consignment were produced in a ‘pest free area’ for *Grapevine Pinot gris virus*”.

**OR**

- ii) “The *Rosa* plants in this consignment were produced in a ‘pest free place of production’ for *Grapevine Pinot gris virus*”.

## Inspection, Testing and Treatment Requirements for *Rosa*

ORGANISM	MPI-ACCEPTED METHODS	Comments
<b>Fungi</b>		
<i>Phellinus noxius</i>	Refer to section 2.2.1.13 “Measures for <i>Phellinus noxius</i> ”	Applies to whole plants only
Pucciniales	Treatment; refer to part A and B of the <i>Rosa</i> schedule	Applies to whole plants and non-dormant cuttings only
<b>Bacteria</b>		
<i>Ralstonia pseudosolanacearum</i>	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective media <b>OR</b> PCR	Applies to <i>Rosa</i> whole plants, cuttings, and tissue culture imported into a level 3A PEQ facility
<i>Xylella fastidiosa</i>	Refer to section 2.2.1.12 “Measures for <i>Xylella fastidiosa</i> ”	Applies to whole plants and cuttings only. Testing requirements for <i>Xylella fastidiosa</i> are identified in section 2.2.1.12.
	Refer to section 2.2.2.5 “Measures for <i>Xylella fastidiosa</i> on tissue culture”	Applies to tissue culture only. Testing requirements for <i>Xylella fastidiosa</i> are identified in section 2.2.2.5.
<b>Viruses</b>		
<i>Blackberry chlorotic ringspot virus</i>	PCR	Applies to whole plants, cuttings, and tissue culture
<i>Raspberry ringspot virus</i> (strains not in <i>New Zealand</i> )	PCR	Applies to whole plants, cuttings, and tissue culture
<i>Rose rosette virus</i>	PCR	Applies to whole plants, cuttings, and tissue culture
<b>Phytoplasmas</b>	Nested or real-time PCR using universal phytoplasma primers	Applies to whole plants, cuttings, and tissue culture

### Notes:

1. The unit for testing is defined in section 2.3.2.1.
2. **Sample collection:** Plants shall be sampled from at least two positions on every stem including a young, fully expanded leaf at the top of each stem and an older leaf from a midway position.
3. **Time of testing:** Virus testing must be carried out using the new season’s growth in the spring, or spring-like conditions. Bacteria and phytoplasmas testing must be carried out during late summer to early autumn, or during late summer-like conditions.

## ***Rubus***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Rubus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **1. Type of *Rubus* nursery stock approved for entry into New Zealand**

Cuttings (runner tips and stem cuttings only); Plants in tissue culture

*Rubus* can be imported into Level 2 post entry quarantine from MPI-approved facilities, or into Level 3B post entry quarantine from non-approved facilities.

### **2. Pests of *Rubus***

Refer to the pest list.

### **3. Entry conditions for:**

#### **3.1 *Rubus* cuttings and tissue culture from offshore MPI-approved facilities in any country**

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Rubus*, the approved facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Rubus*.

##### **(i) Documentation**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Rubus* nursery stock exported to New Zealand.

**Import permit:** an import permit is required.

##### **(ii) Phytosanitary requirements**

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Rubus* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

**AND**

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-approved facility].

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the approved facility, and certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section [cuttings only] and by providing the following additional declarations to the phytosanitary certificate:

“The *Rubus* cuttings / plants in tissue culture [choose ONE option] have been:

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-approved facility].

**AND**

- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the approved facility, and certification.”

(v) Post-entry quarantine

**PEQ:** All *Rubus* nursery stock must be imported under permit into post-entry quarantine in a Level 2 greenhouse facility approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**Quarantine Period and Inspection, Testing and Treatment Requirements:** The nursery stock will be grown for a minimum period of 6 months (active continuous growth) in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. Six months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/tests are required.

### **3.2 *Rubus* cuttings and tissue culture from non-approved facilities in any country**

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Rubus* nursery stock exported to New Zealand.

**Import permit:** an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Rubus* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the preshipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section [cuttings only]. No additional declarations are required.

(iv) Post-entry quarantine

**PEQ:** All *Rubus* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**Quarantine Period and Inspection, Testing and Treatment Requirements:** The nursery stock will be grown for a minimum period of 16 months (cuttings) in post-entry quarantine. Tissue cultures must be deflasked, and the deflasked plant material grown in a PEQ greenhouse during the quarantine period. During this time, imported material will be inspected, treated and/or tested for regulated pests as specified in the “Inspection, Testing and Treatment Requirements for *Rubus*”, at the expense of the importer. These times are indicative minimum quarantine periods and may be extended if material is slow growing, pests are detected, or treatments/tests are required.

# Pest List for *Rubus*

## REGULATED PESTS (actionable)

### Insects

#### Insecta

##### Coleoptera

##### Attelabidae

*Rhynchites germanicus*

strawberry rhynchites

##### Buprestidae

*Agrilus aurichalceus*

raspberry buprestid

*Agrilus rubicola*

raspberry buprestid

*Agrilus ruficollis*

red-necked cane borer

##### Byturidae

*Byturus ochraceus*

raspberry beetle

*Byturus rubi*

eastern raspberry fruitworm

*Byturus tomentosus*

raspberry beetle

*Byturus unicolor*

raspberry fruitworm

*Byturus urbanus*

raspberry beetle

##### Cerambycidae

*Coreus marginatus*

longhorn beetle

*Oberea bimaculata*

raspberry caneborer

##### Chrysomelidae

*Batophila aerata*

raspberry flea beetle

*Batophila rubi*

raspberry flea beetle

*Brachypnoea exilis grita*

flea beetle

*Nodonota margaretae*

leaf beetle

##### Curculionidae

*Anthonomus rubi*

apple blossom weevil

*Anthonomus signatus*

blossom weevil

*Merhynchites bicolor*

rose curculio

*Merhynchites wickhami*

curculio

*Nemocestes incomptus*

strawberry root weevil

*Otiorhynchus clavipes*

red-legged weevil

*Otiorhynchus singularis*

clay covered weevil

*Rhynchaenus fagi*

strawberry weevil

*Scleropterus verecundus*

weevil

##### Nitidulidae

*Meligethes hebes*

sap beetle

##### Scarabaeidae

*Cetonia aurata pisana*

scarabaeid beetle

*Cotinis nitida*

green June beetle

*Macrodactylus subspinosus*

rose chafer

*Phyllopertha horticola*

garden chafer

*Popillia japonica*

Japanese beetle

##### Diptera

##### Agromyzidae

*Agromyza spiraeae*

rose leafminer

##### Anthomyiidae

*Pegomya rubivora*

raspberry cane maggot

##### Cecidomyiidae

*Contarinia agrimoniae*

midge

*Contarinia rubicola*

blackberry flower midge

*Dasineura plicatrix*

blackberry leaf midge

*Lasioptera rubi*

raspberry gall midge

*Resseliella theobaldi*

raspberry midge

##### Hemiptera

##### Anthocoridae

*Orius vicinus*

raspberry bug

<b>Miridae</b>	
<i>Lygocoris pabulinus</i>	common green caspid
<i>Lygus lineolaris</i>	tarnished plant bug
<i>Macrolophus rubi</i>	mirid
<i>Psallus variabilis</i>	mirid
<b>Pentatomidae</b>	
<i>Dolycoris baccarum</i>	stink bug
<i>Pentatoma rufipes</i>	forest bug
<b>Homoptera</b>	
<b>Aetalionidae</b>	
<i>Aetalion reticulatum</i>	-
<b>Aphididae</b>	
<i>Amphorophora agathonica</i>	strawberry aphid
<i>Amphorophora idaei</i>	large raspberry aphid
<i>Amphorophora rubitoxica</i>	aphid
<i>Aphis rubicola</i> [vect.]	raspberry aphid
<i>Aphis ruborum</i>	permanent blackberry aphid
<i>Macrosiphum funestum</i>	rose aphid
<i>Matsumuraja hirakurensis</i>	raspberry aphid
<b>Cicadellidae</b>	
<i>Dikrella californica</i>	blueberry leafhopper
<i>Dikrella cruentata</i>	leafhopper
<i>Edwardsiana rosae</i>	rose leafhopper
<i>Erythroneura rubiphylla</i>	leafhopper
<i>Macropsis fulcatus</i>	leafhopper
<i>Macropsis fuscata</i>	boysenberry leafhopper
<i>Metascarta impressifrons</i>	leafhopper
<i>Typhlocyba</i> spp.	rubus leafhoppers
<b>Issidae</b>	
<i>Mycterodus serbicus</i>	plant bug
<b>Psyllidae</b>	
<i>Trioza tripunctata</i>	blackberry psyllid
<i>Trioza trisignata</i>	psyllid
<b>Hymenoptera</b>	
<b>Cepidae</b>	
<i>Hartigia albomaculata</i>	sawfly borer
<b>Cynipidae</b>	
<i>Diastrophus</i> spp.	stem gall cynipids
<b>Pamphilidae</b>	
<i>Pamphilus sitkensis</i>	sawfly
<b>Pergidae</b>	
<i>Philomastix macleaii</i>	bramble sawfly
<b>Tenthredinidae</b>	
<i>Allantus cinctus</i>	banded rose sawfly
<i>Emphytus calceatus</i>	sawfly
<i>Empria tridens</i>	raspberry sawfly
<i>Metallus pumilus</i>	raspberry leaf-mining sawfly
<i>Metallus rohweri</i>	raspberry leafmining sawflies
<i>Metallus rubi</i>	blackberry leafminer
<i>Monophadnoides geniculatus</i>	raspberry sawfly
<i>Perineura rubi</i>	sawfly
<i>Sterictiphora furcata</i>	sawfly
<b>Lepidoptera</b>	
<b>Geometridae</b>	
<i>Itame wauaria</i>	v-moth
<i>Operophtera bruceata</i>	Bruce spanworm
<i>Operophtera brumata</i>	European winter moth
<b>Hepialidae</b>	
<i>Hepialus humuli</i>	ghost swift moth
<b>Incurvariidae</b>	

<i>Lampronia rubiella</i>	raspberry bud moth
<b>Lymantriidae</b>	
<i>Euproctis chrysorrhoea</i>	brown-tail moth
<i>Lymantria dispar</i>	Asian gypsy moth
<i>Orgyia antiqua</i>	rusty tussock moth
<b>Megalopygidae</b>	
<i>Megalopyge lanata</i>	-
<b>Nepticulidae</b>	
<i>Stigmella aurella</i>	-
<i>Stigmella splendidissima</i>	-
<b>Noctuidae</b>	
<i>Acronicta psi</i>	grey dagger moth
<i>Agrotis segetum</i>	turnip moth
<i>Cosmia trapezina</i>	dun-bar moth
<i>Eudocima tyrannus</i>	Akebia leaf-like moth
<i>Graphiphora augur</i>	double dart moth
<i>Melanchra persicariae</i>	dot moth
<i>Oraesia emarginata</i>	fruit-piercing moth
<i>Papaipema nebris</i>	stalk borer
<i>Peridroma saucia</i>	variegated cutworm
<i>Spirama retorta</i>	fruit sucking moth
<i>Xestia c-nigrum</i>	spotted cutworm
<b>Notodontidae</b>	
<i>Phalera bucephala</i>	buff-tip moth
<b>Saturniidae</b>	
<i>Saturnia pavonia</i>	silk moth
<b>Sesiidae</b>	
<i>Pennisetia hylaeiformis</i>	raspberry crownborer
<i>Pennisetia marginata</i>	raspberry crownborer
<i>Synanthedon bibionipennis</i>	strawberry crown moth
<b>Tortricidae</b>	
<i>Acleris comariana</i>	leafroller
<i>Acleris laterana</i>	broad barred button moth
<i>Archips oporanthus</i>	fruit tree tortrix
<i>Argyrotaenia citrana</i>	orange tortrix
<i>Choristoneura rosaceana</i>	obliquebanded leafroller
<i>Cnephasia longana</i>	omnivorous leaf-tier
<i>Epiblema uddmanniana</i>	bramble shoot borer
<i>Olethreutes concinnana</i>	leafroller
<i>Olethreutes furfurana</i>	leafroller
<i>Pandemis cerasana</i>	leafroller
<i>Spilonota ocellana</i>	eye-spotted bud moth
<b>Orthoptera</b>	
<b>Gryllidae</b>	
<i>Oecanthus nigricornis</i>	blackhorned tree cricket
<i>Oecanthus pellucens</i>	blackhorned tree cricket
<b>Phasmida</b>	
<b>Phasmatidae</b>	
<i>Carausius morosus</i>	wingless stick insect
<b>Thysanoptera</b>	
<b>Thripidae</b>	
<i>Thrips flavus</i>	flower thrips
<b>Mites</b>	
<b>Arachnida</b>	
<b>Acarina</b>	
<b>Eriophyidae</b>	
<i>Cenopalpus pseudospinosus</i>	rust mite
<i>Epitrimerus gibbosus</i>	eriphyid mite
<i>Eriophyes rubi</i>	eriphyid mite



<i>Phyllocoptes gibbosus</i>	eriophyid mite
<i>Phyllocoptes gracilis</i>	raspberry mite
<i>Phyllocoptes rubi</i>	eriophyid mite
<b>Eupodidae</b>	
<i>Neotetranychus rubi</i>	raspberry mite
<b>Tetranychidae</b>	
<i>Amphitettranychus viennensis</i>	hawthorn spider mite
<b>Nematodes</b>	
<b>Adenophorea</b>	
<b>Dorylaimida</b>	
<b>Longidoridae</b>	
<i>Xiphinema bakeri</i>	dagger nematode
<i>Xiphinema barensense</i>	dagger nematode
<b>Secernentea</b>	
<b>Tylenchida</b>	
<b>Criconematidae</b>	
<i>Criconemella axestis</i>	-
<i>Criconemella curvata</i>	ring nematode
<i>Criconemella denoudeni</i>	-
<i>Criconemella ornata</i>	ring nematode
<i>Criconemella sphaerocephala</i>	ring nematode
<i>Criconemella xenoplax</i>	ring nematode
<b>Dolichodoridae</b>	
<i>Tylenchorhynchus claytoni</i>	tobacco stunt nematode
<b>Hoplolaimidae</b>	
<i>Helicotylenchus platyurus</i>	-
<i>Hoplolaimus magnistylus</i>	-
<i>Scutellonema bradys</i>	yam nematode
<b>Pratylenchidae</b>	
<i>Hirschmanniella oryzae</i>	rice root nematode
<b>Fungi</b>	
<b>Ascomycota: Ascomycetes</b>	
<b>Diaporthales</b>	
<b>Valsaceae</b>	
<i>Gnomonia rostellata</i>	-
<i>Gnomonia rubi</i> (anamorph <i>Gloeosporium</i> sp.)	cane canker, dieback
<i>Gnomonia setacea</i>	cane canker, dieback
<b>Dothideales</b>	
<b>Leptosphaeriaceae</b>	
<i>Leptosphaeria thomasi</i>	cane blight
<b>Melanconidaceae</b>	
<i>Sydowiella depressula</i>	-
<b>Mycosphaerellaceae</b>	
<i>Mycosphaerella confusa</i> (anamorph <i>Pseudocercospora rubi</i> )	cercospora leaf spot
<i>Mycosphaerella ligae</i>	cane & leaf spot
<i>Mycosphaerella rubi</i> (anamorph <i>Septoria rubi</i> )	cane & leaf spot
<i>Sphaerulina rubi</i> (anamorph <i>Cylindrosporium rubi</i> )	-
<b>Helotiales</b>	
<b>Dermateaceae</b>	
<i>Pyrenopeziza rubi</i>	cane spot
<b>Sclerotiniaceae</b>	
<i>Monilinia fructigena</i> (anamorph <i>Monilia fructigena</i> )	brown rot
<b>Meliolales</b>	
<b>Meliolaceae</b>	
<i>Appendiculella calstroma</i>	black mildew
<b>Unknown Ascomycetes</b>	
-	
<i>Hormotheca rubicola</i>	-

<b>Basidiomycota: Basidiomycetes</b>	
<b>Agaricales</b>	
<b>Tricholomataceae</b>	
<i>Armillaria gallica</i>	armillaria root rot
<i>Armillaria mellea (anamorph Rhizomorpha subcorticalis)</i>	shoestring root rot
<i>Armillaria ostoyae</i>	armillaria root rot
<b>Russulales</b>	
<b>Lachnocladiaceae</b>	
<i>Scytinostroma galactinum</i>	Scytinostroma galactinum
<b>Unknown Basidiomycetes</b>	
<i>Gerwasia epiphylla</i>	-
<b>Basidiomycota: Urediniomycetes</b>	
<b>Stereales</b>	
<b>Sistotremataceae</b>	
<i>Phymatotrichopsis omnivora</i>	Texas root rot
<b>Uredinales</b>	
<b>Phragmidiaceae</b>	
<i>Arthuriomyces peckianus</i>	orange rust
<i>Gymnoconia nitens</i>	rust
<i>Hamaspora longissima</i>	sub-tropical rust
<i>Phragmidium alaskanum</i>	-
<i>Phragmidium bulbosum</i>	rust
<i>Phragmidium occidentale</i>	-
<b>Pucciniastraceae</b>	
<i>Pucciniastrum americanum</i>	late leaf rust
<i>Pucciniastrum arcticum</i>	-
<b>Mitosporic Fungi (Coelomycetes)</b>	
<i>Hapalosphaeria deformans</i>	anther blight
<i>Macrophoma rubi</i>	-
<i>Marssonina potentillae</i>	leaf scorch
<i>Phyllosticta carpogena</i>	-
<b>Mitosporic Fungi (Hyphomycetes)</b>	
<i>Fusicladium grayianum</i>	-
<i>Passalora monrosii</i>	-
<i>Pseudocercospora heteromalla</i>	-
<i>Pseudocercospora rubicola</i>	-
<i>Verticillium albo-atrum [severe strain]</i>	verticillium wilt
<b>Zygomycota: Zygomycetes</b>	
<b>Mucorales</b>	
<b>Mucoraceae</b>	
<i>Rhizopus sexualis</i>	soft rot
<b>Chromista</b>	
<b>Oomycota</b>	
<b>Pythiaceae</b>	
<i>Phytophthora idaei</i>	-
<i>Phytophthora ramorum</i>	sudden oak death
<i>Phytophthora rubi</i>	root rot
<b>Bacteria</b>	
-	-
<b>Enterobacteriaceae</b>	
<i>Erwinia amylovora f.sp. rubi</i>	
<b>Rhizobiaceae</b>	
<i>Agrobacterium rubi</i>	cane gall
<b>Xanthomonadaceae</b>	
<i>Xylella fastidiosa</i>	Pierce's disease

## Viruses

-		
-		
-		
	<i>Black raspberry necrosis virus</i> [strains not in New Zealand]	-
	<i>Blackberry calico virus</i>	-
	<i>Blackberry chlorotic ringspot virus</i>	-
	<i>Blackberry virus Y</i>	-
	<i>Blackberry yellow vein associated virus</i>	-
	<i>Bramble yellow mosaic virus</i>	-
	<i>Cherry rasp leaf virus</i>	-
	<i>Hawaiian rubus leaf curl virus</i>	-
	<i>Raspberry latent virus</i>	-
	<i>Raspberry leaf curl virus</i>	-
	<i>Raspberry ringspot virus</i>	-
	<i>Rubus Chinese seedborne virus</i>	-
	<i>Rubus chlorotic mottle virus</i>	-
	<i>Rubus yellow net virus</i>	-
	<i>Thimbleberry ringspot virus</i>	-
	<i>Tobacco necrosis virus</i> [strains not in New Zealand]	-
	<i>Tomato ringspot virus</i>	-
	<i>Wineberry latent virus</i>	-

## Phytoplasmas

-		
-		
-		
	Black raspberry witches'-broom phytoplasma	-
	Rubus stunt phytoplasma	-

## Disease of unknown aetiology

-		
-		
-		
	Alpine mosaic agent	-
	Black raspberry streak disease	-
	Raspberry chlorotic net disease	-
	Raspberry yellow spot disease	-

## Inspection, Testing and Treatment Requirements for *Rubus*

ORGANISM TYPES	MPI-ACCEPTED METHODS
<b>Mites</b>	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]
<b>Fungi</b>	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
<b>Chromista</b>	Growing season inspection in PEQ for symptom expression
<b>Bacteria</b>	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes upon arrival in the post entry quarantine facility.
<i>Erwinia amylovora</i> f. sp. <i>rubi</i>	Growing season inspection for symptom expression <b>AND</b> PCR
<i>Agrobacterium rubi</i>	Growing season inspection for symptom expression
<i>Xylella fastidiosa</i>	Growing season inspection for symptom expression <b>AND</b> PCR
<b>Viruses</b>	
<i>Black raspberry necrosis virus</i> [strains not in New Zealand]	Country freedom <b>OR</b> Graft indexing using <i>Rubus occidentalis</i> <b>and</b> PCR
<i>Blackberry calico virus</i>	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> )
<i>Blackberry chlorotic ringspot virus</i>	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> ) <b>and</b> PCR
<i>Blackberry virus Y</i>	Country freedom <b>OR</b> RT-PCR using BVY-specific primers
<i>Blackberry yellow vein associated virus</i>	Country freedom <b>OR</b> PCR
<i>Bramble yellow mosaic virus</i>	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> )
<i>Cherry rasp leaf virus</i>	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> , and <i>Nicotiana clevelandii</i> ) <b>and</b> ELISA <b>or</b> PCR
<i>Hawaiian rubus leaf curl virus</i>	Country freedom <b>OR</b> Growing season inspection for symptom expression
<i>Raspberry latent virus</i>	Country freedom <b>OR</b> PCR
<i>Raspberry leaf curl virus</i>	Country freedom <b>OR</b> Graft indexing using <i>Rubus occidentalis</i>
<i>Raspberry ringspot virus</i>	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> , and <i>Nicotiana clevelandii</i> ) <b>and</b> ELISA <b>or</b> PCR
<i>Rubus Chinese seedborne virus</i>	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> , and <i>Nicotiana clevelandii</i> )
<i>Rubus chlorotic mottle virus</i>	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> )
<i>Rubus yellow net virus</i>	Country freedom <b>OR</b> Graft indexing using <i>Rubus occidentalis</i> <b>and</b> PCR
<i>Thimbleberry ringspot virus</i>	Country freedom <b>OR</b> Graft indexing using <i>Rubus occidentalis</i>
<i>Tobacco necrosis virus</i> [strains not in New Zealand]	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> and <i>Nicotiana clevelandii</i> )

<i>Tomato ringspot virus</i>	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> , and <i>Nicotiana clevelandii</i> ) <b>and</b> ELISA <b>or</b> PCR
<i>Wineberry latent virus</i>	Country freedom <b>OR</b> Herbaceous indexing ( <i>Chenopodium quinoa</i> )
<b>Phytoplasmas</b>	
Black raspberry witches'-broom phytoplasma	Country freedom <b>OR</b> Nested PCR <b>or</b> real time PCR using universal phytoplasma primers
Rubus stunt phytoplasma	Country freedom <b>OR</b> Nested PCR <b>or</b> real time PCR using universal phytoplasma primers
<b>Diseases of unknown aetiology</b>	
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:

- Country freedom** for regulated viruses, diseases of unknown aetiology, and phytoplasmas will only be accepted when material is sourced from an MPI-approved offshore facility. Country freedom must be endorsed by the exporting NPPO, and must be included in the agreement between MPI and the approved offshore facility.
- The **unit for testing** is defined in section 2.3.2.1.
- Tissue culture plantlets** must be potted up and grown in a greenhouse approved to facility standard PEQ.STD Post Entry Quarantine for Plants, only material from the greenhouse is to be selected for testing.
- 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).
- Virus testing** is to be conducted on new spring growth.
- Phytoplasma and bacteria testing** is to be conducted at the end of the summer growth period.
- 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*.
- 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*.
- 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.
- Polymerase chain reaction (PCR) tests.** All PCR tests must be validated using positive and negative controls prior to use in quarantine testing. Positive and no template controls must be used in all tests. Ideally positive internal control primers and a negative plant control should also be used in PCR tests.

11. **Inspection** of the *Rubus* plants by the Operator of the PEQ facility for signs of pest and disease must be at least twice per week during periods of active growth. A record of inspections carried out by the Operator is to be kept and made available to the MPI Inspector on request.
12. **Other internationally recognised testing methods** may be accepted by MPI with prior notification.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Salix*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Erwinia salicis*, *Melampsora* spp., *Phellinus noxius*, *Phytophthora ramorum*, *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

**A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 3 months

- a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)  
**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*
- c. Conditions for *Phellinus noxius* (section 2.2.1.13)  
**Note:** Only applies to the following species: *Salix babylonica*

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

- a. Conditions for *Xylella fastidiosa* on tissue culture (section 2.2.2.5)  
**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.
- b. Subject to examination at a transitional facility for the identification of organisms approved to facility standard 155.04.03, at the importers expense, prior to release to the importer.

## *Sandersonia*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Sandersonia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **1. Type of *Sandersonia* nursery stock approved for entry into New Zealand**

Dormant bulbs

Plants in tissue culture

### **2. Pests of *Sandersonia***

Refer to the pest list.

### **3. Entry conditions for:**

#### **3.1 *Sandersonia* dormant bulbs from any country**

##### **(i) Documentation**

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

##### **(ii) Phytosanitary requirements**

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Sandersonia* dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur, following certification.

##### **(iii) Additional declarations to the phytosanitary certificate**

No additional declarations are required.

#### **3.2 *Sandersonia* plants in tissue culture from any country**

##### **(i) Documentation**

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

##### **(ii) Special tissue culture media requirements**

The tissue culture media must not contain charcoal.

##### **(iii) Phytosanitary requirements**

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Sandersonia* plants in tissue culture have been:



inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

(iv) *Additional declarations to the phytosanitary certificate*

No additional declarations are required.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Solanum*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Columnea latent viroid*, *Potato spindle tuber viroid*, *Tomato apical stunt viroid*, *Tomato chlorotic dwarf viroid*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

**A. For Whole Plants and Cuttings**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Columnea latent viroid*

**Note:** Only applies to the following species: *Brunfelsia undulata*, *Gloxinia gymnostoma* and *Nematanthus wettsteinii*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Columnea latent viroid* is not known to occur”.

**OR**

ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Columnea latent viroid*”.

**OR**

iii) Pre-determined testing in PEQ: refer to “Inspection, Testing and Treatment Requirements”.

b. Conditions for *Potato spindle tuber viroid*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Potato spindle tuber viroid* is not known to occur”.

**OR**

ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*”.

**OR**

- iii) Pre-determined testing in PEQ: refer to “Inspection, Testing and Treatment Requirements”.

c. Conditions for *Tomato apical stunt viroid*

**Note:** Only applies to the *Cestrum* genus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Tomato apical stunt viroid* is not known to occur”.

**OR**

- ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Tomato apical stunt viroid*”.

**OR**

- iii) Pre-determined testing in PEQ: refer to “Inspection, Testing and Treatment Requirements”.

d. Conditions for *Tomato chlorotic dwarf viroid*

**Note:** Only applies to the *Calibrachoa* genus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Tomato chlorotic dwarf viroid* is not known to occur”.

**OR**

- ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*”.

**OR**

- iii) Pre-determined testing in PEQ: refer to “Inspection, Testing and Treatment Requirements”.

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

a. Conditions for *Columnea latent viroid*

**Note:** Only applies to the following species: *Brunfelsia undulata*, *Gloxinia gymnostoma* and *Nematanthus wettsteinii*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Columnea latent viroid* is not known to occur”.

**OR**

- ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Columnea latent viroid*”.

**OR**

- iii) Pre-determined testing in PEQ: refer to “Inspection, Testing and Treatment Requirements”.

**Guidance for importers:** Tissue culture imported under this option must be imported into a level 2 PEQ greenhouse for a minimum period of 3 months to undergo testing for the presence of *Columnnea latent viroid* during the quarantine period.

b. Conditions for *Tomato apical stunt viroid*

**Note:** Only applies to the *Cestrum* genus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Tomato apical stunt viroid* is not known to occur”.

**OR**

- ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Tomato apical stunt viroid*”.

**OR**

- iii) Pre-determined testing in PEQ: refer to “Inspection, Testing and Treatment Requirements”.

**Guidance for importers:** Tissue culture imported under this option must be imported into a level 2 PEQ greenhouse for a minimum period of 3 months to undergo testing for the presence of *Tomato apical stunt viroid* during the quarantine period.

c. Conditions for *Potato spindle tuber viroid*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Potato spindle tuber viroid* is not known to occur”.

**OR**

- ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Potato spindle tuber viroid*”.

**OR**

- iii) Pre-determined testing in PEQ: refer to “Inspection, Testing and Treatment Requirements”.

**Guidance for importers:** Tissue culture imported under this option must be imported into a level 2 PEQ greenhouse for a minimum period of 3 months to undergo testing for the presence of *Potato spindle tuber viroid* during the quarantine period.

d. Conditions for *Tomato chlorotic dwarf viroid*

**Note:** Only applies to the *Calibrachoa* genus

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Tomato chlorotic dwarf viroid* is not known to occur”.

**OR**

- ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*”.

**OR**

- iii) Pre-determined testing in PEQ: refer to “Inspection, Testing and Treatment Requirements”.

**Guidance for importers:** Tissue culture imported under this option must be imported into a level 2 PEQ greenhouse for a minimum period of 3 months to undergo testing for the presence of *Tomato chlorotic dwarf viroid* during the quarantine period.

## Inspection, Testing and Treatment Requirements for *Solanum*

ORGANISM	MPI-ACCEPTED METHODS	Comments
<b>Viroids</b>		
<i>Columnea latent viroid</i>	PCR based methods	Only applies to <i>Brunfelsia undulata</i> , <i>Gloxinia gymnostoma</i> and <i>Nematanthus wettsteinii</i> whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility
<i>Potato spindle tuber viroid</i>	PCR based methods	Applies to whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility
<i>Tomato apical stunt viroid</i>	PCR based methods	Only applies to <i>Cestrum</i> whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility
<i>Tomato chlorotic dwarf viroid</i>	PCR based methods	Only applies to <i>Calibrachoa</i> whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility

**Guidance for importers:** Testing in PEQ for the presence of *Columnea latent viroid*, *Potato spindle tuber viroid*, *Tomato apical stunt viroid* and *Tomato chlorotic dwarf viroid* is only necessary when an importer has been unable to secure one of the alternative declarations.

## *Solanum tuberosum*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Solanum tuberosum*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **1. Type of *Solanum tuberosum* nursery stock approved for entry into New Zealand**

Plants in tissue culture

*Solanum tuberosum* can be imported into New Zealand as plants in tissue culture from any country.

### **2. Pests of *Solanum tuberosum***

Refer to the pest list.

### **3. Entry conditions for:**

#### **3.1 *Solanum tuberosum* plants in tissue culture from offshore MPI-approved facilities in any country**

##### **(i) Documentation**

**Import permit is required**

**Declaration for genetically modified organisms is required:** Refer to section 5 of this schedule for details.

**Phytosanitary requirements:** a completed phytosanitary certificate issued by the exporting country National Plant Protection Organisation (NPPO) must accompany all *Solanum tuberosum* plants in tissue culture exported to New Zealand.

##### **(ii) 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-approved facility.

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the approved facility, and certification.

##### **(iv) Additional declarations to the phytosanitary certificate**

“The *Solanum tuberosum* tissue cultures in this consignment have been:

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of MPI-approved facility];

**AND**

- have been held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the approved facility, and certification.”

(v) Inspection, testing and treatments of the consignment

For all imported *Solanum tuberosum* tissue cultures, MPI reserves the right to validate all testing and audit all treatment processes that are undertaken by a facility approved by MPI for testing/treatment purposes. This applies to MPI-approved facilities offshore and within New Zealand. Audits will be conducted on a regular basis and at the expense of the importer.

(vi) Post-entry quarantine

**PEQ:** Not required

### **3.2 *Solanum tuberosum* plants in tissue culture from non-approved facilities in any country**

(i) Documentation

**Import permit is required**

**Declaration for genetically modified organisms is required:** Refer to section 5 for details.

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the exporting country National Plant Protection Organisation (NPPO) must accompany all *Solanum tuberosum* plants in tissue culture exported to New Zealand.

(ii) 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/tests are required.

#### **4. Validation of test results and audit of treatments at MPI-approved laboratories or facilities**

For all imported *Solanum tuberosum* plants in tissue culture, MPI reserves the right to validate all testing and audit all treatment processes that are undertaken by a facility approved by MPI for testing/treatment purposes. This applies to MPI-approved facilities offshore and within New Zealand. Audits will be conducted on a regular basis and at the expense of the importer.

#### **5. Declaration for genetically modified organisms**

All import permit applications must include a signed declaration that the *Solanum tuberosum* plants in tissue culture are not genetically modified organisms, as defined by the New Zealand Hazardous Substances and New Organisms Act 1996 (HSNO Act, 1996).

For a copy of the declaration form refer to the end of this schedule.



## Pest List for *Solanum tuberosum*

### REGULATED PESTS (actionable)

#### Mite

#### Arachnida

#### Acarina

#### Tetranychidae

*Tetranychus evansi*

tetranychid mite

#### Fungi

#### Chytridiomycota

#### Chytridiales

#### Synchytriaceae

*Synchytrium endobioticum* [official control]

potato wart

#### Mitosporic Fungi (Coelomycetes)

#### Sphaeropsidales

#### Sphaerioidaceae

*Phoma andigena* var. *andigena*

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*

(formerly *R. solanacearum* race 1)

bacterial wilt of potatoes

#### Corynebacteriaceae

*Clavibacter michiganensis* subsp. *sepedonicus*

potato ring rot

#### Enterobacteriaceae

*Dickeya chrysanthemi* pv. *chrysanthemi*

(syn. *Erwinia chrysanthemi* pv. *chrysanthemi*)

bacterial soft rot

*Dickeya chrysanthemi* pv. *parthenii*

(syn. *Erwinia chrysanthemi* pv. *parthenii*)

-

*Dickeya paradisiaca*

(syn. *Erwinia chrysanthemi* pv. *paradisiaca*)

-

'*Dickeya solani*'

-

*Pectobacterium betavascularum*

(syn. *Erwinia carotovora* subsp. *betavascularum*)

bacterial sudden yellows death

*Pectobacterium polaris*

#### Pseudomonadaceae

*Xylella fastidiosa*

#### Phyllobacteriaceae

'*Candidatus Liberibacter solanacearum*' haplotype B

#### Viroids

*Columnnea latent viroid*\*

-

*Pepper chat fruit viroid*\*

*Potato spindle tuber viroid* [transient]

-

*Tomato chlorotic dwarf viroid*\*

-

*Tomato planta macho viroid*\*

-

## Viruses

<i>Abutilon mosaic begomovirus*</i>	-
<i>Andean potato latent tymovirus</i>	-
<i>Andean potato mild mosaic tymovirus</i>	-
<i>Andean potato mottle comovirus</i>	-
<i>Arracacha A nepovirus*</i>	-
<i>Arracacha B nepovirus</i>	-
<i>Asparagus 3 potexvirus*</i>	-
<i>Beet curly top curtovirus</i>	-
<i>Cassava green mottle nepovirus*</i>	-
<i>Cassia mild mosaic carlavirus*</i>	-
<i>Cherry leaf roll nepovirus*</i>	-
<i>Eggplant mosaic tymovirus*</i>	-
<i>Eggplant mottled dwarf nucleorhabdovirus</i>	-
<i>Henbane mosaic potyvirus*</i>	-
<i>Melilotus mosaic potyvirus*</i>	-
<i>Papaya mosaic potexvirus</i>	-
<i>Pelargonium line pattern carmovirus*</i>	-
<i>Pepino mosaic potexvirus</i>	-
<i>Pepper veinal mottle potyvirus*</i>	-
<i>Potato 14R tobamovirus</i>	-
<i>Potato black ringspot nepovirus</i>	-
<i>Potato deforming mosaic begomovirus</i>	-
<i>Potato latent carlavirus</i>	-
<i>Potato mop-top furovirus</i>	-
<i>Potato P carlavirus</i>	-
<i>Potato rough dwarf carlavirus</i>	-
<i>Potato virus H carlavirus</i>	-
<i>Potato virus T trichovirus</i>	-
<i>Potato virus U nepovirus</i>	-
<i>Potato virus V potyvirus</i>	-
<i>Potato virus Y potyvirus [strains not in New Zealand]</i>	-
<i>Potato yellow dwarf nucleorhabdovirus</i>	-
<i>Potato yellow mosaic begomovirus</i>	-
<i>Potato yellow vein crinivirus</i>	-
<i>Potato yellowing alfamovirus</i>	-
<i>Solanum apical leaf curling begomovirus</i>	-
<i>Solanum yellows luteovirus</i>	-
<i>Southern potato latent carlavirus</i>	-
<i>Sowbane mosaic sobemovirus</i>	-
<i>Tobacco etch potyvirus*</i>	-
<i>Tobacco necrosis necrovirus [strains not in New Zealand]</i>	-
<i>Tobacco necrotic dwarf luteovirus*</i>	-
<i>Tobacco rattle tobnavirus [strains not in New Zealand]</i>	-
<i>Tobacco streak ilarvirus [strains not in New Zealand]</i>	-
<i>Tobacco stunt varicosavirus*</i>	-
<i>Tomato bushy stunt tombusvirus*</i>	-
<i>Tomato infectious chlorosis crinivirus</i>	-
<i>Tomato leaf curl begomovirus - Australia*</i>	-
<i>Tomato leaf curl begomovirus - New Delhi</i>	-
<i>Tomato top necrosis nepovirus*</i>	-
<i>Tomato yellow leaf curl begomovirus</i>	-
<i>Tomato yellow mosaic begomovirus</i>	-
<i>Tomato yellow vein streak begomovirus*</i>	-
<i>Wild potato mosaic potyvirus</i>	-

## Phytoplasmas

<i>Columbia basin purple top phytoplasma</i>	-
<i>Eggplant little leaf phytoplasma</i>	-

Peanut witches' broom*	-
Potato marginal flavescence	-
Potato phyllody phytoplasma	-
Potato purple-top roll phytoplasma	-
Potato purple-top wilt phytoplasma	-
Potato round leaf phytoplasma	-
Potato stolbur phytoplasma	-
Potato witches' broom phytoplasma	-
Saq'O disease	-

**Note: \* Pathogens that infect *Solanum tuberosum* experimentally (i.e. not yet found to infect potato naturally under field conditions).**

## Inspection and Testing Requirements for *Solanum tuberosum*

ORGANISM TYPES	MPI-ACCEPTED METHODS	Comments
<b>Mites</b>	Binocular microscope inspection.	
<b>Fungi</b>		
<i>Aecidium cantensis</i>	Growing season inspection in PEQ for symptom expression	
<i>Phoma andigena</i> var. <i>andina</i>	Growing season inspection in PEQ for symptom expression	
<i>Synchytrium endobioticum</i> [official control]	Growing season inspection in PEQ for symptom expression	<i>S. endobioticum</i> cannot be cultured. It is identified by microscopic examination of affected plants. This organism belongs to the Myxomycetes in the Kingdom Protozoa.
<b>Oomycetes</b>		
<i>Phytophthora capsici</i>	Growing season inspection in PEQ for symptom expression	
<i>Phytophthora infestans</i> (A2 mating strain)	Growing season inspection in PEQ for symptom expression	
<i>Phytophthora palmivora</i>	Growing season inspection in PEQ for symptom expression	
<b>Bacteria</b>		
'Candidatus Liberibacter solanacearum' haplotype B	Growing season inspection in PEQ for symptom expression AND PCR	
<i>Clavibacter michiganensis</i> subsp. <i>sepedonicus</i>	Growing season inspection in PEQ for symptom expression <b>AND</b> <ul style="list-style-type: none"> <li>• Immunofluorescence</li> <li><b>or</b></li> <li>• ELISA <b>AND</b> grow plantlets on Murashige and Skoog medium</li> <li><b>or</b></li> <li>• PCR <b>AND</b> grow plantlets on Murashige and Skoog medium</li> </ul>	
<i>Dickeya chrysanthemi</i> pv. <i>chrysanthemi</i>	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective pectate media <b>or</b> PCR	
<i>Dickeya chrysanthemi</i> pv. <i>parthenii</i>	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective pectate media <b>or</b> PCR	
<i>Dickeya paradisiaca</i>	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective pectate media <b>or</b> PCR	
' <i>Dickeya solani</i> '	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective pectate media <b>or</b> PCR	
<i>Pectobacterium betavascularum</i>	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective pectate media <b>or</b> PCR	
<i>Pectobacterium polaris</i>	Growing season inspection in PEQ for symptom expression <b>AND</b> plating on selective pectate media <b>or</b> PCR	
<i>Ralstonia pseudosolanacearum</i> (formerly <i>R. solanacearum</i> race 1)	Growing season inspection in PEQ for symptom expression, <b>AND</b> plating on selective media <b>OR</b> PCR	
<i>Xylella fastidiosa</i>	Growing season inspection in PEQ for symptom expression <b>AND</b> PCR	

ORGANISM TYPES	MPI-ACCEPTED METHODS	Comments
<b>Viroids</b>		
Potato spindle tuber viroid [transient]	PCR using two sets of primers <b>or</b> Return PAGE (with silver staining) <b>or</b> Hybridisation (P32 or digoxigenin labelled RNA probes)	
<b>Viruses</b>		
Arracacha B nepovirus	ELISA <b>or</b> PCR <b>AND</b> herbaceous indicators Ca	Sap transmitted with difficulty. ELISA must detect the oca strain
Andean potato latent tymovirus	ELISA <b>or</b> PCR <b>AND</b> herbaceous indicators Nb, No	
Andean potato mild mosaic tymovirus	ELISA <b>or</b> PCR	
Andean potato mottle comovirus	ELISA <b>or</b> PCR <b>AND</b> herbaceous indicators Nc, Nd	
Beet curly top curtovirus	ELISA <b>or</b> PCR	
Eggplant mottled dwarf nucleorhabdovirus	Herbaceous indicators Nb, Nc, Nd	
Papaya mosaic potexvirus	PCR and Herbaceous indicator Ca	
Pepino mosaic virus	PCR and Herbaceous indicators Nd, No, and Nt	
Potato 14R tobamovirus	Growing season inspection in PEQ for symptom expression	Not fully characterised.
Potato black ringspot nepovirus	ELISA <b>or</b> PCR <b>AND</b> herbaceous indicators Cq, No	
Potato deforming mosaic begomovirus	PCR <b>or</b> ELISA	
Potato latent carlavirus	PCR	
Potato mop-top furovirus	ELISA <b>or</b> PCR <b>AND</b> herbaceous indicators Ca, Cq, Nd	ELISA can be used to detect the virus in indicator plants but may not be reliable for potato in which virus is usually in low concentration or erratically distributed.
Potato P carlavirus	PCR	
Potato rough dwarf carlavirus	PCR	
Potato T trichovirus	ELISA <b>or</b> PCR <b>AND</b> Herbaceous indicators Ca, Cq	
Potato virus H carlavirus	PCR	
Potato virus U nepovirus	Herbaceous indicators Ca, Cq	
Potato virus V potyvirus	ELISA <b>or</b> PCR	
Potato virus Y potyvirus [strains not in NZ]	ELISA <b>or</b> PCR <b>AND</b> herbaceous indicators Nb, No	
Potato yellow dwarf nucleorhabdovirus	Herbaceous indicators Nc	
Potato yellow mosaic begomovirus	Herbaceous indicators Nb, Nt	
Potato yellow vein crinivirus	PCR <b>or</b> hybridisation	
Potato yellowing alfamovirus	ELISA <b>or</b> PCR	
Solanum apical leaf curling begomovirus	Growing season inspection in PEQ for symptom expression	
Solanum yellows luteovirus	Growing season inspection in PEQ for symptom expression	
Southern potato latent carlavirus	Growing season inspection in PEQ for symptom expression	
Sowbane mosaic sobemovirus	Herbaceous indicators Ca, Cq	
Tobacco necrosis necrovirus [strains not in New Zealand]	Herbaceous indicators Ca, Cq, Nc	Tobacco necrosis virus A Tobacco necrosis virus B

ORGANISM TYPES	MPI-ACCEPTED METHODS	Comments
Tobacco rattle tobnavirus [strains not in New Zealand]	PCR <b>AND</b> 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 <b>or</b> ELISA	
Tomato yellow mosaic begomovirus	PCR <b>or</b> ELISA <b>AND</b> herbaceous indicators Nb, Nt	
Wild potato mosaic potyvirus	Herbaceous indicators Nc, No	
<b>Phytoplasmas</b>		
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 phytoplasma	Nested or real-time PCR using universal phytoplasma primers	
Potato purple-top wilt phytoplasma	Nested or real-time PCR using universal phytoplasma primers	
Potato round leaf phytoplasma	Nested or real-time PCR using universal phytoplasma primers	
Potato stolbur phytoplasma	Nested or real-time PCR using universal phytoplasma primers	
Potato witches' broom phytoplasma	Nested or real-time PCR using universal phytoplasma primers	
Saq'O disease	Growing season inspection in PEQ for symptom expression	An unknown phytoplasma and a native strain of Potato leafroll virus (PLRV) are associated with this disease. No appropriate detection methods are currently available for the disease-causing agent.

## Viroids, viruses and phytoplasmas infecting potato experimentally

**Note: \* Pathogens that are currently only known to infect *Solanum tuberosum* experimentally. Tests that would detect these pathogens are already being conducted elsewhere in this schedule.**

ORGANISM TYPES	Comments
Columnea latent viroid*	No evidence that this viroid infects potato naturally.
Pepper chat fruit viroid	No evidence that this viroid infects potato naturally.

Tomato chlorotic dwarf viroid*	Tests that would detect this viroid are already being conducted elsewhere in this schedule e.g. the herbaceous indicator Nd.
Tomato planta macho viroid*	No evidence that this viroid infects potato naturally (Galindo <i>et al.</i> 1982).
Abutilon mosaic begomovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule e.g. the universal PCR or ELISA tests for begomoviruses.
Arracacha A nepovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the herbaceous indicators Cq and Nc.
Asparagus 3 potexvirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicator Cq and Nc.
Cassava green mottle nepovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the herbaceous indicators Cq and Nc.
Cassia mild mosaic carlavirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the universal PCR for carlaviruses.
Cherry leaf roll nepovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the herbaceous indicators Nc and Nt.
Eggplant mosaic tymovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicators Cq and Nc.
Henbane mosaic potyvirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the general potyvirus ELISA or PCR using universal potyvirus primers.
Melilotus mosaic potyvirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicator Ca
Pelargonium line pattern carmovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicators Cq and Ca.
Pepper veinal mottle potyvirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicators Nc and Ca and the general potyvirus PCR/ELISA.
Tobacco etch potyvirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicators Cq and Ca.
Tobacco necrotic dwarf luteovirus*	No appropriate test available.
Tobacco stunt varicosavirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicator Ca.
Tomato bushy stunt tombusvirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicators Cq and Nc.
Tomato leaf curl begomovirus - Australia*	Tests that would detect this virus are already being conducted elsewhere in this schedule e.g. the universal PCR or ELISA for begomovirus.

Tomato top necrosis nepovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the indicator Cq.
Tomato yellow vein streak begomovirus*	Tests that would detect this virus are already being conducted elsewhere in this schedule, e.g. the universal PCR or ELISA for begomovirus.
Peanut witches' broom*	Tests that would detect this phytoplasma are already being conducted elsewhere in this schedule, e.g. the universal PCR for phytoplasma.

#### Notes:

1. The unit for testing is defined in section 2.3.2.1.
2. Plantlets in growth medium must be de-flasked and grown in quarantine for the completion of pre-determined testing; however, the 'Inspection and Testing Requirements' may also require the plantlets to be grown on specific medium for bacteria testing. After plantlets are deflasked they must be grown in sterile potting mix. Testing must be carried out on plants while they are still in active growth prior to tuber formation.
3. Herbaceous indicator hosts (**Cq** - *Chenopodium quinoa*, **Nd** – *Nicotiana debneyi*, **No** – *Nicotiana occidentalis* P1 and **Nt** - *Nicotiana tabacum* (cv White Burley)): at least two plants of each herbaceous indicator species must be used in each test. Herbaceous indicator hosts (**Ca** - *Chenopodium amaranticolor*, **Nb** - *Nicotiana benthamiana* and **Nc** - *Nicotiana clevelandii*): at least four plants of each herbaceous indicator species must be used in each test.
4. For herbaceous indexing and ELISA, plants must be sampled from at least two positions on every stem including a young, fully expanded leaflet at the top of each stem and an older leaflet from a midway position (Jeffries, 1998). For the PSTVd PCR young actively growing leaf tissue must be used.
5. Herbaceous indicator plants must be grown under appropriate temperatures and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection. A suitable positive control must be included.
6. Enzyme linked immunosorbent assay (ELISA) and polymerase chain reaction (PCR) tests for viruses. Tests must be completed at the optimal time for detection. In general, plants shall be sampled from at least two positions including a young, fully expanded leaf at the top of the stem and an older leaf from a midway position.
7. All PCR, hybridisation and ELISA tests must be validated using positive controls prior to use in quarantine testing. Positive and negative controls (including a blank water control for PCR) must be used in all tests. Ideally positive internal controls and a negative plant control should also be used in PCR tests.
8. Inspect *Solanum tuberosum* plants for signs of pest and disease at least once per week. Inspect inoculated herbaceous indicator plants at least twice per week for symptoms of virus infection
9. With prior notification, MPI will accept other internationally recognised testing methods.



# Declaration Form

**To be completed and signed by the exporter and importer.**

As defined by the New Zealand HSNO Act 1996, Genetically modified organism means, unless expressly provided otherwise by regulations, any organism in which any of the genes or any other genetic material (a) have been modified by in vitro techniques; or (b) are inherited or otherwise derived, through any number of replications, from any genes or other genetic material which has been modified by in vitro techniques.

Note that under the Hazardous Substances and New Organisms (HSNO) Act 1996. The import and release of any genetically modified crop without approval from the Environmental Protection Authority (EPA) it is unlawful.

I, (**Exporter's** name and address)

--

declare that according to the requirements set out in the Nursery Stock Import Health Standard (MPI Import Health Standard: 155.02.06: Importation of Nursery Stock - <https://www.biosecurity.govt.nz/dmsdocument/1152-Nursery-Stock-Import-Health-Standard>),

(Insert species name and lot/line number or unique identifier as stated on all the other import documentation)

was produced neither “from” nor “by” genetically modified crops.

I undertake to inform immediately the importer and the Ministry for Primary Industries, MPI, New Zealand of any information that can undermine the accuracy of this declaration.

Note that MPI may request evidence as to how production, handling and transport of the nursery stock is performed in the field or require and audit as a way to provide quality to the production system.

I, (**Importer's** name and address)

--

declare to the best of my knowledge that according to the requirements set out in the Nursery Stock Import Health Standard (MPI Import Health Standard: 155.02.06: Importation of Nursery Stock - <https://www.biosecurity.govt.nz/dmsdocument/1152-Nursery-Stock-Import-Health-Standard>),

(Insert species name and lot/line number or unique identifier as stated on all the other import documentation)

was produced neither “from” nor “by” genetically modified crops.

Signed by **Exporter** and Company Name (details) and date

Signed by **Importer** and Company Name (details) and date

**Warning: Any person who knowingly makes a statement of information or a declaration that is false or misleading in a material particular may on summary conviction, be sentenced to a term of imprisonment and/or fined not exceeding \$500,000.00**

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Solidago*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

**Quarantine Pests:** Aster yellows phytoplasma, Uredinales, *Xylella fastidiosa*

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

- b. Conditions for Aster yellows phytoplasma

**Additional declaration:** “Aster yellows phytoplasma is not known to occur in \_\_ [the country or state where the plants were grown] \_\_”.

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

- a. Conditions for *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. Conditions for Aster yellows phytoplasma

**Additional declaration:** “The cultures have been derived from parent stock tested or inspected and found free of Aster yellows phytoplasma”.

## *Syringa*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Syringa*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** Virus & virus-like diseases

**Entry Conditions:** **Basic;** with variations and additional conditions as specified below:

#### **A. For Whole Plants:**

**PEQ:** Level 2

**Minimum Period:** 3 months

**Additional Declaration:** “The plants were inspected during the growing season and no symptoms of viruses or virus-like diseases were detected”.

#### **B. For Tissue Cultures:**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2;

**PLUS**

**Additional Declaration:**

“The cultures have been derived from parent stock tested and found free of viruses or virus-like diseases”.

## ***Tillandsia***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Tillandsia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**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.

## *Tricyrtis*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Tricyrtis*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**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.

## *Tritonia*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Tritonia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Puccinia gladioli*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 6 months

a. Conditions for *Puccinia gladioli*

- i) “*Puccinia gladioli* is not known to occur in \_\_\_\_\_[the country or state where the plants were grown]”.

**OR**

- ii) “The plants were inspected during the growing season and *Puccinia gladioli* was not detected”.

**B. For Dormant Bulbs (Corms) from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, United States of America**

#### **OPTION 1:**

**No import permit is required**

**PEQ:** None

**Cleanliness:** Bulbs (corms) must be free of leafy coverings.

a. Additional Declaration

“In addition to inspection of dormant bulbs prior to shipment, the crop from which the bulbs were derived was inspected during the growing season according to appropriate procedures, and considered free of quarantine pests, and practically free from other injurious pests.”

#### **OPTION 2:**

**PEQ:** Level 1

**Minimum Period:** 3 months

**Cleanliness:** Bulbs (corms) must be free of leafy coverings.

**C. For Dormant Bulbs from Countries other than Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, South Africa, Spain, Sweden, United Kingdom, United States of America**

**OPTION 1:**

**PEQ:** Level 1

**Minimum Period:** 3 months

**Cleanliness:** Bulbs (corms) must be free of leafy coverings.

a. Additional Declaration

“The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

**AND**

- treated for regulated insects as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.”

**OPTION 2:**

**PEQ:** Level 2

**Minimum Period:** 3 months

**Cleanliness:** Bulbs (corms) must be free of leafy coverings.

**D. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

## *Tulipa*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Tulipa*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **1. Type of *Tulipa* nursery stock approved for entry into New Zealand**

Dormant bulbs

Plants in tissue culture

### **2. Pests of *Tulipa***

Refer to the pest list.

### **3. Entry conditions for:**

#### **3.1 *Tulipa* dormant bulbs from the Netherlands**

##### **(i) Documentation**

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

##### **(ii) Phytosanitary requirements**

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Tulipa* dormant bulbs have been:

- produced in accordance with the requirements of the Bloembollenkeuringsdienst (BKD) Class 1 bulb certification scheme.

**AND**

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated bacteria and viruses.

**AND**

- treated for regulated insects and mites as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

##### **(iii) Additional declarations to the phytosanitary certificate**

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection



Treatment” section, and by providing the following additional declaration to the phytosanitary certificate:

“The *Tulipa* dormant bulbs in this consignment have been:

- produced in accordance with the requirements of the BKD Class 1 bulb certification scheme.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated nematodes and fungi [if applicable].

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated bacteria and viruses.”

(iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed.

### 3.2 *Tulipa* dormant bulbs from any country other than the Netherlands

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Tulipa* dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests OR treated for regulated fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated bacteria and viruses.

**AND**

- treated for regulated insects and mites as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection

Treatment” section, and by providing the following additional declaration to the phytosanitary certificate:

“The *Tulipa* dormant bulbs in this consignment have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated nematodes and fungi [if applicable].

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated bacteria and viruses.”

(iv) Post-entry quarantine

**PEQ:** Level 1

**Quarantine Period:** This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/tests are required. Cut flowers may receive biosecurity clearance while the imported plants remain in post-entry quarantine following inspection of the parent plants and with prior approval from an MPI Inspector.

### 3.3 *Tulipa* plants in tissue culture from any country

(i) 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/tests are required.

# Pest List for *Tulipa*

## REGULATED PESTS (actionable)

### Insect

#### Insecta

##### Diptera

##### Anthomyiidae

*Delia antiqua*

onion maggot

##### Homoptera

##### Aphididae

*Rhopalosiphoninus staphyleae tulipaellus*

tulip leaf aphid

##### Orthoptera

##### Gryllotalpidae

*Gryllotalpa gryllotalpa*

mole cricket

##### Thysanoptera

##### Thripidae

*Taeniothrips eucharii*

oriental thrips

### Mite

#### Arachnida

##### Acarina

##### Eriophyidae

*Aceria tulipae* [vector]

wheat curl mite

### Nematode

#### Adenophorea

##### Dorylaimida

##### Longidoridae

*Xiphimena coxi*

dagger nematode

##### Trichodoridae

*Paratrichodorus pachydermus* [vector]

stubby root nematode

*Paratrichodorus teres*

stubby root nematode

*Trichodorus similis*

stubby root nematode

#### Secernentea

##### Tylenchida

##### Tylenchidae

*Ditylenchus dipsaci* [strains not in New Zealand]

stem and bulb nematode

### Fungus

#### Ascomycota

##### Leotiales

##### Sclerotiniaceae

*Sclerotinia bulborum*

black slime

*Sclerotinia galanthina*

bulb rot

#### Basidiomycota: Ustomycetes

##### Ustilaginales

##### Ustilaginaceae

*Ustilago tulipae*

smut

#### mitosporic fungi (Agonomycetes)

##### Agonomycetales

##### unknown Agonomycetales

*Rhizoctonia tuliparum*

basal rot

*Sclerotium perniciusum*

smoulder

*Sclerotium wakkeri*

blackleg

### Bacterium

##### Corynebacteriaceae

*Curtobacterium flaccumfaciens* pv. *oortii*

yellow pock

**Virus**

<i>Cymbidium ringspot virus</i>	-
<i>Tobacco rattle virus</i> [strains not in New Zealand]	-
<i>Tomato bushy stunt virus</i>	-
<i>Tomato ringspot virus</i>	-
<i>Tulip grey virus</i> (syn. <i>Tulip severe mosaic virus</i> )	-
<i>Tulip halo necrosis virus</i>	-
<i>Tulip mild mosaic virus</i>	-
<i>Tulip mild mottle mosaic virus</i>	-
<i>Wa tulip virus</i>	-

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Ulmus*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Ceratocystis fimbriata*, Elm mosaic virus, Elm phloem necrosis, *Phellinus noxius*, *Phytophthora ramorum*, *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

**A. For Whole Plants**

**PEQ:** Level 3B

**Minimum Period:** 3 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)  
**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*
- d. Conditions for *Phellinus noxius* (section 2.2.1.13)  
**Note:** Only applies to the following species: *Ulmus parvifolia*

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

**As per section 2.2.2.4, an import permit is required**

**PEQ:** Level 3B

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.2.5)  
**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Vaccinium*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

These conditions do not apply to *Vaccinium macrocarpon*.

### **1. Type of *Vaccinium* [excluding *Vaccinium macrocarpon*] nursery stock approved for entry into New Zealand**

Cuttings (dormant); Plants in tissue culture.

### **2. Pests of *Vaccinium***

Refer to the pest list.

### **3. Entry conditions for:**

#### **3.1 *Vaccinium* cuttings and tissue culture from offshore MPI-approved facilities in any country**

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. The operator of the approved facility must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Vaccinium*. Refer to the “*Vaccinium* Inspection, Testing and Treatment Requirements”.

##### **(i) Documentation**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vaccinium* nursery stock exported to New Zealand.

**Import permit:** an import permit is required.

##### **(ii) Phytosanitary requirements**

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Vaccinium* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

**AND**

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-approved facility].

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the approved facility, and certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section and by providing the following additional declarations to the phytosanitary certificate:

“The *Vaccinium* cuttings / plants in tissue culture [choose ONE option] have been:

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-approved facility].

**AND**

- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the approved facility, and certification.”

(iv) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

(v) Post-entry quarantine

**PEQ:** All *Vaccinium* nursery stock must be imported under permit into post-entry quarantine in a level 2 quarantine facility approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**Quarantine Period and Inspection, Testing and Treatment Requirements:** The nursery stock will be grown for a minimum period of 6 months in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. Six months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/tests are required.

### 3.2 *Vaccinium* cuttings from non-approved facilities in any country

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vaccinium* nursery stock exported to New Zealand.

**Import permit:** an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Vaccinium* cuttings have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment.

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.



(iii) Additional declarations to the phytosanitary certificate

If satisfied that the preshipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section. No additional declarations are required.

(iv) Post-entry quarantine

**PEQ:** All *Vaccinium* cuttings must be imported under permit into post-entry quarantine in a level 3B quarantine facility approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**Quarantine Period and Inspection, Testing and Treatment Requirements:** The nursery stock will be grown for a minimum period of 16 months in post-entry quarantine. During this time, it will be inspected, treated and/or tested for regulated pests as specified in the “Inspection, Testing and Treatment Requirements for *Vaccinium*”, at the expense of the importer. These times are indicative minimum quarantine periods and may be extended if material is slow growing, pests are detected, or treatments/tests are required.

### 3.3 *Vaccinium* tissue cultures from non-approved facilities in any country

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vaccinium* nursery stock exported to New Zealand.

**Import permit:** an import permit is required.

ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Vaccinium* plants in tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

**AND**

- [for countries recognised by MPI as free of *Phytophthora ramorum*] have been sourced from a country recognised by MPI as being free from *Phytophthora ramorum*.

**Guidance for importers:** Freedom from *Phytophthora ramorum* is an optional measure that may be applied to tissue cultures that will undergo quarantine in a level 3A quarantine facility.

(iii) 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 approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**Special requirements for plants imported into a level 3A quarantine facility:**

- Before plants are deflasked into a level 3A quarantine facility the tissue cultures must be held at a level 3 tissue culture laboratory until the following activities have been completed:
  - Tissue cultures must be held between 17°C and 25°C for a minimum period of four weeks and all plants must be inspected by the MPI inspector for signs or symptoms of *Phytophthora ramorum* prior to deflasking. This inspection will be in addition to growing season inspections which are required in the greenhouse. This is only required for plants which do not have an additional declaration certifying they have been sourced from a country recognised by MPI as being free from *Phytophthora ramorum*.
  - Sub culturing must not occur during this incubation period however plants may be sub-cultured on arrival in New Zealand, prior to commencement of the four-week incubation.
  - Tissue cultures must not be transferred to the level 3A quarantine facility until they have been tested for and found free from *Monilinia vaccinii-corymbosi*.
- Requirements at the level 3A quarantine facility:
  - All plants must be inspected for signs and symptoms of pests and disease at least twice per week throughout the entire quarantine period (including during dormancy).
  - Plants must be irrigated using a method which prevents water coming into contact with plant foliage (such as drip irrigation). Overhead irrigation must not be used.
  - Contingency plans must be developed to identify actions that will be taken to contain the propagules of any fungal or oomycete disease organisms in the event of disease symptoms becoming evident during the quarantine period. These plans must be recorded in the facility operating manual.

**Quarantine Period and Inspection, Testing and Treatment Requirements:**

The imported tissue culture plants must be deflasked and grown for a minimum period of 9 months in post-entry quarantine. During this time plants will be inspected, treated and/or tested for regulated pests as specified in the “Inspection, Testing and Treatment Requirements for *Vaccinium*”, at the expense of the importer. This time is the indicative minimum quarantine period and may be extended if material is slow growing, pests are detected, or treatments/tests are required.

**Guidance:**

Imports of *Vaccinium* under this section are required to go into level 3B PEQ, unless an importer opts for level 3A. When an importer opts into level 3A PEQ the special requirements for plants imported into a Level 3A quarantine facility must be complied with.

# Pest List for *Vaccinium*

## REGULATED PESTS (actionable)

### Insect

### Insecta

#### Coleoptera

##### Cerambycidae

*Oberea myops*

azalea stem borer

##### Chrysomelidae

*Altica sylvia*

blueberry flea beetle

*Rhabdopterus picipes*

cranberry rootworm

##### Curculionidae

*Anthonomus musculus*

cranberry weevil

*Conotrachelus nenuphar*

plum curculio

*Pseudanthonomus validus*

currant fruit weevil

##### Scarabaeidae

*Popillia japonica*

Japanese beetle

#### Diptera

##### Cecidomyiidae

*Contarinia vaccinii*

blueberry tip midge

##### Tephritidae

*Rhagoletis mendax*

blueberry maggot

#### Hemiptera

##### Coreidae

*Veneza phyllopus*

leaf-footed bug

#### Homoptera

##### Aphididae

*Illinoia borealis*

aphid

*Illinoia pepperi*

blueberry aphid

##### Cicadellidae

*Euscelis striatulus*

Blunt-nosed leafhopper

*Scaphytopius magdalenensis*

sharpnosed leafhopper

#### Hymenoptera

##### Tenthredinidae

*Caliroa annulipes*

sawfly

*Neopareophora litura*

gooseberry sawfly

*Pristiphora idiota*

willow redgall sawfly

*Pristiphora mollis*

-

#### Lepidoptera

##### Arctiidae

*Hyphantria cunea*

fall webworm

##### Geometridae

*Itame ribearia*

currant spanworm

##### Noctuidae

*Acronicta tritona*

acronicta caterpillar

*Actebia fennica*

black army cutworm

##### Notodontidae

*Datana major*

azalea caterpillar

##### Pyralidae

*Acrobasis vaccinii*

cranberry fruitworm

##### Sphingidae

*Paonias astylus*

huckleberry sphinx

##### Tortricidae

*Archips rosanus*

rose leafroller

*Argyrotaenia velutinana*

red-banded leafroller

*Aroga trialbamaculella*

leaftier

*Cheimophila salicella*

European carnation tortrix

*Choristoneura hebenstreitella*

tortricid

<i>Choristoneura rosaceana</i>	oblique-banded leafroller
<i>Cydia packardii</i>	cherry fruitworm
<i>Dichomeris vacciniella</i>	leaf-tier
<i>Hendecaneura shawiana</i>	blueberry tip borer
<i>Spilonota ocellana</i>	eyespotted bud moth
<b>Thysanoptera</b>	
<b>Thripidae</b>	
<i>Catinathrips similis</i>	thrips
<i>Catinathrips vaccinicola</i>	thrips
<i>Frankliniella bispinosa</i>	flower thrips
<i>Frankliniella tritici</i>	eastern flower thrips
<i>Frankliniella vaccinii</i>	blueberry thrips
<i>Scirtothrips ruthveni</i>	-
<i>Taeniothrips vaccinophilus</i>	thrips
<b>Mite</b>	
<b>Arachnida</b>	
<b>Acarina</b>	
<b>Eriophyidae</b>	
<i>Acalitus vaccinii</i>	blueberry bud mite
<b>Fungus</b>	
<b>Ascomycota</b>	
<b>Diaporthales</b>	
<b>Valsaceae</b>	
<i>Diaporthe vaccinii</i> (anamorph <i>Phomopsis vaccinii</i> )	twig blight
<b>Dothideales</b>	
<b>Botryosphaeriaceae</b>	
<i>Botryosphaeria corticis</i>	cane blight
<i>Botryosphaeria vaccinii</i> (anamorph <i>Phyllosticta elongata</i> )	--
<b>Polystomellaceae</b>	
<i>Dothidella vacciniicola</i>	twig canker
<b>Erysiphales</b>	
<b>Erysiphaceae</b>	
<i>Microsphaera vaccinii</i>	powdery mildew
<b>Hypocreales</b>	
<b>Hypocreaceae</b>	
<i>Calonectria ilicicola</i> (anamorph <i>Cylindrocladium crotalariae</i> )	root and stem rot
<b>Leotiales</b>	
<b>Leotiaceae</b>	
<i>Godronia cassandrae</i> (anamorph <i>Fusicoccum putrefaciens</i> )	foliage spot
<i>Godronia cassandrae</i> f. sp. <i>vaccinii</i>	cane canker
<b>Sclerotiniaceae</b>	
<i>Monilinia baccarum</i>	mummy berry
<i>Monilinia fructigena</i> (anamorph <i>Monilia fructigena</i> )	European brown rot
<i>Monilinia ledi</i>	twig blight
<i>Monilinia megalospora</i>	-
<i>Monilinia oxycocci</i>	-
<i>Monilinia urnula</i>	brown rot
<i>Monilinia vaccinii-corymbosi</i>	brown rot
<b>Phyllachorales</b>	
<b>Phyllachoraceae</b>	
<i>Ophiodothella vaccinii</i>	fly speck leaf spot
<b>Meliolales</b>	
<b>Meliolaceae</b>	
<i>Asteridiella exilis</i>	black mildew
<b>Rhizomatales</b>	
<b>Rhizomataceae</b>	

<i>Lophodermium hypophyllum</i>	-
<i>Lophodermium maculare</i>	leaf spot
<i>Rhytisma vaccinii</i>	tar leaf spot
<b>Basidiomycota: Basidiomycetes</b>	
<b>Agaricales</b>	
<b>Tricholomataceae</b>	
<i>Armillaria mellea</i> (anamorph <i>Rhizomorpha subcorticalis</i> )	armillaria root rot
<i>Armillaria ostoyae</i>	armillaria root rot
<b>Exobasidiales</b>	
<b>Exobasidiaceae</b>	
<i>Exobasidium maculosum</i>	
<b>Basidiomycota: Teliomycetes</b>	
<b>Uredinales</b>	
<b>Pucciniastraceae</b>	
<i>Pucciniastrum goeppertianum</i>	rust
<b>Oomycota</b>	
<b>Pythiales</b>	
<b>Pythiaceae</b>	
<i>Phytophthora ramorum</i>	sudden oak death disease
<b>mitosporic fungi (Coelomycetes)</b>	
<b>Sphaeropsidales</b>	
<b>Sphaerioidaceae</b>	
<i>Dothichiza caroliniana</i>	double leaf spot
<i>Coniothyrium vaccinicola</i>	brand canker
<i>Phoma vaccinii</i>	stem blight
<i>Piggotia vaccinii</i>	leaf spot
<i>Septoria albopunctata</i>	septoria spot
<i>Septoria vaccinii</i>	septoria spot
<b>unknown Coelomycetes</b>	
<b>unknown Coelomycetes</b>	
<i>Gloeosporium minus</i>	leaf spot and stem canker
<i>Leptothyrium conspicuum</i>	fly speck
<b>mitosporic fungi (Hyphomycetes)</b>	
<b>Hyphomycetales</b>	
<b>Moniliaceae</b>	
<i>Gloeocercospora inconspicua</i>	leaf spot
<i>Ramularia vaccinii</i>	leaf spot
<b>unknown Hyphomycetes</b>	
<b>unknown Hyphomycetes</b>	
<i>Aureobasidium vaccinii</i>	twig and leaf blight
<b>Bacterium</b>	
<b>Burkholderiaceae</b>	
<i>Ralstonia pseudosolanacearum</i>	Bacterial wilt
(formerly <i>Ralstonia solanacearum</i> race 1, Phylotype I)	
<b>Pseudomonadaceae</b>	
<i>Xylella fastidiosa</i>	Pierce’s disease
<b>Rhizobiaceae</b>	
<i>Agrobacterium rubi</i>	cane gall
<b>Virus</b>	
<i>Blueberry leaf mottle virus</i>	-
<i>Blueberry red ringspot virus</i> (syn. <i>Cranberry ringspot virus</i> )	-
<i>Blueberry scorch virus</i>	-
<i>Blueberry shock virus</i>	-
<i>Blueberry shoestring virus</i>	-
<i>Peach rosette mosaic virus</i>	-
<i>Tobacco streak virus</i> [strains not in New Zealand]	-
<i>Tomato ringspot virus</i>	-

**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)
<b>Fungi</b>	Growing season inspection in PEQ for disease symptom expression
<i>Diaporthe vaccinii</i>	Plating of twig or leaf material onto suitable isolation medium
<i>Monilinia vaccinii-corymbosi</i>	Growing season inspection in PEQ for disease symptom expression <b>AND</b> [for tissue cultures which will be deflasked into a level 3A quarantine facility, option 3.3 of the <i>Vaccinium</i> schedule only]; one of the following tests must occur before the tissue cultures are transferred to the quarantine facility: PCR <b>or</b> plating onto suitable isolation medium.
<b>Oomycota</b>	
<i>Phytophthora ramorum</i>	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.
<b>Bacteria</b>	
<i>Agrobacterium rubi</i>	Growing season inspection in PEQ for disease symptom expression
<i>Ralstonia pseudosolanacearum</i> (formerly <i>R. solanacearum</i> race 1)	Growing season inspection in PEQ for disease symptom expression, <b>AND</b> plating on selective media <b>or</b> PCR using DNA from plant stem
<i>Xylella fastidiosa</i>	Growing season inspection in PEQ for disease symptom expression <b>AND</b> PCR
<b>Viruses</b>	
<i>Blueberry leaf mottle virus</i>	Herbaceous indicators Cq and Nc <b>AND</b> ELISA <b>or</b> PCR
<i>Blueberry red ringspot virus</i> (syn. <i>Cranberry ringspot virus</i> )	ELISA <b>or</b> PCR
<i>Blueberry scorch virus</i>	Herbaceous indicator Cq <b>AND</b> ELISA <b>or</b> PCR
<i>Blueberry shock virus</i>	Herbaceous indicators Nc and Nt <b>AND</b> ELISA <b>or</b> PCR
<i>Blueberry shoestring virus</i>	ELISA <b>or</b> PCR
<i>Peach rosette mosaic virus</i>	Herbaceous indicators Cq and Nt <b>AND</b> ELISA <b>or</b> PCR
<i>Tobacco streak virus</i> [strains not in New Zealand]	Herbaceous indicators Cq and Nt <b>AND</b> ELISA <b>or</b> PCR
<i>Tomato ringspot virus</i>	Herbaceous indicators Cq and Nt <b>AND</b> ELISA <b>or</b> PCR
<b>Phytoplasmas</b>	
Blueberry stunt phytoplasma	Nested PCR <b>or</b> real time PCR using universal phytoplasma primers
Cranberry false blossom phytoplasma	Nested PCR <b>or</b> real time PCR using universal phytoplasma primers
<i>Vaccinium</i> witches' broom phytoplasma	Nested PCR <b>or</b> real time PCR using universal phytoplasma primers
<b>Diseases of unknown aetiology</b>	
Blueberry fruit drop disease	Growing season inspection in PEQ for disease symptom expression

### Notes:

- The unit for testing is defined in section 2.3.2.1.
- Herbaceous indicator hosts: *Chenopodium quinoa* (Cq), *Nicotiana clevelandii* (Nc) and *Nicotiana tabacum* (Nt). At least two plants of each herbaceous indicator species must be used in each test. Tests are to be carried out using the new season's growth in the spring. Plants shall be sampled from at least two positions on every stem including a young, fully expanded leaf at the top of each stem and an older leaf from a midway position. Herbaceous indicator plants must be grown under appropriate temperatures and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.

3. Virus testing (herbaceous indexing, ELISA and PCR) must be carried out in the spring or under spring-like conditions using the new flush of growth. Bacteria and phytoplasma testing (PCR) must be carried out at the end of the summer or under summer-like conditions.
4. *Vaccinium* plants must be sampled from at least two positions on every stem including a young, fully expanded leaf at the top of each stem and an older leaf from a midway position.
5. All PCR and ELISA tests must be validated using positive controls prior to use in quarantine testing. Positive and negative controls (including a blank water control for PCR) must be used in all tests. Ideally positive internal controls and a negative plant control should also be used in PCR tests.
6. Inspect *Vaccinium* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy. Note: plants held in a level 3A quarantine facility under option 3.3 of the IHS must be inspected at least twice per week for the entire quarantine period (including during any periods of dormancy).
7. With prior notification, MPI will accept other internationally recognised testing methods.



## *Vaccinium macrocarpon*

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Vaccinium macrocarpon*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**1. Type of *Vaccinium macrocarpon* nursery stock approved for entry into New Zealand**  
Cuttings (dormant); Plants in tissue culture

**2. Pests of *Vaccinium macrocarpon***

Refer to the pest list.

**3. Entry conditions for:**

**3.1 *Vaccinium macrocarpon* cuttings and tissue culture from offshore MPI-approved facilities in any country**

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. The operator of the approved facility must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Vaccinium macrocarpon*. Refer to the “*Vaccinium macrocarpon* Inspection, Testing and Treatment Requirements”.

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vaccinium macrocarpon* nursery stock exported to New Zealand.

**Import permit:** an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Vaccinium macrocarpon* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

**AND**

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-approved facility]

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the approved facility, and certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section and by providing the following additional declarations to the phytosanitary certificate:

“The *Vaccinium macrocarpon* cuttings / plants in tissue culture [choose ONE option] have been

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-approved facility].
- AND**
- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the approved facility, and certification.”

(iv) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

(v) Post-entry quarantine

**PEQ:** All *Vaccinium macrocarpon* nursery stock must be imported under permit into post-entry quarantine in a Level 2 greenhouse facility approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**Quarantine Period and Inspection, Testing and Treatment Requirements:** The nursery stock will be grown for a minimum period of 6 months in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. Six months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/tests are required.

### **3.2 *Vaccinium macrocarpon* cuttings and tissue culture from non-approved facilities in any country**

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vaccinium macrocarpon* nursery stock exported to New Zealand.

**Import permit:** an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MPI have been undertaken.

The *Vaccinium macrocarpon* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.
- AND**
- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].
- AND**
- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section. No additional declarations are required.

(iv) Post-entry quarantine

**PEQ:** All *Vaccinium macrocarpon* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**Quarantine Period and Inspection, Testing and Treatment Requirements:** The nursery stock will be grown for a minimum period of either 9 (tissue culture) or 16 months (cuttings) in post-entry quarantine. During this time, it will be inspected, treated and/or tested for regulated pests as specified in the “Inspection, Testing and Treatment Requirements for *Vaccinium macrocarpon*”, at the expense of the importer. These times are indicative minimum quarantine periods and may be extended if material is slow growing, pests are detected, or treatments/tests are required.

## Pest List for *Vaccinium macrocarpon*

### REGULATED PESTS (actionable)

#### Insect

#### Insecta

##### Coleoptera

##### Chrysomelidae

*Rhabdopterus picipes*

cranberry rootworm

##### Curculionidae

*Anthonomus musculus*

cranberry weevil

*Pseudanthonomus validus*

currant fruit weevil

##### Scarabaeidae

*Popillia japonica*

Japanese beetle

##### Diptera

##### Tephritidae

*Rhagoletis pomonella*

apple maggot fly

##### Homoptera

##### Aphididae

*Aphis vaccinii*

blueberry aphid

*Illinoia borealis*

aphid

##### Cicadellidae

*Euscelis striatulus*

Blunt-nosed leafhopper

##### Hymenoptera

##### Tenthredinidae

*Pristiphora idiota*

willow redgall sawfly

##### Lepidoptera

##### Arctiidae

*Hyphantria cunea*

fall webworm

##### Geometridae

*Itame ribearia*

currant spanworm

##### Noctuidae

*Acronicta tritona*

acronicta caterpillar

*Actebia fennica*

black army cutworm

##### Pyralidae

*Acrobasis vaccinii*

cranberry fruitworm

##### Tortricidae

*Archips rosanus*

rose leafroller

*Argyrotaenia velutinana*

red-banded leafroller

*Aroga triangularis*

leaf-tier

*Choristoneura hebenstreitella*

tortricid

*Choristoneura rosaceana*

oblique-banded leafroller

*Dichomeris vacciniella*

leaf-tier

##### Thysanoptera

##### Thripidae

*Frankliniella vaccinii*

blueberry thrips

#### Mite

#### Arachnida

##### Acarina

##### Eriophyidae

*Acalitus vaccinii*

blueberry bud mite

#### Fungus

#### Ascomycota

##### Diaporthales

##### Valsaceae

*Diaporthe vaccinii* (anamorph *Phomopsis vaccinii*)

twig blight

##### Dothideales

<b>Botryosphaeriaceae</b>	
<i>Botryosphaeria vaccinii</i> (anamorph <i>Phyllosticta elongata</i> )	--
<b>Erysiphales</b>	
<b>Erysiphaceae</b>	
<i>Microsphaera vaccinii</i>	powdery mildew
<b>Leotiales</b>	
<b>Leotiaceae</b>	
<i>Godronia cassandrae</i> (anamorph <i>Fusicoccum putrefaciens</i> )	foliage spot
<i>Godronia cassandrae</i> f. sp. <i>vaccinii</i>	cane canker
<b>Sclerotiniaceae</b>	
<i>Monilinia fructigena</i> (anamorph <i>Monilia fructigena</i> )	European brown rot
<i>Monilinia oxycocci</i>	-
<b>Rhytismatales</b>	
<b>Rhytismataceae</b>	
<i>Lophodermium hypophyllum</i>	-
<i>Lophodermium maculare</i>	leaf spot
<i>Lophodermium oxycocci</i>	-
<b>Basidiomycota: Basidiomycetes</b>	
<b>Agaricales</b>	
<b>Tricholomataceae</b>	
<i>Armillaria mellea</i> (anamorph <i>Rhizomorpha subcorticalis</i> )	armillaria root rot
<b>Basidiomycota: Teliomycetes</b>	
<b>Uredinales</b>	
<b>Pucciniastraceae</b>	
<i>Pucciniastrum goeppertianum</i>	rust
<b>Chytridiomycota</b>	
<b>Chytridiales</b>	
<b>Synchytriaceae</b>	
<i>Synchytrium vaccinii</i>	red leaf gall
<b>Mitosporic fungi (Coelomycetes)</b>	
<b>Sphaeropsidales</b>	
<b>Sphaerioidaceae</b>	
<i>Coniothyrium vaccinicola</i>	brand canker
<i>Phoma vaccinii</i>	stem blight
<i>Septoria vaccinii</i>	septoria spot
<i>Strasseria oxycocci</i>	fruit rot
<b>unknown Coelomycetes</b>	
<b>unknown Coelomycetes</b>	
<i>Gloeosporium minus</i>	leaf spot and stem canker
<i>Leptothyrium conspicuum</i>	fly speck
<b>Oomycota</b>	
<b>Pythiales</b>	
<b>Pythiaceae</b>	
<i>Phytophthora ramorum</i>	Sudden Oak Death disease
<b>Bacterium</b>	
<b>Pseudomonadaceae</b>	
<i>Xylella fastidiosa</i>	
<b>Rhizobiaceae</b>	
<i>Agrobacterium rubi</i>	cane gall
<b>Virus</b>	
<i>Blueberry scorch virus</i>	
<i>Blueberry red ringspot virus</i> (syn. <i>Cranberry ringspot virus</i> )	-
<i>Tobacco streak virus</i> [strains not in New Zealand]	-

## Phytoplasma

Cranberry false blossom phytoplasma

-

# Inspection, Testing and Treatment Requirements for *Vaccinium macrocarpon*

ORGANISM TYPES	MPI-ACCEPTED METHODS (See notes below)
<b>Fungi</b>	Growing season inspection in PEQ for disease symptom expression.
<b>Bacterium</b>	
<i>Agrobacterium rubi</i>	Growing season inspection in PEQ for disease symptom expression.
<i>Xylella fastidiosa</i>	Growing season inspection in PEQ for disease symptom expression <b>AND</b> PCR
<b>Virus</b>	
<i>Blueberry scorch virus</i>	Herbaceous indicator Cq <b>AND</b> ELISA <b>or</b> PCR.
<i>Blueberry red ringspot virus</i> (syn. <i>Cranberry ringspot virus</i> )	ELISA <b>or</b> PCR.
<i>Tobacco streak virus</i> [strains not in New Zealand]	Herbaceous indicators Cq and Nt <b>AND</b> ELISA <b>or</b> PCR.
<b>Phytoplasmas</b>	
Cranberry false blossom phytoplasma	Nested PCR <b>or</b> real time PCR using universal phytoplasma primers.

## Notes:

1. The unit for testing is defined in section 2.3.2.1.
2. Herbaceous indicator hosts: *Chenopodium quinoa* (Cq) and *Nicotiana tabacum* (Nt). At least two plants of each herbaceous indicator species must be used in each test. Tests are to be carried out using the new season's growth in the spring. Plants shall be sampled from at least two positions on every stem including a young, fully expanded leaf at the top of each stem and an older leaf from a midway position. Herbaceous indicator plants must be grown under appropriate temperatures and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.
3. Virus testing (herbaceous indexing, ELISA and PCR) must be carried out in the spring or under spring-like conditions using the new flush of growth. Bacteria and phytoplasma testing (PCR) must be carried out at the end of the summer or under summer-like conditions.
4. *Vaccinium macrocarpon* plants must be sampled from at least two positions on every stem including a young, fully expanded leaf at the top of each stem and an older leaf from a midway position.
5. All PCR and ELISA tests must be validated using positive controls prior to use in quarantine testing. Positive and negative controls (including a blank water control for PCR) must be used in all tests. Ideally positive internal controls and a negative plant control should also be used in PCR tests.
6. Inspect *Vaccinium macrocarpon* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy.
7. With prior notification, MPI will accept other internationally recognised testing methods.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Verbena*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Phytophthora tentaculata*, *Tetranychus kanzawai*, *Tomato chlorotic dwarf viroid*, Uredinales, *Xylella fastidiosa*

**Entry Conditions: Basic;** with variations and additional conditions as specified below:

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Phytophthora tentaculata*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora tentaculata*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora tentaculata*”.

b. Conditions for *Tomato chlorotic dwarf viroid*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Tomato chlorotic dwarf viroid* is not known to occur”.

**OR**

- ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*”.

**OR**

- iii) Pre-determined testing in PEQ: refer to “Inspection, Testing and Treatment Requirements for *Verbena*”.

c. Conditions for Uredinales

**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 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

## B. For Tissue Cultures

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

### PLUS

a. Conditions for *Tomato chlorotic dwarf viroid*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert plant species] plants in this consignment have been produced in a ‘pest free area’, where *Tomato chlorotic dwarf viroid* is not known to occur”.

### OR

- ii) “The [insert plant species] plants have been produced in a ‘pest free place of production’, where parent plants were tested according to an NPPO approved methodology and found free from *Tomato chlorotic dwarf viroid*”.

### OR

- iii) Pre-determined testing in PEQ: refer to “Inspection, Testing and Treatment Requirements for *Verbena*”

**Guidance for importers:** Tissue culture imported under this option must be imported into a level 2 PEQ greenhouse for a minimum period of 3 months to undergo testing for the presence of *Tomato chlorotic dwarf viroid* during the quarantine period.

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 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

## Inspection, Testing and Treatment Requirements for *Verbena*

ORGANISM	MPI-ACCEPTED METHODS	Comments
<b>Bacteria</b>		
<i>Xylella fastidiosa</i>	Refer to section 2.2.1.12 “Measures for <i>Xylella fastidiosa</i> ”	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
<b>Viroids</b>		
<i>Tomato chlorotic dwarf viroid</i>	PCR based method	Applies to whole plants, cuttings, and tissue culture imported into a level 2 PEQ facility

**Guidance for importers:** Testing in PEQ for the presence of *Tomato chlorotic dwarf viroid* is only necessary when an importer has been unable to secure one of the alternative declarations.



## ***Veronica (formerly Hebe)***

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Veronica*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

### **GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Phellinus noxius*, *Phytophthora capsici*, *Phytophthora palmivora*, *Phytophthora tentaculata*, *Xylella fastidiosa*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

#### **A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

- b. Conditions for *Phellinus noxius* (section 2.2.1.13)

**Note:** Only applies to members of the *Albizia* and *Cassia* genera AND the following species: *Agathis robusta*, *Celtis sinensis*, *Grevillea robusta*, *Hibiscus rosa-sinensis*, *Hibiscus schizopetalus*, *Hibiscus tiliaceus*, *Ilex rotunda*, *Lagerstroemia speciosa*, *Lagerstroemia subcostata*, *Ligustrum japonicum*, *Liquidambar formosana* and *Pistacia chinensis*

- c. Conditions for *Phytophthora capsici*

**Note:** Only applies to the following genera: *Abelmoschus*, *Hibiscus*, *Lavandula* and *Pistacia*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

- d. Conditions for *Phytophthora palmivora*

**Note:** Only applies to the following genera: *Abelmoschus*, *Catharanthus*, *Coronilla*, *Dodonaea*, *Euphorbia*, *Grevillea*, *Hibiscus*, *Lavandula* and *Pistacia*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

e. Conditions for *Phytophthora tentaculata*

**Note:** Only applies to the following genera: *Lavandula* and *Origanum*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora tentaculata*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora tentaculata*”.

## **B. For Cuttings**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

**Guidance for importers:** The minimum quarantine period will be 6 months for nursery stock sourced from countries not recognised by MPI as free from *Xylella fastidiosa*

b. Conditions for *Phytophthora capsici*

**Note:** Only applies to the following genera: *Abelmoschus*, *Hibiscus*, *Lavandula* and *Pistacia*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora capsici*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora capsici*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora capsici*”.

c. Conditions for *Phytophthora palmivora*

**Note:** Only applies to the following genera: *Abelmoschus*, *Catharanthus*, *Coronilla*, *Dodonaea*, *Euphorbia*, *Grevillea*, *Hibiscus*, *Lavandula* and *Pistacia*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

d. Conditions for *Phytophthora tentaculata*

**Note:** Only applies to the following genera: *Lavandula* and *Origanum*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

- i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora tentaculata*”.

**OR**

- ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora tentaculata*”.

**OR**

- iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora tentaculata*”.

**C. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

a. Conditions for *Xylella fastidiosa* on tissue culture (see section 2.2.2.5)

**Guidance for importers:** There will be a minimum quarantine period of 6 months in a Level 2 PEQ greenhouse, for tissue cultures from countries not recognised by MPI as free from *Xylella fastidiosa*.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Viburnum*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom, United States of America.

**Quarantine Pests:** *Phytophthora ramorum*, Uredinales

**Entry Conditions:** Basic; with variations and additional conditions as specified below:

**A. For Cuttings and Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 3 months

a. Conditions for Uredinales

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. 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-approved facilities, or into Level 3B post entry quarantine from non-approved facilities.

### **2. Pests of *Vitis***

Refer to the pest list.

### **3. Entry conditions for:**

#### **3.1 *Vitis* cuttings and tissue cultures from offshore MPI-approved facilities in any country**

An offshore approved facility is a facility that has been approved to the Administrative Standard: Standard for Offshore Facilities Holding and Testing Plants for Planting to undertake phytosanitary activities. For *Vitis*, the approved facility operator must also have an agreement with MPI on the phytosanitary measures to be undertaken for *Vitis*.

#### **(i) Documentation**

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all *Vitis* nursery stock exported to New Zealand.

**Import permit:** an import permit is required.

#### **(ii) Phytosanitary requirements**

Before a phytosanitary certificate is to be issued, the exporting country NPPO must be satisfied that the following activities required by MPI have been undertaken.

The *Vitis* cuttings / plants in tissue culture [choose ONE option] have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- treated for regulated insects and mites as described in section 2.2.1.6 of the basic conditions within 7 days prior to shipment [cuttings only].

**AND**

- sourced from *either* mother plants that have been kept in insect-proof plant houses *or* from open ground mother plants [cuttings only, choose ONE option].

**AND**

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-approved facility].

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following inspection and testing at the approved facility, and certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section and by providing the following additional declarations to the phytosanitary certificate:

“The *Vitis* cuttings / plants in tissue culture [choose ONE option] have been:

- held and tested for/classified free from specified regulated pests as required in the agreement between MPI and the [name of the MPI-approved facility].

**AND**

- sourced from mother plants that have been kept in insect-proof plant houses *or* sourced from open ground mother plants [cuttings only, choose ONE option].

**AND**

- sourced from mother plants which are at least 10 years old and have been inspected during the growing season and are free from symptoms of Syrah decline.

**AND**

- held in a manner to ensure infestation/reinfestation does not occur following inspection and testing at the approved facility, and certification.”

(iv) Post-entry quarantine

**PEQ:** “All *Vitis* nursery stock must be imported under permit into post-entry quarantine in a Level 2 greenhouse facility (or Level 3B greenhouse facility at the direction of the CTO) approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.”

**Quarantine Period and Inspection, Testing and Treatment Requirements:** Upon arrival cuttings will be dipped in 1% sodium hypochlorite for 2 minutes [cuttings only]. The nursery stock will be grown in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. The minimum quarantine period will be:

1. 6 months for plants in tissue culture and cuttings sourced from mother plants that have been kept in insect-proof plant houses (which may be extended to a minimum of 16 months at the direction of the CTO); or
  2. 16 months (which may be reduced to a minimum of 9 months at the discretion of the CTO) for cuttings sourced directly from open ground mother plants.
- These periods are indicative minimum quarantine periods and may be extended if material is slow growing, pests are detected, or treatments/tests are required.

### 3.2 *Vitis* cuttings and tissue culture from non-approved facilities in any country

(i) 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 years old and have been inspected during the growing season and are free from symptoms of Syrah decline.”

(iv) Post-entry quarantine

**PEQ:** All *Vitis* nursery stock must be imported under permit into post-entry quarantine in a Level 3B greenhouse facility approved to Facility Standard PEQ.STD: Post Entry Quarantine for Plants.

**Quarantine Period and Inspection, Testing and Treatment Requirements:** Upon arrival cuttings will be dipped in 1% sodium hypochlorite for 2 minutes [cuttings only]. The nursery stock will be grown for a minimum period of 16 months active growth in post-entry quarantine and will be inspected, treated and/or audit-tested for regulated pests, at the expense of the importer. Sixteen months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/tests are required.

# Pest List for *Vitis*

## REGULATED PESTS (actionable)

### Insect

### Insecta

#### Coleoptera

##### Bostrichidae

<i>Amphicerus bicaudatus</i>	apple twig borer
<i>Amphicerus bimaculatus</i>	bostrichid beetle
<i>Amphicerus cornutus</i>	-
<i>Apate congener</i>	-
<i>Apate monachus</i>	black borer
<i>Bostrychopsis jesuita</i>	large auger beetle
<i>Dexicrates robustus</i>	-
<i>Melalgus confertus</i>	branch and twig borer
<i>Micrapate scabrata</i>	-
<i>Neoterius mistax</i>	-
<i>Psoa quadrisignata</i>	-
<i>Schistocerus bimaculatus</i>	grape cane borer
<i>Scobicia declivis</i>	lead cable borer
<i>Xylopertha retusa</i>	wood boring beetle
<i>Xylopsocus gibbicollis</i>	-

##### Buprestidae

<i>Agrilus marginicollis</i>	flatheaded grape borer
------------------------------	------------------------

##### Carabidae

<i>Adoxus obscurus</i> [Animals Biosecurity]	-
--	---

##### Cerambycidae

<i>Acalolepta vastator</i>	-
<i>Cerasphorus albofasciatus</i>	grape trunk borer

##### Chrysomelidae

<i>Altica chalybaea</i>	grape flea beetle
<i>Altica torquata</i>	grapevine flea beetle
<i>Bromius obscurus</i>	western grape rootworm
<i>Fidia viticida</i>	grape root worm
<i>Glyptoscelis squamulata</i>	grape bud beetle
<i>Haltica</i> spp.	-
<i>Monolepta australis</i>	red-shouldered leaf beetle

##### Coccinellidae

<i>Coccinella transversoguttata</i> [Animals Biosecurity]	-
<i>Midas pygmaeus</i> [Animals Biosecurity]	-
<i>Nephus reunioni</i> [Animals Biosecurity]	-
<i>Rhyzobius ruficollis</i> [Animals Biosecurity]	-
<i>Stethorus</i> spp. [Animals Biosecurity]	-

##### Curculionidae

<i>Bustomus setulosus</i>	brown weevil
<i>Craponius inaequalis</i>	grape curculio
<i>Dischista cinna</i>	flower beetle
<i>Eremnus atratus</i>	black weevil
<i>Eremnus cerealis</i>	western province grain worm
<i>Eremnus setulosus</i>	grey weevil
<i>Naupactus xanthographus</i>	fruit tree weevil
<i>Orthorhinus cylindrirostris</i>	elephant weevil
<i>Orthorhinus klugi</i>	immigrant acacia weevil
<i>Otiorynchus cribricollis</i>	cribrate weevil
<i>Perperus</i> spp.	apple root weevils
<i>Platyaspistes glaucus</i>	-
<i>Platyaspistes venustus</i>	-
<i>Rhigopsis effracta</i>	-
<i>Tanyrhynchus carinatus</i>	bud nibbler



<b>Elateridae</b>	
<i>Limonium canus</i>	Pacific Coast wireworm
<b>Meloidae</b>	
<i>Mylabris oculata</i>	-
<b>Scarabaeidae</b>	
<i>Athlia rustica</i>	-
<i>Cotalpa ursina</i>	-
<i>Hoplia callipyge</i>	-
<i>Hoplia pubicollis</i>	-
<i>Macrodactylus subspinosus</i>	rose chafer
<i>Pachnoda sinuata</i>	scarab beetle
<i>Popillia japonica</i>	Japanese beetle
<i>Schizonycha</i> sp.	cockchafer
<b>Scolytidae</b>	
<i>Scolytus japonicus</i>	Japanese bark beetle
<i>Xyleborus dispar</i>	ambrosia beetle
<i>Xyleborus semiopacus</i>	black twig borer
<b>Staphylinidae</b>	
<i>Oligota pygmaea</i> [Animals Biosecurity]	-
<b>Tenebrionidae</b>	
<i>Blapstinus</i> sp.	darkling beetle
<i>Coniontis parviceps</i>	-
<i>Metoponium abnorme</i>	-
<b>Diptera</b>	
<b>Cecidomyiidae</b>	
<i>Diadiplosis koebelei</i>	-
<b>Tachinidae</b>	
<i>Ollacheryphe aenea</i> [Animals Biosecurity]	-
<i>Sturmia harrisinae</i> [Animals Biosecurity]	-
<i>Voriella uniseta</i> [Animals Biosecurity]	-
<b>Hemiptera</b>	
<b>Anthocoridae</b>	
<i>Orius</i> sp. [Animals Biosecurity]	-
<b>Coreidae</b>	
<i>Anthocoris</i> sp.	-
<i>Mictis profana</i>	crusader bug
<b>Lygaeidae</b>	
<i>Nysius raphanus</i>	false chinch bug
<i>Nysius vinitor</i>	Rutherglen bug
<i>Oxycarenus arctatus</i>	coon bug
<b>Miridae</b>	
<i>Creontiades dilutus</i>	green mirid
<b>Pentatomidae</b>	
<i>Euschistus conspersus</i>	stink bug
<i>Oechalia schellenbergi</i> [Animals Biosecurity]	Schellenberg's soldier bug
<b>Pyrrhocoridae</b>	
<i>Dindymus versicolor</i>	harlequin bug
<b>Homoptera</b>	
<b>Aleyrodidae</b>	
<i>Aleurocanthus woglumi</i>	citrus blackfly
<i>Tetraleurodes vittatus</i>	-
<i>Trialeurodes vittata</i>	grape whitefly
<b>Aphididae</b>	
<i>Aphis illinoisensis</i>	grapevine aphid
<i>Aphis medicaginis</i>	-
<b>Asterolecaniidae</b>	
<i>Asterolecanium pustulans</i>	oleander pit scale
<b>Cerococcidae</b>	
<i>Asterococcus muratae</i>	pit scale
<b>Cicadellidae</b>	
<i>Acia lineatifrons</i>	leafhopper
<i>Carneocephala fulgida</i>	red-headed sharpshooter

<i>Carneiocephala fulgida</i> [vector]	red-headed sharpshooter
<i>Dikrella cockerellii</i>	blackberry leafhopper
<i>Draeculacephala minerva</i>	green sharpshooter
<i>Draeculacephala minerva</i> [vector]	green sharpshooter
<i>Empoasca</i> sp.	green leafhopper
<i>Erythroneura comes</i>	eastern grape leafhopper
<i>Erythroneura elegantula</i>	western grape leafhopper
<i>Erythroneura variabilis</i>	variegated grape leafhopper
<i>Erythroneura ziczac</i>	-
<i>Graphocephala atropunctata</i>	leafhopper
<i>Graphocephala atropunctata</i> [vector]	blue-green sharpshooter
<i>Hordnia circellata</i>	-
<i>Scaphoideus titanus</i> [vector]	raspberry leafhopper
<b>Cicadidae</b>	
<i>Platypedia minor</i>	-
<i>Tettigades chilensis</i>	-
<b>Coccidae</b>	
<i>Ceroplastes rusci</i>	fig wax scale
<i>Eulecanium cerasorum</i>	calico scale
<i>Eulecanium prunosum</i>	frosted scale
<i>Heliooccus bohemius</i>	scale
<i>Parthenolecanium persicae</i>	European peach scale
<i>Pulvinaria betulae</i>	scale
<i>Pulvinaria innumerabilis</i>	cottony maple scale
<i>Pulvinaria vitis</i>	woolly vine scale
<b>Diaspididae</b>	
<i>Aonidiella inornata</i>	inornate scale
<i>Chrysomphalus aonidum</i>	Florida red scale
<i>Diaspidiotus uvae</i>	grape scale
<i>Oceanspidiotus spinosus</i>	armoured scale
<i>Parlatoria cinerea</i>	chaff scale
<i>Parlatoria oleae</i>	olive scale
<i>Pinnaspis strachani</i>	hibiscus snow scale
<i>Pseudaonidia trilobitiformis</i>	trilobite scale
<i>Pseudaulacaspis pentagona</i>	white peach scale
<i>Quadraspidiotus juglansregiae</i>	walnut scale
<i>Selenaspidus articulatus</i>	West Indian red scale
<b>Margarodidae</b>	
<i>Eurhizococcus brasiliensis</i>	margarodid
<i>Icerya seychellarum</i>	Seychelles scale
<i>Margarodes capensis</i>	Seychelles fluted scale
<i>Margarodes greeni</i>	soft scale
<i>Margarodes meridionalis</i>	-
<i>Margarodes prieskaensis</i>	margarodid
<i>Margarodes trimeni</i>	margarodid
<i>Margarodes vitis</i>	-
<i>Margarodes vredendalensis</i>	margarodid
<b>Membracidae</b>	
<i>Ceresa bubalus</i>	tree hopper
<i>Spissistilus bisonia</i>	-
<i>Spissistilus festinus</i>	three-cornered alfalfa hopper
<b>Phylloxeridae</b>	
<i>Viteus vitifoliae</i> [strain]	grape phylloxera
<b>Pseudococcidae</b>	
<i>Maconellicoccus hirsutus</i>	pink hibiscus mealybug
<i>Planococcus ficus</i>	fig mealybug
<i>Pseudococcus capensis</i>	-
<i>Pseudococcus maritimus</i>	grape mealybug
<i>Rhizoecus kondonis</i>	Kondo mealybug
<b>Hymenoptera</b>	
<b>Aphelinidae</b>	
<i>Coccophagus caridei</i> [Animals Biosecurity]	-

<i>Coccophagus gurneyi</i> [Animals Biosecurity]	-
<b>Bethylidae</b>	
<i>Goniozus platynota</i> [Animals Biosecurity]	-
<b>Braconidae</b>	
<i>Apanteles harrisinae</i> [Animals Biosecurity]	-
<i>Bracon cushmani</i> [Animals Biosecurity]	-
<i>Dolichogenidea tasmanica</i> [Animals Biosecurity]	-
<b>Dryinidae</b>	
<i>Aphelopus albopictus</i> [Animals Biosecurity]	-
<b>Encyrtidae</b>	
<i>Acerophagus notativentris</i> [Animals Biosecurity]	-
<i>Anagyrus clauseni</i> [Animals Biosecurity]	-
<i>Anagyrus fusciventris</i> [Animals Biosecurity]	-
<i>Anagyrus pseudococci</i> [Animals Biosecurity]	-
<i>Leptomastix dactylopii</i> [Animals Biosecurity]	parasitic wasp
<i>Metaphycus flavus</i> [Animals Biosecurity]	-
<i>Pseudaphycus angelicus</i> [Animals Biosecurity]	-
<i>Zarhopalus corvinus</i> [Animals Biosecurity]	-
<b>Eulophidae</b>	
<i>Colpoclypeus florus</i> [Animals Biosecurity]	-
<b>Formicidae</b>	
<i>Anoplolepis steingroeveri</i> [Animals Biosecurity]	black ant
<i>Crematogaster peringueyi</i> [Animals Biosecurity]	cocktail ant
<i>Formica cinerea</i> [Animals Biosecurity]	ant
<i>Pogonomyrmex californica</i> [Animals Biosecurity]	California harvester ant
<i>Solenopsis xyloni</i> [Animals Biosecurity]	southern fire ant
<i>Veromessor pergandei</i> [Animals Biosecurity]	desert seed-harvester ant
<b>Ichneumonidae</b>	
<i>Campoplex capitator</i> [Animals Biosecurity]	-
<i>Dicaelotus inflexus</i> [Animals Biosecurity]	-
<b>Mymaridae</b>	
<i>Anagrus epos</i> [Animals Biosecurity]	-
<b>Pteromalidae</b>	
<i>Ophelosia charlesii</i> [Animals Biosecurity]	-
<i>Pachyneuron</i> sp. [Animals Biosecurity]	-
<b>Trichogrammatidae</b>	
<i>Trichogramma funiculatum</i> [Animals Biosecurity]	-
<i>Trichogrammatomyia tortricis</i> [Animals Biosecurity]	-
<b>Vespidae</b>	
<i>Polistes buysoni</i> [Animals Biosecurity]	-
<b>Isoptera</b>	
<b>Kalotermitidae</b>	
<i>Cryptotermes brevis</i>	West Indian drywood termite
<i>Kalotermes flavicollis</i>	termite
<i>Kalotermes minor</i>	-
<i>Neotermes chilensis</i>	termite
<b>Rhinotermitidae</b>	
<i>Coptotermes acinaciformis</i> [official control]	Australian subterranean termite
<i>Reticulitermes hesperus</i>	-
<b>Termopsidae</b>	
<i>Porotermes quadricollis</i>	-
<b>Lepidoptera</b>	
<b>Agaristidae</b>	
<i>Agarista agricola</i>	painted vine moth
<i>Heraclia superba</i>	grapevine zebra moth
<b>Arctiidae</b>	
<i>Estigmene acrea</i>	saltmarsh caterpillar
<i>Hyphantria cunea</i>	fall webworm
<i>Laora variabilis</i>	-
<i>Spilosoma virginica</i>	yellow woollybear
<i>Turuptiana obliqua</i>	tiger moth
<b>Cossidae</b>	

<i>Coryphodema tristis</i>	quince trunk borer
<i>Zeuzera coffeae</i>	red coffee borer
<b>Heliozelidae</b>	
<i>Antispila rivillei</i>	-
<b>Noctuidae</b>	
<i>Achaea</i> spp.	fruit-piercing moths
<i>Agrotis munda</i>	brown cutworm
<i>Alabama argillacea</i>	cotton leafworm
<i>Anomis mesogona</i>	hibiscus looper
<i>Anomis</i> spp.	-
<i>Calyptra</i> spp.	fruit-piercing moths
<i>Copitarsia consueta</i>	noctuid moth
<i>Eudocima</i> spp.	fruit-piercing moths
<i>Euxoa messoria</i>	darksided cutworm
<i>Euxoa ochrogaster</i>	redbacked cutworm
<i>Helicoverpa punctigera</i>	oriental tobacco budworm
<i>Mythimna</i> sp.	-
<i>Noctua fimbriata</i>	broad-bordered yellow underwing
<i>Noctua pronuba</i>	large yellow underwing
<i>Oraesia</i> spp.	fruit-piercing moths
<i>Orthodes rufula</i>	cutworm
<i>Peridroma margaritosa</i>	-
<i>Peridroma saucia</i>	variegated cutworm
<i>Protorthodes rufula</i>	-
<i>Serodes</i> spp.	fruit-piercing moth
<i>Sphingomorpha</i> spp.	-
<i>Spodoptera littoralis</i>	cotton leafworm
<i>Xestia c-nigrum</i>	spotted cutworm
<b>Oecophoridae</b>	
<i>Echiomima</i> sp.	-
<i>Maroga melanostigma</i>	fruit tree borer
<b>Psychidae</b>	
<i>Gymnelema plebigena</i>	bagworm
<b>Pterophoridae</b>	
<i>Geina periscelidactylus</i>	-
<b>Pyalidae</b>	
<i>Desmia funeralis</i>	grape leaf-folder
<i>Euzophera bigella</i>	quince moth
<i>Ostrinia nubilalis</i>	European corn borer
<b>Saturniidae</b>	
<i>Hemileuca eglanterina</i>	brown day-moth
<i>Hyalophora cecropia</i>	cecropia moth
<b>Sesiidae</b>	
<i>Vitacea polistiformis</i>	grape root borer
<b>Sphingidae</b>	
<i>Eumorpha achemon</i>	achemon sphinx
<i>Hippotion celerio</i>	grapevine hawk moth
<i>Hyles euphorbiae</i>	spurge hawk moth
<i>Hyles lineata</i>	whitelined sphinx
<i>Theretra capensis</i>	grapevine hawk moth
<i>Theretra oldenlandiae</i>	vine hawk moth
<b>Tortricidae</b>	
<i>Archips argyrospilus</i>	fruit tree leafroller
<i>Argyrotaenia citrana</i>	orange tortrix
<i>Argyrotaenia ljungiana</i>	grey red-barred tortrix
<i>Argyrotaenia velutinana</i>	red-banded leafroller
<i>Cryptophlebia leucotreta</i>	false codling moth
<i>Endopiza viteana</i>	-
<i>Eulia stalactitis</i>	-
<i>Eupoecilia ambiguella</i>	vine moth
<i>Lobesia botrana</i>	grape berry moth
<i>Paralobesia viteana</i>	grape berry moth

<i>Platynota stultana</i>	omnivorous leafroller
<i>Proeulia auraria</i>	grapevine leafroller
<i>Proeulia triqueta</i>	-
<b>Zygaenidae</b>	
<i>Harrisina americana</i>	grapeleaf skeletonizer
<i>Harrisina brillians</i>	western grapeleaf skeletonizer
<i>Theresimima ampelophaga</i>	zygaenid butterfly
<b>Neuroptera</b>	
<b>Chrysopidae</b>	
<i>Chrysopa oculata</i> [Animals Biosecurity]	-
<i>Chrysopa</i> spp. [Animals Biosecurity]	-
<b>Coniopterygidae</b>	
<i>Cryptosceneia australiensis</i> [Animals Biosecurity]	-
<b>Hemerobiidae</b>	
<i>Micromus</i> sp. [Animals Biosecurity]	-
<b>Orthoptera</b>	
<b>Acrididae</b>	
<i>Melanoplus femurrubrum</i>	red-legged grasshopper
<i>Melanoplus mexicanus devastator</i>	-
<i>Oedaleonotus enigma</i>	-
<i>Phaulacridium vittatum</i>	wingless grasshopper
<i>Schistocerca cancellata</i>	-
<i>Schistocerca shoshone</i>	-
<i>Schistocerca vaga</i>	-
<b>Gryllidae</b>	
<i>Acheta fulvipennis</i>	cricket
<i>Microgryllus pallipes</i>	cricket
<b>Tettigoniidae</b>	
<i>Caedicia</i> spp.	-
<i>Plangia graminea</i>	grasshopper
<b>Thysanoptera</b>	
<b>Phlaeothripidae</b>	
<i>Haplothrips victoriensis</i>	tubular black thrips
<b>Thripidae</b>	
<i>Caliothrips fasciatus</i>	bean thrip
<i>Drepanothrips reuteri</i>	grape thrips
<i>Frankliniella cestrum</i>	tomato thrips
<i>Frankliniella minuta</i>	minute flower thrips
<i>Frankliniella occidentalis</i> [pesticide resistant strain]	western flower thrips
<i>Heliothrips sylvanus</i>	thrips
<i>Rhipiphorothrips cruentatus</i>	leaf thrips
<i>Scirtothrips citri</i>	citrus thrips
<i>Scolothrips sexmaculatus</i> [Animals Biosecurity]	-
<b>Unknown Insecta</b>	
<b>Unknown Insecta</b>	
<i>Cryptolarynx vitis</i>	-
<i>Dytineis pulvinosus</i>	-
<b>Mite</b>	
<b>Arachnida</b>	
<b>Acarina</b>	
<b>Anystidae</b>	
<i>Anystis agilis</i> [Animals Biosecurity]	-
<b>Eriophyidae</b>	
<i>Colomerus vitis</i> [leaf curling strain]	grape erineum mite
<i>Phyllocoptes vitis</i>	erriophyid mite
<b>Phytoseiidae</b>	
<i>Amblyseius victoriensis</i> [Animals Biosecurity]	-
<i>Metaseiulus occidentalis</i> [Animals Biosecurity]	-
<i>Neoseiulus chilensis</i> [Animals Biosecurity]	predator mite
<i>Typhlodromus doreenae</i> [Animals Biosecurity]	-
<b>Tenuipalpidae</b>	

<i>Brevipalpus chilensis</i>	false spider mite
<i>Brevipalpus lewisi</i>	bunch mite
<i>Brevipalpus lilium</i>	false spider mite
<i>Brevipalpus obovatus</i>	privet mite
<i>Tenuipalpus granati</i>	false spider mite
<b>Tetranychidae</b>	
<i>Eotetranychus carpini</i>	tetranychid mite
<i>Eotetranychus pruni</i>	hickory scorch mite
<i>Eotetranychus smithi</i>	tetranychid mite
<i>Eotetranychus viticola</i>	tetranychid mite
<i>Eotetranychus willamettei</i>	hazel mite
<i>Eotetranychus yumensis</i>	Yumi spider mite
<i>Eutetranychus orientalis</i>	pear leaf blister mite
<i>Oligonychus coffeae</i>	tea red spider mite
<i>Oligonychus mangiferus</i>	mango spider mite
<i>Oligonychus peruvianus</i>	spider mite
<i>Oligonychus punicae</i>	avocado brown mite
<i>Oligonychus yothersi</i>	avocado red mite
<i>Tetranychus kanzawai</i>	kanzawa mite
<i>Tetranychus mcdanieli</i>	McDaniel spider mite
<i>Tetranychus pacificus</i>	Pacific spider mite
<b>Mollusc</b>	
<b>Gastropoda</b>	
<b>Stylommatophora</b>	
<b>Helicidae</b>	
<i>Cernuella virgata</i>	small banded snails
<i>Cochlicella barbara</i>	small pointed garden snail
<i>Theba pisana</i>	white Italian snail
<b>Fungus</b>	
<b>Ascomycota</b>	
<b>Caliciales</b>	
<b>Unknown Caliciales</b>	
<i>Roesleria pallida</i>	grape root rot
<b>Diaporthales</b>	
<b>Valsaceae</b>	
<i>Diaporthe rudis</i> (anamorph <i>Phomopsis rudis</i> )	phomopsis canker
<b>Dothideales</b>	
<b>Mycosphaerellaceae</b>	
<i>Guignardia bidwellii</i> (anamorph <i>Phyllosticta ampellicida</i> )	black rot
<i>Guignardia bidwellii</i> f. sp. <i>euvitis</i>	-
<i>Guignardia bidwellii</i> f. sp. <i>muscadinii</i>	-
<i>Mycosphaerella angulata</i> (anamorph <i>Cercospora brachypus</i> )	angular leaf spot
<b>Schizothyriaceae</b>	
<i>Schizothyrium pomi</i> (anamorph <i>Zygophiala jamaicensis</i> )	fly speck
<b>Hypocreales</b>	
<b>Hypocreaceae</b>	
<i>Cylindrocarpon destructans</i> var. <i>crassum</i>	root rot
<b>Leotiales</b>	
<b>Dermateaceae</b>	
<i>Pseudopezicula tetraspora</i>	angular leaf scorch
<i>Pseudopezicula tracheiphila</i>	rotbrenner
<b>Sclerotiniaceae</b>	
<i>Grovesinia pyramidalis</i> (anamorph <i>Cristulariella moricola</i> )	target spot
<b>Rhytismatales</b>	
<b>Rhytismataceae</b>	
<i>Rhytisma vitis</i>	tar spot
<b>Saccharomycetales</b>	

<b>Saccharomycetaceae</b>	
<i>Pichia membranaefaciens</i>	-
<b>Unknown Ascomycota</b>	
<b>Hyponectriaceae</b>	
<i>Physalospora baccae</i>	-
<b>Xylariales</b>	
<b>Xylariaceae</b>	
<i>Anthostomella pullulans</i>	Brulure
<b>Basidiomycota: Agaricomycetes</b>	
<b>Hymenochaetales</b>	
<b>Hymenochaetaceae</b>	
<i>Phellinus noxius</i>	brown root rot
<b>Basidiomycota: Basidiomycetes</b>	
<b>Agaricales</b>	
<b>Tricholomataceae</b>	
<i>Armillaria mellea</i> (anamorph <i>Rhizomorpha subcorticalis</i> )	armillaria root rot
<i>Armillaria</i> sp.	armillaria root rot
<i>Armillaria tabescens</i>	armillaria root rot
<b>Ganodermatales</b>	
<b>Ganodermataceae</b>	
<i>Ganoderma lucidum</i> (anamorph <i>Polyporus lucidus</i> )	wood rot
<i>Ganoderma tsugae</i>	-
<b>Poriales</b>	
<b>Coriolaceae</b>	
<i>Bjerkandera adusta</i>	white rot
<i>Bjerkandera fumosa</i>	--
<b>Lentinaceae</b>	
<i>Pleurotus ostreatus</i>	wood decay
<b>Stereales</b>	
<b>Stereaceae</b>	
<i>Stereum</i> sp.	-
<b>Basidiomycota: Teliomycetes</b>	
<b>Uredinales</b>	
<b>Unknown Uredinales</b>	
<i>Physopella ampelopsidis</i>	grape rust
<b>Mitosporic Fungi</b>	
<b>Unknown Mitosporic Fungi</b>	
<b>Unknown Mitosporic Fungi</b>	
<i>Phacellium</i> sp.	-
<b>Mitosporic Fungi (Coelomycetes)</b>	
<b>Sphaeropsidales</b>	
<b>Sphaerioidaceae</b>	
<i>Ascochyta ampelina</i>	leaf spot
<i>Coniella diplodiella</i>	white rot
<i>Coniella petrakii</i>	white rot
<i>Phomopsis longiparaphysata</i>	phomopsis rot
<i>Pyrenochaeta vitis</i>	leaf spot
<i>Septoria ampelina</i>	septoria leaf spot
<b>Unknown Coelomycetes</b>	
<b>Unknown Coelomycetes</b>	
<i>Nattrassia toruloidea</i>	leaf spot
<i>Pestalotia menezesiana</i>	fruit rot
<i>Pestalotia pezizoides</i>	fruit and leaf spot
<i>Pestalotiopsis mangiferae</i>	grey leaf spot of mango
<i>Pestalotiopsis uvicola</i>	fruit rot
<b>Mitosporic Fungi (Hyphomycetes)</b>	
<b>Hyphomycetales</b>	
<b>Dematiaceae</b>	
<i>Alternaria vitis</i>	leaf disease
<i>Phaeoramularia dissiliens</i>	cercospora leaf spot
<b>Moniliaceae</b>	

<i>Cephalosporium</i> sp.	--
<i>Penicillium aurantiogriseum</i>	penicillium rot
<i>Verticillium heterocladium</i>	-
<b>Unknown Hyphomycetes</b>	
<b>Unknown Hyphomycetes</b>	
<i>Briosia ampelophaga</i>	leaf blotch
<i>Candida krusei</i>	yeasty rot
<i>Candida steatolytica</i> [Animals Biosecurity]	-
<i>Oidium</i> sp.	powdery mildew
<i>Paecilomyces farinosus</i>	-
<i>Paecilomyces</i> spp.	-
<i>Phaeoacremonium aleophilum</i>	-
<i>Phaeoisariopsis</i> sp.	-
<i>Stigmata vitis</i>	leaf fall
<b>Bacterium</b>	
<b>Pseudomonadaceae</b>	
<i>Xanthomonas campestris</i> pv. <i>viticola</i>	bacterial canker
<i>Xylella fastidiosa</i>	Pierce's disease
<i>Xylophilus ampelinus</i>	bacterial blight
<b>Rhizobiaceae</b>	
<i>Agrobacterium rubi</i>	cane gall
<b>Virus</b>	
<i>Artichoke Italian latent virus</i>	-
<i>Cherry leaf roll virus</i> [strains not in New Zealand]	-
<i>Grapevine Ajinashika disease virus</i>	-
<i>Grapevine Algerian latent virus</i>	-
<i>Grapevine Anatolian ringspot virus</i>	-
<i>Grapevine angular mosaic virus</i>	-
<i>Grapevine berry inner necrosis virus</i>	-
<i>Grapevine Bulgarian latent virus</i>	-
<i>Grapevine chrome mosaic virus</i>	-
<i>Grapevine deformation virus</i>	-
<i>Grapevine fanleaf virus</i> [strains not in New Zealand]	-
<i>Grapevine labile rod-shaped virus</i>	-
<i>Grapevine leafroll-associated virus</i> [type 7]	-
<i>Grapevine line pattern virus</i>	-
<i>Grapevine pinot gris virus</i>	-
<i>Grapevine red blotch-associated virus</i>	-
<i>Grapevine stunt virus</i>	-
<i>Grapevine Tunisian ringspot virus</i>	-
<i>Grapevine virus D</i>	-
<i>Peach rosette mosaic virus</i>	-
<i>Petunia asteroid mosaic virus</i>	-
<i>Raspberry ringspot virus</i>	-
<i>Sowbane mosaic virus</i>	-
<i>Strawberry latent ringspot virus</i> [strains not in New Zealand]	-
<i>Tomato ringspot virus</i>	-
<b>Viroid</b>	
<i>Australian grapevine viroid</i>	-
<i>Grapevine yellow speckle viroid 2</i>	-
<b>Phytoplasma</b>	
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)
<b>Mites</b>	Visual inspection AND approved miticide treatments (Refer to section 2.2.1.65 of the basic conditions) [cuttings only] or binocular microscope inspection in PEQ [plants in tissue culture only]
<b>Fungi</b>	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
<b>Bacteria</b>	All cuttings must be dipped in 1% sodium hypochlorite for 2 minutes upon arrival in the post entry quarantine facility.
<i>Agrobacterium rubi</i>	Growing season inspection in PEQ for disease symptom expression AND Hot water treatment (Refer to “Approved Treatments for <i>Vitis</i> ”)
<i>Xanthomonas campestris pv. viticola</i>	Growing season inspection in PEQ for disease symptom expression AND Hot water treatment (Refer to “Approved Treatments for <i>Vitis</i> ”)
<i>Xylophilus ampelinus</i>	Growing season inspection in PEQ for disease symptom expression AND Hot water treatment (Refer to “Approved Treatments for <i>Vitis</i> ”)
<i>Xylella fastidiosa</i>	Growing season inspection in PEQ for disease symptom expression AND PCR (two sets, samples to be collected at least four weeks apart) AND Hot water treatment (Refer to “Approved Treatments for <i>Vitis</i> ”)
<b>Viruses</b>	
<i>Artichoke Italian latent virus</i>	Growing season inspection in PEQ for disease symptom expression
<i>Cherry leaf roll virus</i> [strains not in New Zealand]	ELISA or PCR AND herbaceous indicators (Ca, Cq, Cs and Nt)
<i>Grapevine Ajinashika disease virus</i>	Growing season inspection in PEQ for disease symptom expression
<i>Grapevine Algerian latent virus</i>	Growing season inspection in PEQ for disease symptom expression
<i>Grapevine Anatolian ringspot virus</i>	Growing season inspection in PEQ for disease symptom expression
<i>Grapevine angular mosaic virus</i>	Growing season inspection in PEQ for disease symptom expression
<i>Grapevine berry inner necrosis virus</i>	Growing season inspection in PEQ for disease symptom expression
<i>Grapevine Bulgarian latent virus</i>	Herbaceous indicators (Ca and Cq)
<i>Grapevine chrome mosaic virus</i>	Herbaceous indicators (Ca, Cq, Cs and Nt)
<i>Grapevine deformation virus</i>	Herbaceous indicators (Ca and Cq)
<i>Grapevine fanleaf virus</i> [strains not in New Zealand]	ELISA or PCR AND herbaceous indicators (Ca, Cq, and Cs)
<i>Grapevine labile rod-shaped virus</i>	Growing season inspection in PEQ for disease symptom expression
<i>Grapevine leafroll-associated virus</i> [type 7]	PCR
<i>Grapevine line pattern virus</i>	Growing season inspection in PEQ for disease symptom expression
<i>Grapevine pinot gris virus</i>	PCR
<i>Grapevine red blotch-associated virus</i>	PCR
<i>Grapevine stunt virus</i>	Growing season inspection in PEQ for disease symptom expression
<i>Grapevine Tunisian ringspot virus</i>	Growing season inspection in PEQ for disease symptom expression
<i>Grapevine virus D</i>	PCR
<i>Peach rosette mosaic virus</i>	ELISA or PCR AND herbaceous indicators (Ca, Cq, Cs and Nt)
<i>Petunia asteroid mosaic virus</i>	ELISA or PCR
<i>Raspberry ringspot virus</i>	ELISA or PCR AND herbaceous indicators (Ca, Cq, Cs and Nt)
<i>Sowbane mosaic virus</i>	Herbaceous indicators (Ca and Cq)
<i>Strawberry latent ringspot virus</i> [strains not in New Zealand]	PCR AND herbaceous indicators (Ca, Cq and Cs)

<i>Tomato ringspot virus</i>	ELISA or PCR AND herbaceous indicators (Ca and Cq)
<b>Viroids</b>	Growing season inspection in PEQ for disease symptom expression
<b>Phytoplasmas</b>	<b>Plants derived from cuttings:</b> Nested PCR or real-time PCR using universal phytoplasma primers AND Hot water treatment (Refer to “Approved Treatments for <i>Vitis</i> ”) <b>Plants derived from tissue cultures:</b> Nested PCR or real-time PCR using universal phytoplasma primers (two sets, samples to be collected at least four weeks apart)
<b>Diseases of unknown aetiology</b>	
Grapevine vein clearing	Growing season inspection in PEQ for disease symptom expression
LN33 stem grooving	Woody indexing or green indexing (LN33)
Syrah decline	Additional declaration endorsed on the phytosanitary certificate, refer to section 3.1 (iii) for offshore MPI-approved facilities or 3.2 (iii) for non-approved facilities.

### Notes:

1. The unit for testing is defined in section 2.3.2.1.
2. Herbaceous indicator hosts (**Ca** - *Chenopodium amaranticolor*, **Cq** - *Chenopodium quinoa*, **Cs** - *Cucumis sativus* and **Nt** - *Nicotiana tabacum*): at least two plants of each herbaceous indicator species must be used in each test. Tests are to be carried out using the new season’s growth in the spring. Plants shall be sampled from at least two positions on every stem including a young, fully expanded leaf at the top of each stem and an older leaf from a midway position. Herbaceous indicator plants must be grown under appropriate temperatures and must be shaded for 24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.
3. Woody or green indexing: at least two plants of each woody/green indicator must be used in each test. All woody indicators are to be inoculated by double budding while green indicators are top grafted. A suitable positive control must be included.
4. Enzyme linked immunosorbent assay (ELISA) and polymerase chain reaction (PCR) tests for viruses. Tests must be completed at the optimal time for detection. In general, plants shall be sampled from at least two positions including a young, fully expanded leaf at the top of the stem and an older leaf from a midway position.
5. All PCR and ELISA tests must be validated using positive controls prior to use in quarantine testing. Positive and negative controls (including a blank water control for PCR) must be used in all tests. Ideally positive internal controls and a negative plant control should also be used in PCR tests.
6. Inspect *Vitis* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy.
7. With prior notification, MPI will accept other internationally recognised testing methods.

## Approved Treatments for *Vitis*

### Hot Water Treatment

The consignment must be treated using hot water treatment (dipping), for the eradication of phytoplasmas and fastidious vascular prokaryotic organisms, as follows:

1. Cuttings with good hydration and reserves are stored in a cool room (~ 4°C). Before treatment, the dormant material must be held at room temperature for one day (24 hours).
2. For the treatment, the dormant material must be dipped into the hot water at 50°C for 45 minutes or at 45°C for 3 hours (FAO/IBPGR Technical Guidelines for Safe Movement of Grapevine Germplasm, 1990, Martelli G.P and Walter B. Virus Certification of

Grapevines. In - Plant Virus Disease Control, edited by A. Hadidi, RK Khetarpal and H Koganezawa. APS Press 1998). The water bath must have a moving system to homogenize the temperature and a precise control system to monitor the temperature at an accuracy of 0.1°C.

3. After the treatment the cuttings must stay for one day (24 hours) at room temperature. After this period, they are transferred to a cool room.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Wollemia nobilis*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**1. Type of *Wollemia nobilis* nursery stock approved for entry into New Zealand**

Plants *in-vitro*

**2. Pests of *Wollemia nobilis***

Refer to the pest list.

**3. Entry conditions for:**

**3.1 *Wollemia nobilis* plants *in-vitro* from Australia**

The requirements of this schedule are in addition to the requirements specified in Section 2.2.2 “Entry Conditions for Tissue Culture”.

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

(ii) Special tissue culture media requirements

The tissue culture media must not contain charcoal.

(iii) Phytosanitary requirements

The full botanical name of *Wollemia nobilis* must be identified upon the phytosanitary certificate.

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken:

The *Wollemia nobilis* plants *in-vitro* have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.  
**AND**
- derived from mother stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.  
**AND**
- derived from explant material which has been surface sterilised in a solution of 0.5% sodium hypochlorite and sterile water, or MPI approved alternative treatment.  
**AND**
- prepared by asexual reproduction (clonal techniques) under sterile conditions.  
**AND**
- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iv) Additional declarations to the phytosanitary certificate

No additional declarations are required.

(v) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed.

## **Pest List for *Wollemia nobilis***

### **REGULATED PESTS (actionable)**

#### **Fungus**

##### **Ascomycota**

##### **Dothideales**

##### **Botryosphaeriaceae**

*Botryosphaeria* spp.

-

##### **Oomycota**

##### **Pythiales**

##### **Pythiaceae**

*Phytophthora cinnamomi*

black rot

##### **Arbuscular mycorrhizae**

All regulated species

##### **Ectomycorrhizae**

All regulated species

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Yucca*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Phytophthora palmivora*

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

**A. For Cuttings (dormant)**

**PEQ:** Level 2

**Minimum Period:** 3 months

**Inspection Requirements:** A minimum of 600 plants are to be inspected during each inspection in post-entry quarantine

a. Conditions for *Phytophthora palmivora*

One of the following Additional Declarations must be endorsed on the phytosanitary certificate:

i) “The [insert species name] plants in this consignment have been sourced from [insert country name], which is free from *Phytophthora palmivora*”.

**OR**

ii) “The [insert species name] plants in this consignment were produced in a ‘pest free area’ for *Phytophthora palmivora*”.

**OR**

iii) “The [insert species name] plants in this consignment were produced in a ‘pest free place of production’ for *Phytophthora palmivora*”.

**B. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Zantedeschia*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**1. Type of *Zantedeschia* nursery stock approved for entry into New Zealand**

Dormant bulbs

Plants in tissue culture

**2. Pests of *Zantedeschia***

Refer to the pest list.

**3. Entry conditions for:**

**3.1 *Zantedeschia* dormant bulbs from any country**

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Zantedeschia* dormant bulbs have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated nematodes and fungi OR treated for regulated nematodes and fungi as described in section 2.2.1.7 of the basic conditions within 7 days prior to freezing, cold-storage or shipment.

**AND**

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated bacteria and viruses.

**AND**

- held in a manner to ensure that infestation/reinfestation does not occur following certification.

(iii) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section [if applicable], and by providing the following additional declaration to the phytosanitary certificate:

“The *Zantedeschia* dormant bulbs in this consignment have been:

- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated nematodes and fungi [if applicable].

**AND**



- sourced from a ‘pest free area’, ‘pest free place of production’ or ‘pest free production site’, free from regulated bacteria, phytoplasmas and viruses.”

(iv) Post-entry quarantine

**PEQ:** Level 1

**Quarantine Period:** This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/tests are required.

### 3.2 *Zantedeschia* plants in tissue culture from any country

(i) Documentation

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** no import permit is required.

(ii) Special tissue culture media requirements

The tissue culture media may contain charcoal.

(iii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry for Primary Industries (MPI) have been undertaken.

The *Zantedeschia* plants in tissue culture have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

**AND**

- derived from parent stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

(iv) Additional declarations to the phytosanitary certificate

If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declaration to the phytosanitary certificate:

“The *Zantedeschia* plants in tissue culture have been derived from parent stock inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests”

(iv) Post-entry quarantine

Post-entry quarantine is not required provided that the above measures have been completed overseas. Alternatively, the inspection and testing may be completed in post-entry quarantine upon arrival in New Zealand according to the following conditions:

**Phytosanitary certificate:** a completed phytosanitary certificate, issued by the national plant protection organisation (NPPO) of the exporting country, is required.

**Import permit:** an import permit is required.

**PEQ:** Level 3B

**Quarantine Period:** This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/tests are required.

# Pest List for *Zantedeschia*

## REGULATED PESTS (actionable)

### Nematode

#### Secernentea

##### Tylenchida

##### Meloidogynidae

*Meloidogyne arenaria*

peanut root knot nematode

### Fungus

#### Basidiomycota: Basidiomycetes

##### Agaricales

##### Tricholomataceae

*Armillaria mellea* (anamorph *Rhizomorpha subcorticalis*)

armillaria root rot

#### Oomycota

##### Pythiales

##### Pythiaceae

*Phytophthora richardiae*

rhizome and root rot

*Pythium aphanidermatum*

cottony leak

### Bacterium

*Xanthomonas campestris* pv. *zantedeschiae*

-

### Virus

*Zantedeschia mild mosaic virus*

-

**Note:** The entry conditions in this schedule only apply to species in the Plants Biosecurity Index listed under Import Specifications for Nursery Stock as “see 155.02.06 under *Zingiber*”, and are additional to those specified in sections 1, 2 and 3 of the import health standard.

**GENERAL CONDITIONS:**

**Approved Countries:** All

**Quarantine Pests:** *Helicobasidium mompa*, Virus diseases

**Entry Conditions:** **Basic**; with variations and additional conditions as specified below:

**A. For Whole Plants**

**PEQ:** Level 2

**Minimum Period:** 6 months

**B. For Dormant Bulbs**

**PEQ:** Level 1

**Minimum Period:** 3 months

a. Additional Declaration

“The dormant bulbs in this consignment have been:

- derived from a crop which was inspected during the growing season according to appropriate procedures and found to be free of regulated pests.

**AND**

- treated for regulated insects as described in section 2.2.1.7 ‘Pesticide treatments for dormant bulbs’ of the basic conditions within 7 days prior to freezing, cold-storage or shipment.”

b. Conditions for *Helicobasidium mompa*

“The dormant bulbs in this consignment have been:

- sourced from a ‘pest free area’ or ‘pest free place of production’ [choose ONE], free from *Helicobasidium mompa*.”

**OR**

- treated for regulated nematodes and fungi as described in section 2.2.1.7 ‘Pesticide treatments for dormant bulbs’ of the basic conditions within 7 days prior to freezing, cold-storage or shipment.”

**C. For Tissue Cultures**

As for **Standard Entry Conditions for Tissue Cultures** - see Section 2.2.2.

**PLUS**

a. Conditions for virus diseases

Additional declaration: “The cultures have been derived from parent stock tested and found free of virus diseases.”