



Risk Management Proposal for management of *Phellinus noxius* in nursery stock hosts (whole plants, including rooted cuttings) from all countries

For Public Consultation

Plant Imports
Plants, Food & Environment
Ministry for Primary Industries
Pastoral House
25 The Terrace
PO Box 2526
Wellington 6140
New Zealand
Tel: +64 4 894 0100
Fax: +64 4 894 0662
Email: plantimports@mpi.govt.nz

Contents

| | |
|---|----|
| Submissions | 4 |
| Purpose | 6 |
| Background | 6 |
| Commodity Description | 6 |
| Trade | 6 |
| Current Requirements | 6 |
| Source Information | 7 |
| International Setting | 7 |
| Objective | 7 |
| Summary of Risk | 8 |
| Risk Management | 8 |
| Feasibility & Practicality of Measures | 10 |
| Proposed IHS Requirements | 10 |
| Appendix 1: Known Host Species and Distribution | 11 |
| Appendix 2: Proposed Measures in IHS 155.02.06 | 17 |
| References | 47 |

Submissions

The Ministry for Primary Industries (MPI) invites comment from interested parties on the proposed amendment to import health standard (IHS) 155.02.06: Importation of Nursery Stock, which is supported by this risk management proposal.

An IHS “specifies requirements to be met for the effective management of risks associated with importing risk goods, including risks arising because importing the goods involves or might involve an incidentally imported new organism” (Section 22(1) Biosecurity Act 1993).

MPI therefore seeks comment on the proposed amendments to the requirements in the IHS 155.02.06: Importation of Nursery Stock. Submitters may also like to comment separately on other aspects of the IHS and MPI will respond to these in due course.

The following points may be of assistance in preparing comments:

- Wherever possible, comments should be specific to a particular change in IHS requirements or a question asked in this document (referencing section numbers or commodity names as applicable).
- Where possible, reasons, data and supporting published references to support comments are requested.
- The use of examples to illustrate particular points is encouraged.

MPI encourages respondents to forward comments electronically. Please include the following in your submission:

- The title of the consultation document in the subject line of your email;
- Your name and title (if applicable);
- Your organisation’s name (if applicable); and
- Your address.

Send submissions to: plantimports@mpi.govt.nz.

However, should you wish to forward submissions in writing, please send them to the following address to arrive by close of business on **19th August 2016**.

Plant Imports
Plants, Food & Environment
Ministry for Primary Industries
PO Box 2526
Wellington 6140
New Zealand

Submissions received by the closure date will be considered during the development of the final IHS. Submissions received after the closure date may be held on file for consideration when the issued IHS is next revised/ reviewed.

Official Information Act 1982

Please note that your submission is public information and it is MPI policy to publish submissions and the review of submissions on the MPI website. Submissions may also be the subject of requests for information under the Official Information Act 1982 (OIA).

The OIA specifies that information is to be made available to requesters unless there are sufficient grounds for withholding it, as set out in the OIA. Submitters may wish to indicate grounds for withholding specific information contained in their submission, such as the information is commercially sensitive or they wish personal information to be withheld.

Any decision to withhold information requested under the OIA is reviewable by the Ombudsman.

Purpose

- (1) The purpose of this risk management proposal (RMP) is to:
 - a) summarise biosecurity risk of *Phellinus noxius* associated with nursery stock;
 - b) propose measures for the effective management of this risk; and
 - c) seek stakeholder feedback on the proposed management options and import requirements as outlined in [Appendix 2: Proposed Measures in IHS 155.02.06](#).

Background

- (2) *Phellinus noxius* (syn. *Fomes noxius*), causes 'brown root rot disease' and is a fungal pathogen found on the roots of trees in countries with tropical and subtropical climates; including Africa, Caribbean, Central America, Japan, Oceania and Southeast Asia (Appendix 1, Table 4).
- (3) *P. noxius* has a wide host range affecting 200 trees and plant species in 59 different plant families (Ann et al., 2002), including avocados (*Persea americana*), grapes (*Vitis*), pears (*Pyrus*) and eucalyptus.
- (4) *P. noxius* is not known to be present in New Zealand and is a regulated organism.
- (5) Avocados New Zealand notified MPI in 2010 of their concerns about the persistent establishment of *P. noxius* in avocado orchards in Queensland:
 - a) symptoms of *P. noxius* were first observed in avocado orchards in Queensland in 2001, causing progressive tree death in the Atherton Tablelands.
 - b) *P. noxius* was first positively identified as the causal agent of avocado tree death in Maleny, Queensland in 2002.
- (6) MPI had previously considered the risk of *P. noxius* in Wollemia pine in 2008, and completed a risk analysis of other hosts and distribution of *P. noxius* in 2010.
- (7) A summary of risk is provided in sections 19 – 32 of this RMP. Whole plants (including rooted cuttings) are considered to present a risk of entry of *P. noxius* and are the subject of risk management measures proposed by this RMP.
- (8) MPI have been working with importers of host plants of *P. noxius* since 2010 to prohibit the entry of whole plants grown in soil.

Commodity Description

- (9) IHS 155.02.06: *Importation of Nursery Stock* specifies the import requirements for the following commodity sub-classes: whole plants, cuttings, dormant bulbs, plants in-vitro/tissue culture and pollen for breeding purposes.
 - a) the IHS defines whole plants as a nursery stock commodity sub-class for rooted cuttings and whole plants.

Trade

- (10) The New Zealand horticultural industry continues to grow and total horticultural exports are now close to \$4 billion (Fresh Facts, 2014). New Zealand's most valuable horticulture export continues to be wine returning \$1.3 billion.
- (11) Avocado exports have increased in value to \$93 million per year (Fresh Facts 2014).

Current Requirements

- (12) *P. noxius* is not specifically managed in IHS 155.02.06: *Importation of Nursery Stock*, and is not currently listed as a quarantine pest.

- (13) Under the current IHS 155.02.06: *Importation of Nursery Stock* a number of ‘basic’ conditions must be met for all types of nursery stock imported into New Zealand, including whole plants and rooted cuttings.
- (14) The ‘basic’ conditions in section 2 of the IHS applying to whole plants are:
- a) Section 2.2.1.4 (Cleanliness): Only inert/synthetic material may be used for protection, packaging and shipping material of the nursery stock, and action will be taken for consignments which are contaminated with soil;
 - b) Section 2.2.1.5 (Phytosanitary Certificate): Prior to issuing the phytosanitary certificate, the exporting National Plant Protection Organisation must inspect the consignment to certify that it is free from visually detectable regulated pests (this includes symptoms of infection);
 - c) Section 2.2.1.6 (Pesticide treatments for whole plants and cuttings): Whole plants and rooted cuttings must either be grown in soil-free media or the soil must be removed and the roots dipped in a pesticide prior to export. This requirement manages the risk of insects and nematodes;
 - d) Section 2.2.1.13 (Post Entry Quarantine): All whole plants must be imported into a post entry quarantine (PEQ) facility for a period of active growth. Symptomatic plant material must be tested to ensure it is free from regulated organisms before it can be given biosecurity clearance to enter New Zealand.

Source Information

- (15) The following information was used in the development of the RMP to identify the appropriate measures to manage *P. noxius* on imported nursery stock.
- a) *Wollemia nobilis* (Wollemi pine) Nursery Stock from Australia – (MPI) Risk Analysis (March 2008): <http://mpi.govt.nz/document-vault/2890>
 - b) MAF Biosecurity New Zealand: *Phellinus noxius* pest risk analysis, 21 June 2011 (available on request).

International Setting

- (16) Where possible, phytosanitary measures are aligned with international standards, guidelines, and recommendations as per New Zealand’s obligations under Article 3.1 of the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), WTO 1995 and Section 23(4) (c) of the Biosecurity Act 1993.
- (17) The SPS Agreement states that phytosanitary measures must not discriminate unfairly between countries or between imported or domestically produced goods, and where there is a choice of phytosanitary measures to reduce risk to an acceptable level, WTO members must select the least trade restrictive measure.

Objective

- (18) MPI’s objective is to ensure the biosecurity risk posed by *P. noxius* on imported nursery stock is managed appropriately and is consistent with New Zealand’s domestic legislation and international obligations.

Summary of Risk

A. Likelihood of entry

- (19) The likelihood of *P. noxius* entering New Zealand on cuttings and budwood of host species is considered to be negligible because there is no evidence that it is present in leaves, stems or branches of plants.
- (20) The likelihood of *P. noxius* entering into New Zealand from rooted plants (whole plants) is also considered to be low, however the current requirements for whole plants do not fully manage the risk of entry.

B. Likelihood of exposure

- (21) The likelihood of exposure is considered to be moderate in areas such as the far northern region of New Zealand where imported nursery stock could be planted in the environment. Physical contact of infected roots with healthy roots generally transfers *P. noxius* to roots of healthy plants (Brooks, 2002).

C. Likelihood of establishment

- (22) The likelihood of establishment in New Zealand is considered to be moderate as *P. noxius* is a high temperature organism associated with tropical and subtropical areas (Ann et al. 2002). *P. noxius* may therefore be able to establish in the far north areas of New Zealand.
- (23) *P. noxius* could be spread by people transplanting infected plants in an uninfected area as movement of soil and plant material is not controlled within New Zealand.

D. Potential Impacts

- (24) *P. noxius* spreads from tree to tree mainly by root-to-root contact and can exist on decaying roots in the soil for more than 10 years, causing major losses in timber and hardwood plantations, fruit orchards, and landscapes.
- (25) Plantations and orchards cannot be replanted for many years due to the longevity of *P. noxius* in the soil and its broad host range (Brooks, 2002).
- (26) There are no known treatments or cures for *P. noxius*, so if it established in an orchard or plantation, the only management option is to remove infected trees and as much of the root system as possible.
- (27) Ornamental plants are important components of domestic, leisure and working environments. *P. noxius* affects ornamental and amenity trees such as windbreak trees, parks, roadsides and around residences or other places associated with human activities (Anne et al. 1999).
- (28) Hosts are mostly tropical tree species and include cacao, coffee, tea, timber trees (Hodges and Tenorio 1984). It is more common on hardwood species, but also known on conifers (e.g. hoop pine *Araucaria cunninghamii*) (I. Hood pers. comm. 2011).
- (29) *P. noxius* has been found in native rain forests in American Samoa (Brooks 2002).

Risk Management

- (30) Basic conditions in section 2 of the IHS applying to whole plants do not manage the risk of entry of *P. noxius* into New Zealand. The root rot can be transmitted through infected soil and lead to root infection of whole plants and rooted cuttings. Basic conditions allow for whole plants to be grown in soil and have the soil washed off prior to export, which doesn't manage the risk of *P. noxius*.
- (31) Imported nursery stock is grown in PEQ facility for a minimum of three months. It is not known whether this is long enough or if this would be suitable for symptoms of infection to be observed through wilting of the leaves, or mycelia to become evident on the roots or stem of plants.

- (32) Additional measures are proposed to manage the risk of *P. noxius* in imported nursery stock, these are:
- a) a new section “*Measures for P. noxius*” is incorporated within the basic conditions (section 2.2.1.13);
 - b) requirements of section 2.2.1.13 apply only to whole plants (including rooted cuttings) which are hosts of *P. noxius*;
 - c) the plants are accompanied by a phytosanitary certificate, issued by the exporting NPPO that certifies that the risk has been managed by one of the following declarations:
 - (i) “*The plants were raised from seed/cuttings in soil-less rooting media in containers maintained out of contact with the soil*”
- OR**
- (ii) “*The plants have been sourced from a “Pest free area” free from Phellinus noxius*”.

Regulation at Genus Level

- (33) Under the SPS Agreement, MPI regulates natural hosts of plant diseases based on scientific evidence. Where there is scientific uncertainty, MPI may apply a precautionary approach to manage the risk. MPI manages *P. noxius* at genus level when three or more species of a genus are found to be natural hosts. The susceptibility of multiple species in a genus suggests high susceptibility, and more species are likely to be hosts for the pathogen. Regulation at genus level therefore reduces the risk of import of *P. noxius*.
- a) It is proposed that the following genera are regulated as genus level:
 - (i) *Araucaria* spp.: 3 species listed in Appendix 1
 - (ii) *Bauhinia* spp.: 4 species listed in Appendix 1
 - (iii) *Eucalyptus* spp.: 4 species listed in Appendix 1
 - (iv) *Ficus* spp.: 5 host species listed in Appendix 1
- (34) MPI proposes to regulate the following genera as the Risk Assessment does not identify the host to species level (unnamed species):
- (i) *Albizia* spp.: *Albizia* spp. including *A. lebbek* listed in Appendix 1
 - (ii) *Bougainvillea* spp.: *Bougainvillea* spp. listed in Appendix 1
 - (iii) *Cassia* spp.: *Cassia* spp. listed in Appendix 1
 - (iv) *Casuarina* spp.: *Casuarina* spp. listed in Appendix 1
 - (v) *Cinnamomum* spp.: *Cinnamomum* spp. listed in Appendix 1
 - (vi) *Crataegus* spp.: *Crataegus* spp. listed in Appendix 1
 - (vii) *Diospyros* spp.: *Diospyros* spp. including *D. kaki* listed in Appendix 1
 - (viii) *Populus* spp.: *Populus* spp. listed in Appendix 1
 - (ix) *Rosa* spp.: *Rosa* spp. listed in Appendix 1
- (35) MPI regulates *P. noxius* at the species level when one or two species of a plant genus is found to be natural host.

Additional Declarations

A. Contact with soil

- (36) The risk of *P. noxius* can be managed by ensuring that whole plants and rooted cuttings have been kept out of contact with infected soil. Plants raised from seeds/ cuttings in soil-less rooting media and grown in containers maintained out of contact with the soil are considered free from *P. noxius*.

- (37) The exporting National Plant Protection Organisation (NPPO) would endorse this additional declaration on the phytosanitary certificate.

Note: This is an existing declaration in section 2.2.1.6 (part A) of the IHS 155.02.06: *Importation of Nursery Stock*, to manage the risk of insects on the roots of whole plants.

Note: The second option in 2.2.1.6 (part A) whole plants grown in soil, with the soil washed and the roots dipped in Fenamiphos prior to export, is not permitted for hosts of *P. noxius*.

B. Pest Free Area (PFA)

- (38) International Standards for Phytosanitary Measures (ISPM) 4: Requirements for the establishment of pest free areas describe the requirements for the establishment and use of PFA as a risk management option for meeting phytosanitary requirements for the import of plants.
- (39) Exporting country NPPO's from countries where *P. noxius* is not known to occur may endorse a Pest free area additional declaration on the phytosanitary certificate.
- (40) Normally PFA status is based on specific surveying for a quarantine pest or disease, such as an official delimiting or detection survey. It is accepted internationally that pests or diseases that have never been detected in, or that have been detected and eradicated from, an area should not be considered present in an area.
- (41) When sufficient information is available to support a PFA declaration, this phytosanitary measure is usually considered to provide a very high level of protection.

Feasibility & Practicality of Measures

- (42) PFA declarations can only be supplied by exporting countries where *P. noxius* is absent. However, some countries (such as Australia) may be able to provide a PFA declaration for a restricted region / state or geographic area. MPI will discuss the implementation of PFA during consultation.
- (43) A proposed measure for plants to be raised from seeds/ cuttings in soil-less rooting media in containers maintained out of contact with the soil, is considered achievable by all trading partners.
- (44) Additional financial expenditure and additional time resource are not expected to be prohibitive for trading partners to achieve the proposed measures.

Proposed IHS Requirements

- (45) This RMP proposes that *P. noxius* is a regulated quarantine pest, to be managed on imported nursery stock under the IHS 155.02.06: *Importation of Nursery Stock*.
- (46) *P. noxius* will be listed as a quarantine pest in the schedules of the IHS applying to host species. Where the schedule includes other species that are not hosts of *P. noxius*, each species to which the measures for *P. noxius* apply will be stated.
- (47) The requirements apply to all countries.
- (48) The requirements for *P. noxius* do not apply to host species which can only be imported as cuttings and tissue cultures.
- a) While no specific additional declarations or testing will be required, *P. noxius* will be included in the list of quarantine pests for the applicable schedule.

Appendix 1: Known Host Species and Distribution

This Appendix includes the following information relevant to the regulation of *P. noxius* on imported nursery stock, as identified in the Risk Analysis (MAF Biosecurity 2011):

- Table 1: Species which can be imported as whole plants to be regulated for *P. noxius*
- Table 2: Host species which can be imported as nursery stock, not including whole plants
- Table 3: Host species which cannot currently be imported into New Zealand
- Table 4: Countries where *P. noxius* is recorded as present

Table 1: Species which can be imported as whole plants to be regulated for *P. noxius*

At a minimum, **ALL** imported nursery stock must meet the Entry Conditions specified in Section 2.2 of the IHS. The table below identifies where additional entry requirements must be met for each species as identified in Section 3 'Schedule of Special Entry Conditions'.

Note: As identified in the [Risk Management](#) section, MPI are proposing to regulate at the genus level where:

- more than three species are identified as a host
- the host is identified to the genus level only in scientific literature (i.e. is an unnamed species)

| Schedule of special entry conditions | Host species |
|---|--|
| <p>Basic Entry Conditions PBI Specification: L2 (Basic)</p> <p>MPI propose a new schedule to manage <i>P. noxius</i> on these hosts: <u>Araucaria</u> PBI Specification: L2 see 155.02.06 under Araucaria</p> | <ul style="list-style-type: none"> • <i>Adenanthera pavonina</i> • <i>Agathis robusta</i> (syn. <i>A. palmerstonii</i>) • <i>Albizia</i> spp. (including <i>A. lebbek</i>) • <i>Aleurites fordii</i> • <i>Aleurites moluccana</i> • <i>Anacardium occidentale</i> • <i>Annona cherimola</i> • <i>Annona squamosa</i> • <i>Aralia elata</i> • <i>Araucaria</i> spp. (including <i>A. bidwillii</i>, <i>A. cunninghamii</i>, <i>A. heterophylla</i>) • <i>Averrhoa carambola</i> • <i>Azadirachta indica</i> • <i>Bauhinia</i> spp. (including <i>B. acuminata</i>, <i>B. purpurea</i>, <i>B. racemosa</i>, <i>B. variegata</i>) • <i>Boehmeria nivea</i> • <i>Bombax ceiba</i> • <i>Bougainvillea</i> spp. • <i>Breynia nivosa</i> • <i>Broussonetia papyrifera</i> • <i>Calophyllum inophyllum</i> • <i>Cananga odorata</i> • <i>Cassia fistula</i> • <i>Cassia grandis</i> • <i>Cassia</i> spp. • <i>Casuarina equisetifolia</i> • <i>Casuarina</i> spp. • <i>Celtis sinensis</i> • <i>Codiaeum variegatum</i> • <i>Delonix regia</i> • <i>Elaeocarpus grandis</i> (syn. <i>E. serratus</i>) • <i>Elaeocarpus sylvestris</i> (syn. <i>E. sylvestris</i> var. <i>ellipticus</i>) • <i>Gardenia augusta</i> (syn. <i>G. jasminoides</i>) • <i>Grevillea robusta</i> • <i>Hibiscus rosa-sinensis</i> • <i>Hibiscus tiliaceus</i> • <i>Ilex rotunda</i> • <i>Lagerstroemia speciosa</i> • <i>Lagerstroemia subcostata</i> • <i>Leucaena leucocephala</i> • <i>Ligustrum japonicum</i> • <i>Liquidambar formosana</i> • <i>Melia azedarach</i> • <i>Morinda citrifolia</i> • <i>Nephelium lappaceum</i> • <i>Pachira aquatica</i> (syn. <i>P. macrocarpa</i>) • <i>Piper nigrum</i> • <i>Pistacia chinensis</i> • <i>Podocarpus macrophyllus</i> • <i>Podocarpus macrophyllus</i> • <i>Rhaphiolepis umbellata</i> • <i>Samanea saman</i> • <i>Schefflera actinophylla</i> • <i>Schefflera octophylla</i> • <i>Stenocarpus sinuatus</i> • <i>Tabebuia chrysantha</i> • <i>Terminalia catappa</i> • <i>Thevetia peruviana</i> <p>Note: requirements will apply to all species imported under this schedule</p> |
| <p><u>Acacia</u> PBI Specification: L2 see 155.02.06 under Acacia</p> | <ul style="list-style-type: none"> • <i>Artemisia capillaris</i> • <i>Artemisia princeps</i> • <i>Duranta repens</i> • <i>Nerium oleander</i> |

| Schedule of special entry conditions | Host species |
|--|--|
| <p><u>Acrocomia</u> PBI Specification: L2 see 155.02.06 under Acrocomia</p> | <ul style="list-style-type: none"> • <i>Areca catechu</i> • <i>Areca triandra</i> • <i>Chrysalidocarpus lutescens</i> • <i>Cocos nucifera</i> • <i>Elaeis guineensis</i> • <i>Roystonea regia</i> |
| <p><u>Aesculus</u> PBI Specification: L2 see 155.02.06 under Aesculus</p> | <ul style="list-style-type: none"> • <i>Fraxinus griffithii</i> (syn. <i>F. formosana</i>) • <i>Rhus succedanea</i> |
| <p><u>Arbutus</u> PBI Specification: L2 see 155.02.06 under Arbutus</p> | <ul style="list-style-type: none"> • <i>Cinnamomum</i> spp. (including <i>C. camphora</i>, <i>C. verum</i> (syn. <i>C. zeylanicum</i>)) • <i>Michelia compressa</i> • <i>Michelia figo</i> • <i>Osmanthus fragrans</i> |
| <p><u>Camellia</u> PBI Specification: L2 see 155.02.06 under Camellia</p> | <ul style="list-style-type: none"> • <i>Camellia japonica</i> |
| <p><u>Camellia sinensis</u> PBI Specification: L2 see 155.02.06 under Camellia sinensis</p> | <ul style="list-style-type: none"> • <i>Camellia sinensis</i> <p>Note: requirements will apply to all species imported under this schedule</p> |
| <p><u>Cedrus</u> PBI Specification: L3 see 155.02.06 under Cedrus</p> | <ul style="list-style-type: none"> • <i>Chamaecyparis formosensis</i> • <i>Cupressus lusitanica</i> |
| <p><u>Crataegus</u> PBI Specification: L2 see 155.02.06 under Crataegus</p> | <ul style="list-style-type: none"> • <i>Crataegus</i> spp. |
| <p><u>Delphinium</u> PBI Specification: L2 see 155.02.06 under Delphinium</p> | <ul style="list-style-type: none"> • <i>Barleria cristata</i> • <i>Erythrina</i> spp. (including <i>Erythrina variegata</i> (syn. <i>E. variegata</i> var. <i>orientalis</i>)) |
| <p><u>Diospyros</u> PBI Specification: L3 see 155.02.06 under Diospyros</p> | <ul style="list-style-type: none"> • <i>Diospyros</i> spp. (including <i>D. kaki</i>) <p>Note: requirements will apply to all species imported under this schedule</p> |
| <p><u>Eriobotrya</u> PBI Specification: L2 see 155.02.06 under Eriobotrya</p> | <ul style="list-style-type: none"> • <i>Eriobotrya japonica</i> |
| <p><u>Eucalyptus</u> PBI Specification: L2 see 155.02.06 under Eucalyptus</p> | <ul style="list-style-type: none"> • <i>Eucalyptus</i> spp. (including <i>E. camaldulensis</i>, <i>E. citriodora</i>, <i>E. grandis</i>, <i>E. tessellaris</i>) <p>Note: requirements will apply to all species imported under this schedule</p> |
| <p><u>Eugenia</u> PBI Specification: L2 and L3 see 155.02.06 under Eugenia</p> | <ul style="list-style-type: none"> • <i>Syzygium samarangense</i> |
| <p><u>Ficus</u> PBI Specification: L2 see 155.02.06 Ficus</p> | <ul style="list-style-type: none"> • <i>Ficus</i> spp. (including <i>F. elastica</i>, <i>F. pumila</i> (syn. <i>F. hanceana</i>), <i>F. microcarpa</i>, <i>F. obliqua</i>, <i>F. religiosa</i>) <p>Note: requirements will apply to all species imported under this schedule</p> |
| <p><u>Hebe</u> PBI Specification: L2 see 155.02.06 under Hebe</p> | <ul style="list-style-type: none"> • <i>Albizia julibrissin</i> • <i>Hibiscus schizopetalus</i> |

| Schedule of special entry conditions | Host species |
|--|---|
| <p><u>Hydrangea</u> PBI Specification: L2 see 155.02.06 under Hydrangea</p> | <ul style="list-style-type: none"> • <i>Hydrangea chinensis</i> • <i>Morus alba</i> (syn. <i>M. australis</i>) |
| <p><u>Litchi</u> PBI Specification: L2 see 155.02.06 under Litchi</p> | <ul style="list-style-type: none"> • <i>Litchi chinensis</i> <p>Note: requirements will apply to all species imported under this schedule</p> |
| <p><u>Mangifera</u> PBI Specification: L2 see 155.02.06 under Mangifera</p> | <ul style="list-style-type: none"> • <i>Mangifera indica</i> |
| <p><u>Metrosideros</u> PBI Specification: L2 see 155.02.06 under Metrosideros</p> | <ul style="list-style-type: none"> • <i>Melaleuca leucadendra</i> |
| <p><u>Nandina</u> PBI Specification: L2 see 155.02.06 under Nandina</p> | <ul style="list-style-type: none"> • <i>Nandina domestica</i> <p>Note: requirements will apply to all species imported under this schedule</p> |
| <p><u>Planera</u> PBI Specification: L2 see 155.02.06 under Planera</p> | <ul style="list-style-type: none"> • <i>Zelkova serrata</i> |
| <p><u>Populus</u> PBI Specification: L2 see 155.02.06 under Populus</p> | <ul style="list-style-type: none"> • <i>Populus spp.</i> <p>Note: requirements will apply to all species imported under this schedule</p> |
| <p><u>Rhododendron</u> PBI Specification: L2 see 155.02.06 under Rhododendron</p> | <ul style="list-style-type: none"> • <i>Rhododendron x obtusum</i> (syn. <i>Rhododendron obtusum</i>) |
| <p><u>Rosa</u> PBI Specification: L2 see 155.02.06 under Rosa</p> | <ul style="list-style-type: none"> • <i>Rosa spp.</i> <p>Note: requirements will apply to all species imported under this schedule</p> |
| <p><u>Salix</u> PBI Specification: L2 see 155.02.06 under Salix</p> | <ul style="list-style-type: none"> • <i>Salix babylonica</i> |
| <p><u>Ulmus</u> PBI Specification: L3 see 155.02.06 under Ulmus</p> | <ul style="list-style-type: none"> • <i>Ulmus parvifolia</i> |

Table 2: Host species which can be imported as nursery stock, not including whole plants

At a minimum, **ALL** imported nursery stock must meet the Entry Conditions specified in Section 2.2 of the IHS. The table below identifies where additional entry requirements must be met for each species as identified in Section 3 ‘Schedule of Special Entry Conditions’.

| Schedule of special entry conditions | Host species | Approved commodity types | Proposed change to schedule |
|--|--|---|--|
| <u>Artocarpus</u> see 155.02.06 under Artocarpus | <ul style="list-style-type: none"> • <i>Artocarpus altilis</i> • <i>Artocarpus heterophyllus</i> | Plants in-vitro only | No specific measures will be required, as only tissue culture can be imported under this schedule. |
| <u>Citrus</u> (<i>Fortunella</i> and <i>Poncirus</i>) L2,L3 see 155.02.06 under Citrus | <ul style="list-style-type: none"> • <i>Citrus</i> spp. (including <i>C. aurantiifolia</i>, <i>C. reticulata</i>) | Cuttings (dormant only); Plants in-vitro | <i>Phellinus noxius</i> is added to the pest list for <i>Citrus</i> . No specific measures will be required, as only cuttings and tissue culture can be imported under this schedule. |
| <u>Cycas</u> L2 see 155.02.06 under Cycas | <ul style="list-style-type: none"> • <i>Cycas taiwaniana</i> | Cuttings (dormant, including offsets); Plants in-vitro | No specific measures will be required, as only cuttings and tissue culture can be imported under this schedule. |
| <u>Persea</u> L3 see 155.02.06 under Persea | <ul style="list-style-type: none"> • <i>Machilus thunbergii</i> • <i>Persea americana</i> (syn <i>P. gratissima</i>) | Cuttings (dormant only); Plants in-vitro | <i>Phellinus noxius</i> is added to the Pest List for <i>Persea</i> . No specific measures will be required, as only cuttings and tissue culture can be imported under this schedule. |
| <u>Prunus</u> L2,L3 see 155.02.06 under Prunus | <ul style="list-style-type: none"> • <i>Prunus campanulata</i> • <i>Prunus mume</i> • <i>Prunus persica</i> | Cuttings;Plants in-vitro | <i>Phellinus noxius</i> is added to the Pest List for <i>Prunus</i> . No specific measures will be required, as only cuttings and tissue culture can be imported under this schedule. |
| <u>Vitis</u> L2,L3 see 155.02.06 under Vitis | <ul style="list-style-type: none"> • <i>Vitis vinifera</i> | Cuttings;Plants in-vitro | <i>Phellinus noxius</i> is added to the pest list for <i>Vitis</i> . No specific measures will be required, as only cuttings and tissue culture can be imported under this schedule. |

Table 3: Host species which cannot currently be imported into New Zealand as nursery stock

The species listed in this table are known hosts of *P. noxius*; however, they cannot currently be imported into New Zealand as nursery stock.

| Host species | |
|---|---|
| Entry Prohibited | |
| • <i>Euonymus japonicas</i> | • <i>Lantana camara</i> |
| Cannot be imported into New Zealand as nursery stock: Nursery Stock import specification on PBI 'Require assessment' | |
| <i>Alstonia scholaris</i> <i>Bischofia javanica</i> <i>Cajanus cajan</i> <i>Calocedrus formosana</i> <i>Castanospermum australe</i> <i>Casuarina torulosa</i> <i>Cedrela odorata</i> (syn. <i>C. mexicana</i>) <i>Ceiba pentandra</i> <i>Chorisia speciosa</i> <i>Coffea</i> sp.; <i>Coffea arabica</i> ; <i>Coffea canephora</i> <i>Dalbergia sissoo</i> <i>Dimocarpus longan</i> <i>Firmiana simplex</i> <i>Flindersia brayleyana</i> <i>Hevea</i> sp.; <i>Hevea brasiliensis</i> | <ul style="list-style-type: none"> • <i>Ipomoea pes-caprae</i> • <i>Khaya nyasica</i> • <i>Kigelia pinnata</i> • <i>Manihot esculenta</i> (syn. <i>M. utilissima</i>) • <i>Murraya paniculata</i> • <i>Pinus</i> spp.; <i>Pinus elliotii</i>; <i>Pinus thunbergii</i> • <i>Pongamia pinnata</i> • <i>Pterocarpus indicus</i> • <i>Pyrus pyrifolia</i> • <i>Sterculia foetida</i> • <i>Swietenia</i> spp.; <i>Swietenia mahagonia</i> • <i>Taiwania cryptomerioides</i> • <i>Tectona grandis</i> • <i>Tephrosia</i> sp.; <i>Tephrosia vogelii</i> • <i>Theobroma cacao</i> |
| Cannot be imported into New Zealand: Species not listed on PBI | |
| <i>Acacia aulacocarpa</i> ; <i>Acacia confusa</i> ; <i>Acacia mangium</i> <i>Actinodaphne pedicellata</i> <i>Annona montana</i> <i>Ardisia quinquegona</i> ; <i>Ardisia sieboldii</i> <i>Barringtonia asiatica</i> ; <i>Barringtonia samoensis</i> <i>Blepharocarya involucrigera</i> <i>Broussonetia kazinoki</i> <i>Calophyllum neobudicum</i> <i>Canarium harveyi</i> <i>Castanospora alphandii</i> <i>Cerbera manghas</i> <i>Chlorophora excelsa</i> <i>Cinnamomum japonicum</i> ; <i>Cinnamomum kanehirai</i> <i>Clusia</i> sp. <i>Cola nitida</i> <i>Cordia aspera</i> ; <i>Cordia dichotoma</i> <i>Crescentia cujete</i> <i>Crossostylis biflora</i> <i>Crotalaria micans</i> (syn. <i>C. anagyroides</i>) <i>Cryptocarya concinna</i> ; <i>Cryptocarya mackinnoniana</i> <i>Diospyros oldhamii</i> ; <i>Diospyros samoensis</i> ; <i>Diospyros vera</i> (syn. <i>D. ferrea</i> var. <i>buxifolia</i>) <i>Dysoxylum samoense</i> <i>Elattostachys falcata</i> <i>Eucalyptus drepanophylla</i> <i>Ficus copiosa</i> ; <i>Ficus pumila</i> var. <i>awkeotsang</i> ; <i>Ficus septica</i> ; <i>Ficus tinctoria</i> ; <i>Ficus virgata</i> <i>Flemingia macrophylla</i> <i>Flindersia pimenteliana</i> ; <i>Flindersia schottiana</i> <i>Flueggea flexuosa</i> <i>Garcinia subelliptica</i> <i>Glochidion obovatum</i> ; <i>Glochidion ramiflorum</i> <i>Hedera australiana</i> <i>Heritiera</i> spp. <i>Hernandia nymphaeifolia</i> <i>Inocarpus fagifer</i> <i>Intsia bijuga</i> | <i>Jatropha integerrima</i> <i>Keteleeria davidiana</i> var. <i>formosana</i> <i>Kissodendron australianum</i> <i>Koelreuteria henryi</i> <i>Lactuca indica</i> <i>Lagerstroemia turbinata</i> <i>Lannea coromandelica</i> <i>Litsea glutinosa</i> ; <i>Litsea hypophaea</i> ; <i>Litsea japonica</i> <i>Macaranga harveyana</i> ; <i>Macaranga stipulosa</i> ; <i>Macaranga tanarius</i> <i>Machilus zuihoensis</i> <i>Maesa tenera</i> <i>Malaisia scandens</i> <i>Mallotus paniculatus</i> <i>Melicope merrilli</i> <i>Melodinus angustifolius</i> <i>Mitrephora froggattii</i> <i>Muntingia calabura</i> <i>Myristica fatua</i> <i>Neolitsea parvigemma</i> <i>Neonauclea forsteri</i> <i>Ochroma lagopus</i> <i>Palaquium formosanum</i> <i>Pinus caribaea</i> var. <i>hondurensis</i> ; <i>Pinus merkusii</i> <i>Pipturus argenteus</i> <i>Planchonella grayana</i> ; <i>Planchonella samoensis</i> <i>Pometia pinnata</i> <i>Pygeum turnerianum</i> <i>Rhus taitensis</i> <i>Saurauia oldhamii</i> <i>Spondias dulcis</i> <i>Sterculia nobilis</i> <i>Swietenia macrophylla</i> <i>Syzygium inophylloides</i> <i>Terminalia boivinii</i> ; <i>Terminalia richii</i> <i>Thespesia populnea</i> <i>Trema orientalis</i> <i>Urena lobata</i> |

Table 4: Countries where *Phellinus noxius* is recorded as present

| Region | Country | |
|--|---|--|
| Africa | Angola (CPC 2007) Benin (CPC 2007) Burkina (CPC 2007) Cameroon (CPC 2007) Central African Republic (CPC 2007) Cote d'Ivoire (Farr and Rossman 2010) Democratic Republic of Congo (CPC 2007) Faso (CPC 2007) Gabon (CPC 2007) | Ghana (Farr and Rossman 2010) Kenya (CPC 2007) Liberia (Nandris <i>et al.</i> 1987) Nigeria (Farr and Rossman 2010) Sierra Leone (Farr and Rossman 2010) Tanzania (Farr and Rossman 2010) Togo (CPC 2007) Uganda (CPC 2007) |
| Asia | Andaman Islands (Farr and Rossman 2010) China (Kai-Ming and Chee 1989) Islands of China (Ann <i>et al.</i> 2002) East Indies (Farr and Rossman 2010) India (Farr and Rossman 2010) Indonesia (Farr and Rossman 2010) Islands of Japan (Ann <i>et al.</i> 2002) Malay Peninsula (Farr and Rossman 2010) | Malaysia (Farr and Rossman 2010) Myanmar (Farr and Rossman 2010) Nicobar Islands (Farr and Rossman 2010) Pakistan (CPC 2007) Philippines (CPC 2007) Singapore (CPC 2007) Sri Lanka (CPC 2007) Taiwan (Ann <i>et al.</i> 2002) Vietnam (CPC 2007) |
| Central America & Caribbean | Brazil (Farr and Rossman 2010) Costa Rica (CPC 2007) Cuba (Farr and Rossman 2010) | MPI does not accept the record of presence in Puerto Rico. A review of the fungal databases on that island did not contain any records of <i>P. noxius</i> (Ridley 2001). |
| Oceania | American Samoa (Brooks 2002) Australia (NSW, Queensland) (CPC 2007) Fiji (Farr and Rossman 2010) Mariana Islands (Hodges and Tenorio 1984) | New Guinea (Farr and Rossman 2010) Papua New Guinea (Farr and Rossman 2010) Samoa (Farr and Rossman 2010; Gibson 1979) Vanuatu (Gibson 1979) |

Appendix 2: Proposed Measures in IHS 155.02.06

A new section is proposed to be incorporated within Section 2.2.1 Basic Conditions:
2.2.1.13 *Measures for Phellinus noxius*.

The measures in this section apply only to known host plants which can be imported as whole plants and rooted cuttings (as identified in Appendix 1, Table 1).

2.2.1.13 Measures for *Phellinus noxius*

All whole plants from all countries (not cuttings, dormant bulbs or tissue culture) from species which are listed as hosts of P. noxius in the following schedules must meet the requirements of this section:

- | | | |
|----------------------------|---------------------|-----------------------|
| • <i>Acacia</i> | • <i>Delphinium</i> | • <i>Mangifera</i> |
| • <i>Acrocomia</i> | • <i>Diospyros</i> | • <i>Metrosideros</i> |
| • <i>Aesculus</i> | • <i>Eriobotrya</i> | • <i>Nandina</i> |
| • <i>Araucaria</i> | • <i>Eucalyptus</i> | • <i>Planera</i> |
| • <i>Arbutus</i> | • <i>Eugenia</i> | • <i>Populus</i> |
| • <i>Camellia</i> | • <i>Ficus</i> | • <i>Rhododendron</i> |
| • <i>Camellia sinensis</i> | • <i>Hebe</i> | • <i>Rosa</i> |
| • <i>Cedrus</i> | • <i>Hydrangea</i> | • <i>Salix</i> |
| • <i>Crataegus</i> | • <i>Litchi</i> | • <i>Ulmus</i> |

The phytosanitary certificate must endorse one of the following additional declarations:

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

OR

- b) “The plants have been sourced from a “Pest free area” 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

MPI does not accept the record of presence in Puerto Rico. A review of the fungal databases on that island did not contain any records of *P. noxius* (Ridley 2001).

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

GENERAL CONDITIONS:

Approved Countries: All

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

Entry Conditions:

Basic; with variations and additional conditions as specified below:

A. For Whole Plants

PEQ: Level 2

Minimum Period: 3 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Acacia* and *Passiflora* genera
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
Note: Only applies to the following species: *Veronica spicata*
- c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
- d. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Artemisia capillaris*; *Artemisia princeps*; *Duranta repens*; *Nerium oleander*; **and**
Note: Applies to all members of the *Acacia* genus.

B. For Cuttings

PEQ: Level 2

Minimum Period: 3 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Acacia* and *Passiflora* genera
- b. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
Note: Only applies to the following species: *Veronica spicata*
- c. Conditions for *Xylella fastidiosa* (section 2.2.1.12)

C. For Plants in Tissue Culture from All Countries:

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

Acrocomia

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

GENERAL CONDITIONS:

Approved Countries: Australia, Hawaii, mainland USA

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

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

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 2.2.1.13)

Note: Only applies to the following species: *Phoenix roebelenii*

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

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

- d. **Additional Declaration:**

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

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

GENERAL CONDITIONS:

Approved Countries: All

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

Entry Conditions:

Basic; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

- a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
- c. Conditions for *Phellinus noxius* (section 2.2.1.13)

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

B. For Cuttings:

PEQ: Level 2

Minimum Period: 3 months

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

C. For Plants in Tissue Culture from All Countries:

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

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

GENERAL CONDITIONS:

Approved Countries: All

Quarantine Pests: *Phellinus noxius*

Entry Conditions:

Basic; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

- a. Conditions for *Phellinus noxius* (Section 2.2.1.13)

B. For Cuttings:

PEQ: Level 2

Minimum Period: 3 months

C. For Plants in Tissue Culture from All Countries:

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

Arbutus

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

GENERAL CONDITIONS:

Approved Countries: All

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

Entry Conditions:

Basic; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

- a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only applies to the following species: *Magnolia grandiflora*
- c. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Applies to all members of the *Cinnamomum* genus; **and**
Note: Applies to the following species: *Michelia compressa*; *Michelia figo*; *Osmanthus fragrans*.

B. For Cuttings:

PEQ: Level 2

Minimum Period: 3 months

- a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only applies to the following species: *Magnolia grandiflora*

C. For Plants in Tissue Culture from All Countries:

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

Camellia

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

GENERAL CONDITIONS:

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

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

Entry Conditions:

Basic; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

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

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

B. For Cuttings:

PEQ: Level 2

Minimum Period: 3 months

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

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

C. For Tissue Cultures:

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

Camellia sinensis

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

GENERAL CONDITIONS:

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

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

Entry Conditions:

Basic; with variations and additional conditions as specified below:

For Whole Plants

PEQ:Level 3

Minimum Period: 3 months

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

For Tissue Culture:

PEQ:Level 3

Minimum Period: 3 months

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

Cedrus

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

GENERAL CONDITIONS:

Approved Countries: All

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

Entry Conditions:

Basic; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 3

Minimum Period: 6 months

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

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

B. For Tissue Cultures:

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

Crataegus

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

GENERAL CONDITIONS:

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

Quarantine Pests: *Gymnosporangium clavipes*; *Gymnosporangium globosum*; *Phellinus noxius*

Entry Conditions:

Basic; with variations and additional conditions as specified below:

A. For Whole Plants:

OPTION 1

PEQ: Level 2

Minimum Period: 6 months

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

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

- b. Additional declaration:

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

- c. Additional declaration:

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

OPTION 2

PEQ: Level 3

Minimum Period: 3 months

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

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

B. For Tissue Cultures:

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

Delphinium

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

GENERAL CONDITIONS:

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

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

Entry Conditions:

Basic; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
Note: Only applies to members of the *Erythrina* genus
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
Note: Only applies to the following species: *Convolvulus arvensis*; *Crepis capillaris*, *Geranium dissectum*, *Myrica cerifera*, *Salvia mellifera*, *Senecio vulgaris*
- c. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Applies to all members of the *Erythrina* genus; **and**
Note: Applies to the following species: *Barleria cristata*.
- d. Additional declaration:
"Rust diseases of genus *Coleosporium* and *Cronatium* are not known to occur on
_ (the host species being imported)_ in _ (the country in which the plants were grown) _".

B. For Tissue Cultures:

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

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*; *Xylella fastidiosa*

Entry Conditions:

Basic; with variations and additional conditions as specified below:

A. For Whole Plants

PEQ:Level 3

Minimum Period: 3 months

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

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

B. For Tissue Culture:

PEQ:Level 3

Minimum Period: 3 months

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, USA.

Quarantine Pests: *Ceratocystis fimbriata*; *Phellinus noxius*; *Pseudomonas syringae* pv. *eriobotryae*

Entry Conditions:

Basic; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 6 months

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

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

Note: Only applies to the following species: *Eriobotrya japonica*

c. Additional declaration:

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

OR

"The plants were from a nursery that has been inspected for the presence of *Pseudomonas syringae* pv. *eriobotryae* and none has been detected".

B. For Tissue Cultures:

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

Eucalyptus

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

GENERAL CONDITIONS:

Approved Countries: All

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

Entry Conditions:

Basic; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ:Level 3

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)
Note: Only applies to the following species: *Eucalyptus globulus*
- d. Conditions for *Phellinus noxius* (section 2.2.1.13)

B. For Tissue Cultures:

OPTION 1:

- a. 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)”.
- b. The tissue cultures are subject to examination at a MPI-registered laboratory at the importers expense, prior to release to the importer.

OPTION 2:

PEQ:Level 2 Tissue culture laboratory

Minimum Period: 4 weeks

- a. The cultures containers are not to be opened during the quarantine period.

Eugenia

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

GENERAL CONDITIONS:

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

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

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

A. For Whole Plants:

OPTION 1:

PEQ:Level 2

Minimum Period: 6 months

- a. Conditions for *Xylella fastidiosa* (see section 2.2.1.12)
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Syzygium samarangense*
- c. Additional declaration:
" *Puccinia psidii* s.l. complex (including *Uredo rangelii*) is not known to occur in (the country of origin) ".

OPTION 2:

PEQ:Level 3

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:

OPTION 1:

- a. Additional declaration:
 - “*Puccinia psidii* s.l. complex (including *Uredo rangelii*) is not known to occur in (the country of origin) ”.
- OR
- “The tissue cultures in this consignment have been actively growing in the culture container for at least four weeks at temperatures between 15 – 23°C (59 – 73.4°F)”.

OPTION 2:

PEQ:Level 2 Tissue culture laboratory

Minimum Period: 4 weeks

- a. The cultures containers are not to be opened during the quarantine period.

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

GENERAL CONDITIONS:

Approved Countries: All

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

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

A. For Whole Plants:

PEQ: Level 2

Minimum Period: 3 months

Note: Nursery stock of *Ficus microcarpa* must be free of flowers and fruit.

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

Note: Only applies to the following species: *Ficus carica*

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

Note: Only applies to the following species: *Ficus carica*

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

- d. Additional declaration:

"*Uredo ficina* is not known to occur in __ (the country or state where the plants were grown) _".

OR

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

B. For Tissue Cultures:

PEQ: Level 2

Minimum Period: 3 months

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

Note: Only applies to the following species: *Ficus carica*

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

Note: Only applies to the following species: *Ficus carica*

- c. Additional declaration:

"*Uredo ficina* is not known to occur in __ (the country or state where the plants were grown) _".

OR

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

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

GENERAL CONDITIONS:

Approved Countries: All

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

Entry Conditions:

Basic; with variations and additional conditions as specified below:

A. For Whole Plants

PEQ: Level 2

Minimum Period: 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Albizia julibrissin*, *Hibiscus schizopetalus*

B. For Cuttings

PEQ: Level 2

Minimum Period: 3 months

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

C. For Plants in Tissue Culture from All Countries:

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

Hydrangea

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

GENERAL CONDITIONS:

Approved Countries: All

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

Entry Conditions:

Basic; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ:Level 2

Minimum Period: 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Hydrangea chinensis*, *Morus alba*
- c. Additional declaration:
"The plants have been dipped prior to export in dicofol at the rate of 0.7g a.i. per litre of water".

B. For Cuttings:

PEQ:Level 2

Minimum Period: 3 months

- a. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
- b. Additional declaration:
"The plants have been dipped prior to export in dicofol at the rate of 0.7g a.i. per litre of water".

C. For Plants in Tissue Culture from All Countries:

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

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

GENERAL CONDITIONS:

Approved Countries: Australia

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

Entry Conditions:

Basic; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ:Level 2

Minimum Period: 6 months

- a. Conditions for *Phellinus noxius* (section 2.2.1.13)
- b. Additional declaration:
"The plants were grown on a nursery that has been inspected for the presence of *Aceria litchii* and members of the Xyloryctidae and none were found".

B. For Tissue Cultures:

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

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, Pakistan, Mexico, Philippines

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

Entry Conditions:

Basic; with variations and additional conditions as specified below:

A. For Whole Plants:

PEQ:Level 2

Minimum Period: 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Mangifera indica*
- c. Additional declaration:
"Xanthomonas campestris pv. mangiferae-indicae is not known to occur in _____ (the country or state where the plants were grown) _____".
OR
"The plants were inspected during the growing season and no *Xanthomonas campestris* pv. *mangiferae-indicae* was detected".

B. For Tissue Cultures:

PEQ:Level 2

Minimum Period: 6 months

- a. Conditions for *Ceratocystis fimbriata* (section 2.2.1.8)
- b. Additional declaration:
"Xanthomonas campestris pv. mangiferae-indicae is not known to occur in _____ (the country or state where the plants were grown) _____".
OR
"The plants were inspected during the growing season and no *Xanthomonas campestris* pv. *mangiferae-indicae* was detected".

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*; *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 the following species: *Metrosideros excelsea*, *Metrosideros kermadecensis*, *Myrtus communis*
- c. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Melaleuca leucadendra*
- d. Additional declaration:
" *Puccinia psidii* s.l. complex (including *Uredo rangelii*) is not known to occur in (the country of origin)".

OPTION 2:

PEQ:Level 3

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 the following species: *Metrosideros excelsea*, *Metrosideros kermadecensis*, *Myrtus communis*
- c. Conditions for *Phellinus noxius* (section 2.2.1.13)
Note: Only applies to the following species: *Melaleuca leucadendra*

B. For Tissue Cultures:

OPTION 1:

- a. Additional declaration:

“*Puccinia psidii* s.l. complex (including *Uredo rangelii*) is not known to occur in (the country of origin) ”.

OR

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

OPTION 2:

PEQ:Level 2 Tissue culture laboratory

Minimum Period: 4 weeks

- a. The cultures containers are not to be opened during the quarantine period.

Nandina

Note: The entry conditions in 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)
- b. Conditions for *Phellinus noxius* (section 2.2.1.13)
- c. Additional declaration:
"*Alternanthera mosaic virus* and *Plantago asiatica mosaic virus* are not known to occur in _____ (the country or state where the plants were grown) _____".

B. For Tissue Cultures:

PEQ: Level 2

Minimum Period: 3 months

- a. Additional declaration:
"The cultures have been derived from parent stock tested and found free of *Alternanthera mosaic virus* and *Plantago asiatica mosaic virus*".

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:

For Whole Plants:

PEQ:Level 3

Minimum Period: 3 months

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

Note: Only applies to the following species: *Zelkova serrata*

For Tissue Cultures:

PEQ:Level 3

Minimum Period: 3 months

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, USA

Quarantine Pests: *Ceratocystis fimbriata*, *Marssonina* spp.; *Phellinus noxius*; *Phytophthora ramorum*; Uredinales; virus diseases; *Xylella fastidiosa*

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

A. For Whole Plants:

PEQ:Level 3

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)
- 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, but subject to examination at a MPI-registered laboratory at the importers expense, prior to release to the importer.

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 azaleae*; *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. Measures for *Microsphaera* spp. and rust diseases:

- i. Additional declaration:

"*Microsphaera* spp., and the following rust diseases are not known to occur on *Rhododendron* spp. in _ (the country or state where the plants were grown) _".

Note: Applies to the following rust diseases: *Aecidium rhododendri*; *Aecidium sinorhododendri*; *Chrysomyxa ledi*; *Chrysomyxa ledicola*; *Chrysomyxa dieteli*; *Chrysomyxa expansa*; *Chrysomyxa himalensis*; *Chrysomyxa komarovii*; *Chrysomyxa piperiana*; *Chrysomyxa roanensis*; *Chrysomyxa succinea*; *Chrysomyxa taghishae*; *Puccinia rhododendri*; *Pucciniastrum vaccinii*

OR

- ii. All visible flower buds are to be removed prior to export;

and

On arrival in New Zealand the plant material is to be treated, under the supervision of an Inspector, at a MPI-registered transitional facility by dipping in Benomyl, Carbendazim or Thiophanate methyl [choose one] at a rate of 250mg a.i. per litre.

B. For Cuttings:

PEQ: Level 2

Minimum Period: 3 months

- a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- b. Measures for *Microsphaera* spp. and rust diseases:

- i. Additional declaration:

"*Microsphaera* spp., and the following rust diseases are not known to occur on *Rhododendron* spp. in _ (the country or state where the plants were grown) _".

Note: Applies to the following rust diseases: *Aecidium rhododendri*; *Aecidium sinorhododendri*; *Chrysomyxa ledi*; *Chrysomyxa ledicola*; *Chrysomyxa dieteli*; *Chrysomyxa expansa*; *Chrysomyxa himalensis*; *Chrysomyxa komarovii*; *Chrysomyxa piperiana*;

Chrysomyxa roanensis; Chrysomyxa succinea; Chrysomyxa taghishae; Puccinia rhododendri; Pucciniastrum vaccinii

OR

- ii. All visible flower buds are to be removed prior to export;

and

On arrival in New Zealand the plant material is to be treated, under the supervision of an Inspector, at a MPI-registered transitional facility by dipping in Benomyl, Carbendazim or Thiophanate methyl [choose one] at a rate of 250mg a.i. per litre.

C. For Tissue Cultures:

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

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. These conditions do not apply to *Rosa gymnocarpa*, for which there is currently no import health standard.

GENERAL CONDITIONS:

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

Quarantine Pests: *Phellinus noxius*; Uredinales; *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. Conditions for *Phellinus noxius* (section 2.2.1.13)
- c. Additional declaration:
"The plants have been dipped in propiconazole at the rate of 5g a.i. per 10 litres of water".

B. For Cuttings (dormant):

PEQ: Level 1

Minimum Period: 6 months

- a. Additional declaration:
"The plants have been sourced from a “Pest free area”, free from *Xylella fastidiosa*".

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 *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 3

Minimum Period: 3 months

- a. Conditions for *Phytophthora ramorum* (section 2.2.1.11)
- b. Conditions for *Xylella fastidiosa* (section 2.2.1.12)
- 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, but subject to examination at a MPI-registered laboratory at the importers expense, prior to release to the importer.

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

PEQ:Level 3

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

Note: Only applies to the following species: *Ulmus parvifolia*

B. Tissue Cultures:

PEQ:Level 3

Minimum Period: 3 months

References

- Ann, P. J.; Chang, T. T.; Ko, W. H. (2002) *Phellinus noxius* brown root rot of fruit and ornamental trees in Taiwan. *Plant Disease* 86(8): 820-826.
- Ann, P. J., Lee, H. L., & Tsai, J. N. (1999). Survey of brown root disease of fruit and ornamental trees caused by *Phellinus noxius* in Taiwan. *Plant Pathology Bulletin*, 8(2), 51-60.
- Brooks, F.E. (2002). Brown root rot disease in American Samoa's tropical rain forests. *Pacific Science* 56: 377 -387.
- CPC (2007) Crop Protection Compendium: <http://www.cabi.org>
- Farr, D. F.; Rossman, A. Y. (2010). Fungal Databases, Systematic Mycology and Microbiology Laboratory, ARS, USDA. Retrieved 7 June, 2016, from <http://nt.ars-grin.gov/fungaldatabases/>
- Hodges, C. S.; Tenorio, J. A. (1984). Root disease of *Delonix regia* and associated tree species in the Mariana Islands caused by *Phellinus noxius*. *Plant Disease* 68: 334-336.
- Kai-Ming, Z.; Chee, K. H. (1989). *Hevea* diseases of economic importance in China *The Planter, Kuala Lumpur* 65: 3-8
- Nandris, D.; Nicole, M.; Geiger, J. P. (1987). Root rot diseases of rubber trees. *Plant Disease* 71: 298-306.
- MAF Biosecurity *Phellinus noxius* pest risk analysis (June 2011). Available upon request.
- Ridley, G. S. (2001). *Phellinus noxius*. Unpublished report prepared for MAFBNZ by Forest Research, June 2001.
- Ridley, G.; Crabtree, R. (2001) Temperature mortality thresh-holds for insects and fungi. Unpublished report.
- Sahashi, N.; Akiba, M.; Ishihara, M.; Ota, Y.; Kanzaki, N. (1998). Brown root rot of trees caused by *Phellinus noxius* in the Ryukyu Islands, subtropical areas of Japan.