

Recommendation for the Amendment and Re-issuance of an Import Health Standard

Import Health Standard:	MAF Biosecurity Standard 155.02.06: <i>Importation of Nursery Stock</i> last amended 9 September 2005
Commodity Class:	Nursery Stock
Section:	Schedule of special conditions for <i>Cycas</i>
Date of re-issuance:	6 October 2005

Background

Nursery stock imported into New Zealand must meet the requirements of the Ministry of Agriculture and Forestry (MAF) Biosecurity New Zealand import health standard 155.02.06 *Importation of Nursery Stock*. All nursery stock must meet the basic conditions (section 2) while some species (for which specific associated pests have been identified) have further requirements as outlined in the schedule of special conditions (section 3).

1) Cycads

This amendment recommends changes to the import requirements for cycads and other hosts of *Aulacaspis yasumatsui*. In the last few months there has been an incursion of the scale insect *Aulacaspis yasumatsui* in New Zealand on plants of *Cycas* from Costa Rica. Following a letter from BNZ to the Costa Rican authorities, Costa Rica indicated that they are investigating the causes of this incident.

MAF BNZ has recently reviewed *Cycas* plants from countries where this scale is a pest and determined that because *Aulacaspis yasumatsui* is very difficult to eradicate using chemical treatments and to further reduce the chance of further incursions of this pest, it was recommended that the importation of host genera of *Aulacaspis yasumatsui* (*Cycas*, *Dioon*, *Encephalartos*, *Macrozamia*, *Stangeria*, *Zamia*) be prohibited from those areas in which the pest is present (Cayman Islands, China, Guam, Puerto Rico, Singapore, Taiwan, Thailand, U.S. Virgin Islands and the USA (Florida and Hawaii)). Following this recent incursion it is now recommended that host genera of *Aulacaspis yasumatsui* be suspended from Costa Rica, pending additional information from Costa Rica.

Additionally, new information has also indicated that *A. yasumatsui* is present in Vietnam. It is recommended that host genera of *A. yasumatsui* be prohibited from Vietnam. Vietnam has been notified and we have received no comments back.

2) Removal of Pests from the Nursery Stock Standard

The following pests have completed the process, including necessary consultations, to remove them from the unwanted organism register because they are present in NZ and therefore this standard is being revised from regulated to non-regulated: *Lily mottle virus*, *Iris severe mosaic*

virus, Iris mild mosaic virus, Nerine virus X, Lily virus X, Ornithogalum mosaic virus, and Erwinia rhapontici.

The following schedules will be revised: *Allium, Hippeastrum, Iris* and *Lilium*.

3) *Xylella fastidiosa* from French Polynesia

It is recommended that French Polynesia be added to the countries where *Xylella fastidiosa* is present. MAF BNZ has requirements to prevent the entry of *Xylella fastidiosa* from countries in which the bacterium is present and it has recently been demonstrated that *Xylella fastidiosa* is present in French Polynesia.

All schedules for hosts need to be revised.

4) The MAF BNZ Risk Analysis Group has concluded that there is no clear evidence to demonstrate that *Hippeastrum* is a host of *Rhizoctonia tuliparum*. MAF BNZ has recently been challenged by its counterparts in the Netherlands. It is recommended that *Rhizoctonia tuliparum* be removed from the Import Health Schedule.

Considerations under the Biosecurity Act 1993

These amendments are issued in accordance with the Biosecurity Act 1993. Section 22 sets out matters that must be considered when an import health standard is amended. The following paragraphs record the consideration in so far as they relate to the requirements for the abovementioned amendments.

Section 22 (5) (a) The likelihood that goods of the kind or description to be specified in the import health standard may bring organisms into New Zealand

- 1) The pests and diseases associated with nursery stock of cycads, and the likelihood of their entry and establishment via these pathways were considered when the current import health standards were issued. However, recent interceptions and incursions have demonstrated that the current measures are insufficient to prevent the introduction of this unwanted scale insect.
- 2) Based on new information, it is no longer technically justified to regulate the above mentioned organisms.
- 3) This amendment will reduce the likelihood that hosts of *Xylella fastidiosa* bring this organism to New Zealand.
- 4) *Hippeastrum* is not a host of this pest.

Section 22 (5) (b) The nature and possible effect on people, the New Zealand environment, and the New Zealand economy of any organisms that goods of the kind or description specified in the import health standard may bring into New Zealand

- 1) The nature and possible effect on people, the New Zealand environment, and the New Zealand economy of any organisms that nursery stock of cycads may bring into New Zealand was considered when the current import health standards were issued. There are a number of pests such as *Aulacaspis yasumatsui* which are associated with cycads and would have an adverse effect on the New Zealand economy and environment were they to become established.

- 2) Based on new information, it is no longer technically justified to regulate the above mentioned organisms
- 3) This amendment will reduce the likelihood that hosts of *Xylella fastiosa* will have a negative effect on people, the New Zealand environment and the New Zealand economy.
- 4) *Hippeastrum* is not a host of this pest.

Section 22 (5) (c) New Zealand's international obligations

- 1) New Zealand will notify other member countries of the World Trade Organisation of its intention to ban the importation of host plants of *Aulacaspis yasumatsui*. Correspondence has been sent to Costa Rica and, although they are looking into the situation, the decision has been made to proceed with the suspension.
- 2), 3) and 4) will be notified to the WTO.

Section 22 (5) (d) Such other matters as the chief technical officer considers relevant to the purpose of this Part

There are no other relevant matters to consider in making this recommendation.

Section 22 (6) Before making a recommendation ... the chief technical officer must, unless the standard needs to be issued or amended urgently ... consult with those persons considered by the chief technical officer to be representative of the classes of persons having an interest in the standard

These are urgent and minor amendments so is not necessary.

Section 22 (8) Before making a recommendation ... the chief technical officer must give notice of the intention to make the recommendation to the chief executive of every department of State whose responsibilities for natural resources or human health may be adversely affected

Representatives of the Department of Conservation and the Ministry of Health were notified of this recommendation to amend the import health standard on 23 September 2005.

Notification

Inspectors appointed under the Biosecurity Act 1993 will be made aware of this change so that in the performance of their powers, functions and duties they can use their best endeavours to give effect to this change pursuant to their obligations under section 103 (8) of the Biosecurity Act 1993 and can perform their duties under section 25 of the Biosecurity Act 1993 in accordance with the best information available. MAF Biosecurity New Zealand Import Health Standard *155.02.06 Importation of Nursery Stock*, last amended on 9 September 2005, will be amended and reissued on 3 October 2005.

Attachments

Recommendation

Pursuant to section 22 of the Biosecurity Act 1993, I, Brian Double, recommend that MAF Biosecurity Import Health Standard *155.02.06 Importation of Nursery Stock*, last amended on 9 September 2005, be amended by adding or modifying the necessary sections as previously detailed in this amendment.

Signature of Senior Adviser, Nursery Stock
Acting pursuant to delegated authority

Date: 6 October 2005

Agree/Disagree

Pursuant to section 22 of the Biosecurity Act 1993, I, Debbie Pearson, approve this amendment to the Import Health Standard *155.02.06 Importation of Nursery Stock*, last amended on 9 September 2005 to take effect from 6 October 2005.

Signature of Chief Technical Officer
Acting pursuant to delegated authority

Date: 3 October 2005

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:

Countries: All except Australia, Cayman Islands, China, **Costa Rica**, Guam, Italy, Puerto Rico, Singapore, Taiwan, Thailand, U.S. Virgin Islands, the USA (Florida and Hawaii) and **Vietnam**.

Quarantine Pests: *Aulacaspis yasumatsui*, *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

Additional Declaration:

"The nursery stock has been sourced from a “Pest free area”, free from *Aulacaspis yasumatsui*"

B. For Plants in Tissue Culture:

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 *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 of Agriculture and Forestry (MAF) 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”, “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, phytoplasmas 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 *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

- 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 2

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

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: 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 of Agriculture and Forestry (MAF) 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

- 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 Aster yellows phytoplasma, *Impatiens necrotic spot virus*, *Iris yellow spot virus*, *Tobacco rattle virus* and *Tomato black ring 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* 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 Aster yellows phytoplasma, *Impatiens necrotic spot virus*, *Iris yellow spot virus*, *Tobacco rattle virus* and *Tomato black ring 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 3

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

Pest List for *Allium*

REGULATED PESTS (actionable)

Insect

Insecta

Coleoptera

Curculionidae

Brachycerus muricatus
Brachycerus undatus
Ceutorhynchus jakovlevi

weevil
weevil
onion weevil

Nitidulidae

Carpophilus obsoletus

dried fruit beetle

Diptera

Anthomyiidae

Delia antiqua
Delia florilega

onion maggot
onion fly

Heleomyzidae

Suillia lurida
Suillia univittata

garlic fly
-

Syrphidae

Eumerus amoenus

onion bulb fly

Lepidoptera

Cossidae

Dyspessa ulula

garlic moth

Yponomeutidae

Acrolepia alliella
Acrolepia sapporensis
Acrolepiopsis assectella

-
allium leafminer
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
Paratrichodorus minor [vector]
Paratrichodorus teres

stubby root nematode
stubby root nematode
stubby root nematode

Secernentea

Tylenchida

Aphelenchoididae

Aphelenchoides besseyi
Aphelenchoides parietinus

rice white-tip nematode
-

Belonolaimidae

Belonolaimus gracilis

sting nematode

Hoplolaimidae

<i>Helicotylenchus indicus</i>	spiral nematode
<i>Helicotylenchus microlobus</i>	spiral nematode
<i>Helicotylenchus multicinctus</i>	spiral nematode
<i>Hoplolaimus seinhorsti</i>	lance nematode
<i>Rotylenchulus reniformis</i>	reniform nematode
Meloidogynidae	
<i>Meloidogyne arenaria</i>	peanut root knot nematode
<i>Meloidogyne chitwoodi</i>	root knot nematode
Tylenchidae	
<i>Ditylenchus dipsaci</i> [strains not in New Zealand]	stem and bulb nematode
Fungus	
Ascomycota	
Dothideales	
Mycosphaerellaceae	
<i>Mycosphaerella allii-cepae</i> (anamorph <i>Cladosporium allii-cepae</i>)	leaf blotch
Basidiomycota: Basidiomycetes	
Agaricales	
Tricholomataceae	
<i>Armillaria mellea</i> (anamorph <i>Rhizomorpha subcorticalis</i>)	armillaria root rot
Basidiomycota: Teliomycetes	
Uredinales	
Melampsoraceae	
<i>Melampsora allii-fragilis</i>	rust
Pucciniaceae	
<i>Puccinia asparagi</i>	asparagus rust
Basidiomycota: Ustomycetes	
Ustilaginales	
Tilletiaceae	
<i>Urocystis colchici</i>	leaf smut
Oomycota	
Pythiales	
Pythiaceae	
<i>Phytophthora palmivora</i>	black rot
mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Phyllosticta allii</i>	leaf blight
<i>Septoria viridi-tingens</i>	--
Bacterium	
Enterobacteriaceae	
<i>Erwinia chrysanthemi</i> pv. <i>chrysanthemi</i>	bacterial soft rot
Pseudomonadaceae	
<i>Burkholderia cepacia</i>	sour skin
<i>Pseudomonas xanthochlora</i>	-
Virus	
<i>Garlic dwarf virus</i>	-
<i>Garlic mite-borne filamentous virus</i>	-
<i>Garlic mite-borne latent virus</i>	-
<i>Garlic virus A</i>	-
<i>Garlic virus X</i>	-
<i>Impatiens necrotic spot virus</i>	-
<i>Iris yellow spot virus</i>	-
<i>Onion mite-borne latent virus</i>	-
<i>Shallot mite-borne latent virus</i>	-
<i>Shallot virus X</i>	-

Shallot yellow stripe virus -
Sint-Jan's onion latent virus -
Tobacco rattle virus [strains not in New Zealand] -
Tomato black ring virus -

Phytoplasma

Aster yellows phytoplasma -
Garlic decline phytoplasma -
Onion yellows phytoplasma -

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coleoptera

Curculionidae

Listroderes difficilis

vegetable weevil

Elateridae

Agrypnus variabilis

variable wireworm

Nitidulidae

Carpophilus hemipterus

dried fruit beetle

Dermaptera

Labiduridae

Euborellia annulipes

groundnut earwig

Diptera

Anthomyiidae

Delia platura

seedcorn maggot

Syrphidae

Eumerus strigatus

onion bulb fly

Eumerus tuberculatus

lesser bulb fly

Merodon equestris

narcissus bulb fly

Homoptera

Aphididae

Neotoxoptera formosana

onion aphid

Lepidoptera

Noctuidae

Agrotis ipsilon

greasy cutworm

Agrotis ipsilon aneituma

greasy cutworm

Pyralidae

Ephestia cautella

tropical warehouse moth

Thysanoptera

Thripidae

Thrips tabaci

onion thrips

Mite

Arachnida

Acarina

Acaridae

Rhizoglyphus echinopus

bulb mite

Rhizoglyphus robini

bulb mite

Tyrophagus putrescentiae

mould mite

Eriophyidae

Aceria tulipae

wheat curl mite

Tetranychidae

Petrobia latens

brown wheat mite

Nematode

Adenophorea

Dorylaimida

Trichodoridae

Paratrichodorus minor

stubby root nematode

Secernentea

Tylenchida

Aphelenchidae

Aphelenchus avenae

-

Aphelenchoididae

Aphelenchoides ritzemabosi

foliar nematode

Hoplolaimidae

<i>Helicotylenchus dihystera</i>	spiral nematode
<i>Helicotylenchus labiatus</i>	nematode
Meloidogynidae	
<i>Meloidogyne hapla</i>	northern root knot nematode
<i>Meloidogyne incognita</i>	southern root knot nematode
<i>Meloidogyne javanica</i>	Javanese root knot nematode
Pratylenchidae	
<i>Pratylenchus crenatus</i>	root lesion nematode
<i>Pratylenchus penetrans</i>	root lesion nematode
Tylenchidae	
<i>Ditylenchus destructor</i>	potato rot nematode
<i>Ditylenchus dipsaci</i>	stem and bulb nematode

Fungus

Ascomycota

Dothideales

Botryosphaeriaceae

Botryosphaeria rhodina (anamorph *Lasiodiplodia theobromae*) gummosis

Pleosporaceae

Pleospora allii (anamorph *Stemphylium vesicarium*) black mould

Pleospora herbarum (anamorph *Stemphylium herbarum*) black mould rot

Pleospora infectoria black mould

Pleospora tarda (anamorph *Stemphylium botryosum*) black mould

Hypocreales

Hypocreaceae

Gibberella acuminata (anamorph *Fusarium acuminatum*) fusarium storage rot

Gibberella avenacea (anamorph *Fusarium avenaceum*) fusarium stem canker

Gibberella fujikuroi (anamorph *Fusarium fujikuroi*) fusarium rot

Gibberella subglutinans (anamorph *Fusarium subglutinans*) fusarium rot

Nectria haematococca (anamorph *Fusarium solani*) fusarium fruit rot

Leotiales

Sclerotiniaceae

Botryotinia allii neck rot

Botryotinia fuckeliana (anamorph *Botrytis cinerea*) grey mould

Botryotinia squamosa (anamorph *Botrytis squamosa*) botrytis leaf blight

Sclerotinia sclerotiorum cottony rot

Phyllachorales

Phyllachoraceae

Glomerella cingulata (anamorph *Colletotrichum*

gloeosporioides) anthracnose

Saccharomycetales

Dipodascaceae

Dipodascus geotrichum (anamorph *Geotrichum candidum*) sour rot

Saccharomycetaceae

Kluyveromyces marxianus yeast soft rot

Basidiomycota: Basidiomycetes

Ceratobasidiales

Ceratobasidiaceae

Thanatephorus cucumeris (anamorph *Rhizoctonia solani*) rhizoctonia rot

Stereales

Atheliaceae

Athelia rolfsii (anamorph *Sclerotium rolfsii*) Rolf's disease

Basidiomycota: Teliomycetes

Uredinales

Pucciniaceae

Puccinia allii rust

Basidiomycota: Ustomycetes

Platyglloeales

Platyglloeaceae

Helicobasidium purpureum (anamorph *Rhizoctonia crocorum*) violet root rot

Ustilaginales	
Tilletiaceae	
<i>Urocystis magica</i>	onion smut
Oomycota	
Peronosporales	
Peronosporaceae	
<i>Peronospora destructor</i>	onion downy mildew
Pythiales	
Pythiaceae	
<i>Phytophthora cactorum</i>	phytophthora crown and root rot
<i>Phytophthora cinnamomi</i>	phytophthora crown and root rot
<i>Phytophthora cryptogea</i>	pink rot
<i>Phytophthora drechsleri</i>	-
<i>Phytophthora erythroseptica</i>	pink rot
<i>Phytophthora nicotianae</i>	buckeye rot
<i>Phytophthora porri</i>	white leaf spot
<i>Pythium afertile</i>	pythium root rot
<i>Pythium coloratum</i>	pythium root rot
<i>Pythium intermedium</i>	root rot
<i>Pythium irregulare</i>	pythium root and stem rot
<i>Pythium paroecandrum</i>	pythium root and stem rot
<i>Pythium rostratum</i>	root rot
<i>Pythium spinosum</i>	pythium root rot
<i>Pythium ultimum</i>	leak
<i>Pythium vexans</i> (anamorph <i>Stemphylium botryosum</i>)	pythium root rot
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
<i>Rhizopus microsporus</i>	mushy rot
<i>Rhizopus oryzae</i>	wet rot
<i>Rhizopus stolonifer</i>	rhizopus soft rot
mitosporic fungi (Agonomycetes)	
Agonomycetales	
unknown Agonomycetales	
<i>Sclerotium cepivorum</i>	white rot
mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Macrophomina phaseolina</i>	ashy stem blight
<i>Phoma destructiva</i>	bulb rot
<i>Phoma exigua</i>	phoma rot
<i>Pyrenochaeta terrestris</i>	pink root rot
unknown Coelomycetes	
unknown Coelomycetes	
<i>Colletotrichum circinans</i>	smudge
<i>Colletotrichum dematium</i>	anthracnose
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Alternaria alternata</i>	black stalk rot
<i>Alternaria porri</i>	alternaria blight
<i>Alternaria tenuissima</i>	alternaria mould
<i>Cercospora duddiae</i>	leaf spot
<i>Cladosporium allii</i>	leaf blotch
<i>Cochliobolus geniculatus</i>	leaf spot
<i>Embellisia allii</i>	bulb canker
<i>Stemphylium lycopersici</i>	stemphylium fruit spot
<i>Thielaviopsis basicola</i>	black root rot
Moniliaceae	
<i>Botrytis tulipae</i>	blast
<i>Cylindrocladiella parva</i>	root rot

Tuberculariales

Tuberculariaceae

<i>Fusarium culmorum</i>	dry rot
<i>Fusarium oxysporum</i>	leaf spot
<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	fusarium rot
<i>Fusarium poae</i>	fusarium rot

Bacterium

Enterobacteriaceae

<i>Erwinia carotovora</i> subsp. <i>atroseptica</i>	bacterial soft rot
<i>Erwinia carotovora</i> subsp. <i>carotovora</i>	bacterial soft rot
<i>Erwinia herbicola</i>	purple stain
<i>Erwinia rhapontici</i>	bacterial soft rot
<i>Pectobacterium carotovorum</i>	bacterial soft rot

Pseudomonadaceae

<i>Burkholderia gladioli</i> pv. <i>allii</i>	bacterial soft rot
<i>Pseudomonas aeruginosa</i>	-
<i>Pseudomonas cichorii</i>	bacterial leaf spot
<i>Pseudomonas fluorescens</i>	pink eye
<i>Pseudomonas marginalis</i>	bacterial spot
<i>Pseudomonas marginalis</i> pv. <i>marginalis</i>	leaf spot
<i>Pseudomonas syringae</i>	bacterial blast
<i>Pseudomonas syringae</i> pv. <i>porri</i>	-
<i>Pseudomonas syringae</i> pv. <i>syringae</i>	bacterial soft rot
<i>Pseudomonas viridiflava</i>	leaf blight
<i>Ralstonia solanacearum</i> (Race 1)	bacterial wilt

Virus

<i>Cucumber mosaic virus</i>	-
<i>Garlic common latent virus</i>	-
<i>Garlic mosaic virus</i>	-
<i>Garlic virus B</i>	-
<i>Garlic virus C</i>	-
<i>Garlic virus D</i>	-
<i>Leek yellow stripe virus</i>	-
<i>Onion yellow dwarf virus</i>	-
<i>Shallot latent virus</i>	-
<i>Strawberry latent ringspot virus</i>	-
<i>Tobacco mosaic virus</i>	-
<i>Tobacco necrosis virus</i>	-
<i>Tobacco rattle virus</i> [Paeonia and Narcissus infecting strains]	-
<i>Tomato spotted wilt virus</i>	-

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 of Agriculture and Forestry (MAF) 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 viruses.

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, phytoplasmata and viruses."

(iv) Post-entry quarantine

PEQ: Level 1

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

3.2 *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 of Agriculture and Forestry (MAF) 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.

AND

- derived from parent stock tested using molecular/ serological methods [choose ONE option] and found free of *Impatiens necrotic spot virus* and *Iris yellow spot 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 *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

AND

- tested using molecular/ serological methods [choose ONE option] and found free of *Impatiens necrotic spot virus* and *Iris yellow spot 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 3

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

Pest List for *Hippeastrum*

REGULATED PESTS (actionable)

Mite

Arachnida

Acarina

Tarsonemidae

Steneotarsonemus laticeps

bulb scale mite

Nematode

Secernentea

Tylenchida

Pratylenchidae

Pratylenchus coffeae

coffee root lesion nematode

Pratylenchus scribneri

Scribner's root lesion nematode

Fungus

mitosporic fungi (Agonomycetes)

~~—Agonomycetales~~

~~—unknown Agonomycetales~~

~~*Rhizoctonia tuliparum*~~

~~basal rot~~

Basidiomycota: Basidiomycetes

Agaricales

Tricholomataceae

Armillaria mellea (anamorph *Rhizomorpha subcorticalis*)

armillaria root rot

Virus

Hippeastrum mosaic virus

-

Impatiens necrotic spot virus

-

Iris yellow spot virus

-

Nerine latent virus

-

NON-REGULATED PESTS (non-actionable)

Nematode

Secernentea

Tylenchida

Pratylenchidae

Pratylenchus penetrans

root lesion nematode

Fungus

Ascomycota

Leotiales

Sclerotiniaceae

Botryotinia fuckeliana (anamorph *Botrytis cinerea*)

grey mould

Stereales

Atheliaceae

Athelia rolfsii (anamorph *Sclerotium rolfsii*)

Rolf's disease

Zygomycota: Zygomycetes

Mucorales

Mucoraceae

Rhizopus stolonifer

rhizopus soft rot

mitosporic fungi (Coelomycetes)

Sphaeropsidales

Sphaerioidaceae

Phoma glomerata

phoma fruit and leaf spot

Stagonospora curtisii

leaf scorch

mitosporic fungi (Hyphomycetes)

Hyphomycetales

Dematiaceae

Alternaria longipes

alternaria spot

Tuberculariales

Tuberculariaceae

Fusarium oxysporum

leaf spot

Bacterium

Enterobacteriaceae

Erwinia carotovora subsp. *Carotovora*

bacterial soft rot

Erwinia rhapontici

bacterial soft rot

Virus

Cucumber mosaic virus

-

Leek yellow stripe virus

-

Tobacco mosaic virus

-

Tomato spotted wilt 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 *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 of Agriculture and Forestry (MAF) 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/testing are required. Cut flowers may receive biosecurity clearance while the imported plants remain in post-entry quarantine following inspection of the parent plants and with prior approval from a MAF Inspector.

3.1 *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 of Agriculture and Forestry (MAF) 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 of Agriculture and Forestry (MAF) 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 *Iris severe mosaic virus*, *Iris yellow spot 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 *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 *Iris severe mosaic virus*, *Iris yellow spot 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 3

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

Pest List for *Iris*

REGULATED PESTS (actionable)

Insect

Insecta

Coleoptera

Scarabaeidae

Popillia japonica

Japanese beetle

Homoptera

Pseudococcidae

Aleyrodes spiraeoides [whole plants only]

-

Pseudococcidae

Phenacoccus avenae

-

Phenacoccus emansor

-

Pseudococcus jackbeardsleyi [whole plants only]

Jack Beardsley mealybug
root mealybug

Rhizoecus palestineae

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		
Tricholomataceae		
<i>Armillaria mellea</i> (anamorph <i>Rhizomorpha subcorticalis</i>)		armillaria root rot
Lachnocladales		
Lachnocladiaceae		
<i>Scytinostroma eurasiaticogalactinum</i>		white root rot
Phallales		
Hysterangiaceae		
<i>Hysterangium boudieri</i>		--
mitosporic fungi (Agonomycetes)		
Agonomycetales		
unknown Agonomycetales		
<i>Rhizoctonia tuliparum</i>		basal rot
<i>Sclerotium rolfsii</i> var. <i>delphinii</i>		sclerotium rot
Bacterium		
Pseudomonadaceae		
<i>Burkholderia gladioli</i> pv. <i>gladioli</i>		bacterial rot
Virus		
<i>Broad bean wilt virus</i>		-
<i>Iris fulva mosaic virus</i>		-
<i>Iris germanica leaf stripe virus</i>		-
<i>Iris yellow spot virus</i>		-
<i>Japanese iris necrotic ring virus</i>		-
<i>Tobacco rattle virus</i> [strains not in New Zealand]		-

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coleoptera

Curculionidae

Phlyctinus callosus banded fruit weevil

Silvanidae

Ahasverus advena foreign grain beetle

Diptera

Syrphidae

Eumerus strigatus onion bulb fly

Eumerus tuberculatus lesser bulb fly

Merodon equestris narcissus bulb fly

Homoptera

Aphididae

Aulacorthum circumflexum mottled arum aphid

Aulacorthum solani foxglove aphid

Dysaphis tulipae tulip bulb aphid

Macrosiphum euphorbiae potato aphid

Metopolophium dirhodum [whole plants only] rose-grain aphid

Myzus persicae [whole plants only] green peach aphid

Rhopalosiphum rufiabdominalis [whole plants only] rice root aphid

Coccidae

Coccus hesperidum [whole plants only] brown soft scale

Pseudococcidae

Rhizoecus falcifer root mealybug

Vryburgia lounsburyi lily bulb mealybug

Lepidoptera

Pyralidae

Plodia interpunctella Indian meal moth

Thysanoptera

Thripidae

Thrips simplex [whole plants only] gladiolus thrips

Mite

Arachnida

Acarina

Acaridae

Acarus siro grain mite

Rhizoglyphus echinopus bulb mite

Tyrophagus putrescentiae mould mite

Ascidae

Blattisocius dentriticus common ascid mite

Proctolaelaps pygmaeus -

Glycyphagidae

Glycyphagus domesticus house mite

Histiomidae

Histiostoma feroniarum damp mite

Tetranychidae

Petrobia latens [whole plants only] brown wheat mite

Nematode

Secernentea

Tylenchida

Aphelenchoididae

Aphelenchoides blastophthorus leaf nematode

Aphelenchoides fragariae foliar nematode

Aphelenchoides ritzemabosi foliar nematode

<i>Aphelenchoides subtenuis</i>	narcissus bulb and leaf nematode
Dolichodoridae	
<i>Tylenchorhynchus maximus</i>	-
Meloidogynidae	
<i>Meloidogyne hapla</i>	northern root knot nematode
<i>Meloidogyne incognita</i>	southern root knot nematode
<i>Meloidogyne javanica</i>	Javanese root knot nematode
Pratylenchidae	
<i>Pratylenchus penetrans</i>	root lesion nematode
Tylenchidae	
<i>Ditylenchus destructor</i>	potato rot nematode
<i>Ditylenchus dipsaci</i>	stem and bulb nematode
Fungus	
Ascomycota	
Dothideales	
Mycosphaerellaceae	
<i>Mycosphaerella macrospora</i> (anamorph <i>Cladosporium iridis</i>)	leaf spot
Hypocreales	
Hypocreaceae	
<i>Nectria haematococca</i> (anamorph <i>Fusarium solani</i>)	fusarium fruit rot
Leotiales	
Sclerotiniaceae	
<i>Botryotinia draytoni</i> (anamorph <i>Botrytis gladiolorum</i>)	botryotinia rot
<i>Botryotinia fuckeliana</i> (anamorph <i>Botrytis cinerea</i>)	grey mould
<i>Sclerotinia sclerotiorum</i>	cottony rot
Phyllachorales	
Phyllachoraceae	
<i>Glomerella cingulata</i> (anamorph <i>Colletotrichum gloeosporioides</i>)	anthracnose
Xylariales	
Xylariaceae	
<i>Rosellinia necatrix</i> (anamorph <i>Dematophora necatrix</i>)	white root rot
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
<i>Thanatephorus cucumeris</i> (anamorph <i>Rhizoctonia solani</i>)	rhizoctonia rot
Stereales	
Atheliaceae	
<i>Athelia rolfsii</i> (anamorph <i>Sclerotium rolfsii</i>)	Rolf's disease
Basidiomycota: Ustomycetes	
Platyglloeales	
Platyglloeaceae	
<i>Helicobasidium purpureum</i> (anamorph <i>Rhizoctonia crocorum</i>)	violet root rot
Oomycota	
Pythiales	
Pythiaceae	
<i>Phytophthora cactorum</i>	phytophthora crown and root rot
<i>Phytophthora hibernalis</i>	citrus brown rot
<i>Phytophthora nicotianae</i>	root and stem rot
<i>Pythium debaryanum</i>	leak
<i>Pythium irregulare</i>	pythium root and stem rot
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Bipolaris iridis</i>	-
Moniliaceae	
<i>Botrytis tulipae</i>	blast
Tuberculariales	
Tuberculariaceae	

<i>Fusarium oxysporum</i>	leaf spot
<i>Fusarium oxysporum</i> f. sp. <i>gladioli</i>	fusarium wilt

Bacterium

Enterobacteriaceae

<i>Erwinia carotovora</i> subsp. <i>carotovora</i>	bacterial soft rot
--	--------------------

Pseudomonadaceae

<i>Burkholderia gladioli</i> pv. <i>allicola</i> [whole plants only]	bacterial rot
<i>Xanthomonas campestris</i> pv. <i>tardicrescens</i>	bacterial blight

Virus

<i>Arabidopsis mosaic virus</i>	-
<i>Bean yellow mosaic virus</i>	-
<i>Cucumber mosaic virus</i>	-
<i>Iris mild mosaic virus</i>	-
<i>Iris severe mosaic virus</i>	-
<i>Narcissus latent virus</i>	-
<i>Tobacco rattle virus</i> [Paeonia and Narcissus infecting strains]	-
<i>Tobacco ringspot virus</i>	-

Lilium

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

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

Dormant bulbs

Plants in tissue culture

2. Pests of *Lilium*

Refer to the pest list.

3. Entry conditions for:

3.1 *Lilium* dormant bulbs from any country

(i) Documentation

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

Import permit: an import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) 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."

(iv) Post-entry quarantine

PEQ: Level 1

Quarantine Period: This is the time required to complete inspections and/or testing to detect regulated pests. Three months is an indicative minimum quarantine period. The quarantine period may be extended if material is slow growing, pests are detected, or treatments/testing are required. Cut flowers may receive biosecurity clearance while the imported plants remain in post-entry quarantine following inspection of the parent plants (including inspection for bulbils) and with prior approval from a MAF Inspector.

3.2 *Lilium* dormant bulbs from the Netherlands

(i) Documentation

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

Import permit: no import permit is required.

(ii) Phytosanitary requirements

Before a phytosanitary certificate is issued, the exporting country NPPO must be satisfied that the following activities required by the New Zealand Ministry of Agriculture and Forestry (MAF) have been undertaken.

The *Lilium* dormant bulbs have been:

- produced in accordance with the requirements of the Bloembollenkeuringsdienst (BKD) ALG 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 ALG 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 *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 of Agriculture and Forestry (MAF) 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 3

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

Pest List for *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 lillum

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>	-
mitosporic fungi (Agonomycetes)	
Agonomycetales	
unknown Agonomycetales	
<i>Rhizoctonia tuliparum</i>	basal rot
<i>Sclerotium rolfsii</i> var. <i>delphinii</i>	sclerotium rot
<i>Sclerotium wakkeri</i>	Blackleg
mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Macrophoma lillii</i>	black root rot
<i>Phyllosticta lillicola</i>	black rot
unknown Coelomycetes	
unknown Coelomycetes	
<i>Colletotrichum lillii</i>	-
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Moniliaceae	
<i>Botrytis hyacinthi</i>	hyacinth blight
<i>Ramularia vallisumbrosae</i>	white mould
Tuberculariales	
Tuberculariaceae	
<i>Fusarium oxysporum</i> f. sp. <i>lillii</i>	basal rot
unknown Hyphomycetes	
unknown Hyphomycetes	
<i>Aureobasidium microstictum</i>	-
Bacterium	
Enterobacteriaceae	
<i>Erwinia lillii</i>	-
Virus	
<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> [strains not in New Zealand]	-

NON-REGULATED PESTS (non-actionable)

Insect

Insecta

Coleoptera

Anobiidae

Lasioderma serricorne

cigarette beetle

Curculionidae

Sitophilus oryzae

rice weevil

Silvanidae

Oryzaephilus mercator

merchant grain beetle

Diptera

Syrphidae

Eumerus strigatus

onion bulb fly

Merodon equestris

narcissus bulb fly

Homoptera

Aleyrodidae

Trialeurodes vaporariorum

greenhouse whitefly

Aphididae

Aulacorthum circumflexum

mottled arum aphid

Dysaphis tulipae

tulip bulb aphid

Pseudococcidae

Pseudococcus longispinus

longtailed mealybug

Vryburgia lounsburyi

lily bulb mealybug

Lepidoptera

Pyralidae

Ephestia cautella

tropical warehouse moth

Thysanoptera

Phlaeothripidae

Liothrips vaneeckei

lily bulb thrips

Thripidae

Thrips simplex

gladiolus thrips

Mite

Arachnida

Acarina

Acaridae

Caloglyphus mycophagus

-

Rhizoglyphus callae

bulb mite

Rhizoglyphus echinopus

bulb mite

Rhizoglyphus robini

bulb mite

Tyrophagus similis

-

Histiomidae

Histiostoma feroniarum

damp mite

Nematode

Adenophorea

Dorylaimida

Longidoridae

Xiphinema diversicaudatum

European dagger nematode

Secernentea

Tylenchida

Aphelenchoididae

Aphelenchoides fragariae

foliar nematode

Aphelenchoides ritzemabosi

foliar nematode

Hoplolaimidae

Rotylenchus robustus

spiral nematode

Pratylenchidae

Pratylenchus penetrans

root lesion nematode

<i>Pratylenchus pratensis</i>	root lesion nematode
<i>Pratylenchus vulnus</i>	root lesion nematode
Tylenchidae	
<i>Ditylenchus dipsaci</i>	stem and bulb nematode
Fungus	
Ascomycota	
Dothideales	
Botryosphaeriaceae	
<i>Botryosphaeria rhodina</i> (anamorph <i>Lasiodiplodia theobromae</i>)	Gummosis
Hypocreales	
Hypocreaceae	
<i>Bionectria ochroleuca</i> (anamorph <i>Gliocladium roseum</i>)	fusarium rot
<i>Gibberella fujikuroi</i> (anamorph <i>Fusarium fujikuroi</i>)	fusarium rot
<i>Nectria haematococca</i> (anamorph <i>Fusarium solani</i>)	fusarium fruit rot
<i>Nectria radicola</i> (anamorph <i>Cylindrocarpon destructans</i>)	Rot
Leotiales	
Sclerotiniaceae	
<i>Botryotinia fuckeliana</i> (anamorph <i>Botrytis cinerea</i>)	grey mould
<i>Sclerotinia sclerotiorum</i>	cottony rot
Phyllachorales	
Phyllachoraceae	
<i>Glomerella cingulata</i> (anamorph <i>Colletotrichum gloeosporioides</i>)	Anthraxnose
Basidiomycota: Basidiomycetes	
Ceratobasidiales	
Ceratobasidiaceae	
<i>Thanatephorus cucumeris</i> (anamorph <i>Rhizoctonia solani</i>)	rhizoctonia rot
Stereales	
Atheliaceae	
<i>Athelia rolfsii</i> (anamorph <i>Sclerotium rolfsii</i>)	Rolf's disease
Basidiomycota: Ustomycetes	
Platyglloeales	
Platyglloeaceae	
<i>Helicobasidium purpureum</i> (anamorph <i>Rhizoctonia crocorum</i>)	violet root rot
Oomycota	
Pythiales	
Pythiaceae	
<i>Phytophthora cactorum</i>	phytophthora crown and root rot
<i>Phytophthora cinnamomi</i>	phytophthora crown and root rot
<i>Phytophthora nicotianae</i>	buckeye rot
<i>Pythium splendens</i>	basal stem and root rot
<i>Pythium ultimum</i>	Leak
Zygomycota: Zygomycetes	
Mucorales	
Mucoraceae	
<i>Rhizopus stolonifer</i>	rhizopus soft rot
mitosporic fungi (Coelomycetes)	
Sphaeropsidales	
Sphaerioidaceae	
<i>Macrophomina phaseolina</i>	ashy stem blight
unknown Coelomycetes	
unknown Coelomycetes	
<i>Colletotrichum dematium</i>	Anthraxnose
mitosporic fungi (Hyphomycetes)	
Hyphomycetales	
Dematiaceae	
<i>Thielaviopsis basicola</i>	black root rot
Moniliaceae	
<i>Botrytis elliptica</i>	botrytis blight

<i>Botrytis tulipae</i>	Blast
Tuberculariales	
Tuberculariaceae	
<i>Fusarium oxysporum</i> f. sp. <i>narcissi</i>	basal rot
Bacterium	
Corynebacteriaceae	
<i>Corynebacterium fascians</i>	Fasciation
Virus	
<i>Apple stem grooving virus</i> [Malus infecting strain]	-
<i>Arabis mosaic virus</i>	-
<i>Lily mottle virus</i>	-
<i>Lily virus X</i>	-
<i>Lily symptomless virus</i>	-
<i>Narcissus mosaic virus</i>	-
<i>Tobacco rattle virus</i> [Paeonia and Narcissus infecting strains]	-
<i>Tomato aspermy virus</i>	-
<i>Tomato ringspot virus</i> [Grape yellow vein strain]	-
<i>Tulip breaking virus</i> (syn. <i>Tulip mosaic virus</i>)	-

- 2) All hosts of *Xylella fastidiosa* will be reviewed and changed to ensure that imports from French Polynesia are not permitted. Please see example below.

Acacia

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

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Xylella fastidiosa*

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

A. For Cuttings and Whole Plants from All Countries except Argentina, Belize, the Caribbean Islands, Costa Rica, El Salvador, **French Polynesia, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, United States of America, Venezuela and Yugoslavia:**

PEQ: Level 2

Minimum Period: 3 months

Additional Declaration:

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

B. For Plants in Tissue Culture from All Countries:

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