MAF BIOSECURITY NEW ZEALAND

STANDARD 155.02.05

Importation of Seed for Sowing

Issued as an import health standard pursuant to section 22 of the Biosecurity Act 1993

MAF Biosecurity New Zealand
Ministry of Agriculture and Forestry
P O Box 2526
Wellington
New Zealand
CONTENTS

Review and Endorsement
Amendment Record

1 Introduction
1.1 Scope
1.2 References
1.3 Definitions AndAbbreviations
1.4 General
1.5 Appendices
1.5.1 Quarantine Impurities
1.5.2 Schedule Of Regulated (Quarantine) Weed Seeds

2 Import Specification And Entry Conditions
2.1 Import Specification
2.1.1 For Quarantine Pests Other Than Weed Seeds:
2.1.2 For Quarantine Weed Seeds:
2.2 Entry Conditions
2.2.1 Categories Of Entry Conditions
2.2.2 Basic Conditions
2.2.2.1 Cleanliness
2.2.2.2 Labelling
2.2.2.3 Phytosanitary Certificate
2.2.2.4 Seed Analysis
2.2.3 Importation Of Pelleted Seed
2.2.3.1 Additional Declarations
2.2.3.2 Seed Analysis
2.2.4 Importation Of Seed In Hermetically Sealed Containers/Packages
2.2.5 Importation Of Seed Mixtures
2.2.6 Genetically Modified Seed Testing
2.3 Compliance Procedures

3. Schedule Of Species Requiring Additional Declarations And/Or Post Entry Quarantine
3.1 Notes To The Schedule
3.2 Permit To Import
3.3 Importation Of Seed Into Post Entry Quarantine
3.4 Amendments To The Plants Biosecurity Index
3.5 Schedule Of Special Conditions
REVIEW

This standard is subject to periodic review. Amendments will be made to the signed original as required. The signed original will be held by the Plant Imports and Exports Group, MAF Biosecurity New Zealand, Ministry of Agriculture and Forestry, Pastoral House, 25 The Terrace, Wellington.

ENDORSEMENT

This MAF Biosecurity New Zealand standard is hereby approved. Pursuant to section 22 of the Biosecurity Act 1993, I hereby issue this document as an import health standard.

Signature of Group Manager, Plant Imports and Exports Group
Acting pursuant to delegated Director-General authority

Date: 22 September 2010

AMENDMENT RECORD

Amendments to this standard will be given a consecutive number and will be dated.

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<th>Date:</th>
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<td>19/03/2010</td>
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<td>28</td>
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<td>Removal of <em>Xanthomonas translucens pv translucens</em> from the <em>Hordeum</em> and <em>Triticum</em> schedules. Revised schedule of <em>Zea</em>, including Japan as an approved country with the addition of <em>Gloeoceraspora sorghi</em> to the pest list. Addition of pea seed soak test on arrival in <em>Pisum</em> schedule.</td>
<td>22/09/2010</td>
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</table>
1 INTRODUCTION

1.1 SCOPE

This standard describes the Import Specification and Entry Conditions for seeds imported into New Zealand for sowing.

1.1.1 OFFICIAL CONTACT POINT (NEW ZEALAND NATIONAL PLANT PROTECTION ORGANISATION)

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

Biosecurity New Zealand
Ministry of Agriculture and Forestry
PO Box 2526
Wellington
NEW ZEALAND
Fax: +64 4 894 0662
E-mail: plantimports@maf.govt.nz
Website: http://www.biosecurity.govt.nz

1.2 REFERENCES

The following Acts, Regulations and MAF Biosecurity standards are referred to, or complement, the implementation of this import health standard:

- Biosecurity Act 1993
- Biosecurity (Costs) Regulations

1.3 DEFINITIONS AND ABBREVIATIONS

ai
Active ingredient.

Basic
The basic conditions with which all consignments of seed must comply, unless their import conditions are covered by a schedule of special conditions.

Environmental Risk Management Authority (ERMA)
Authority responsible for administering the Hazardous Substances and New Organisms Act 1996.
Fleshy Fruit
Any fruit (matured ovary) that is succulent or semi-succulent e.g. a berry, drupe, pome.

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

a. has been modified by in-vitro techniques; or

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

Import Health Standard (IHS)
A statement approved under section 22 of the Biosecurity Act 1993 by a chief technical officer of the conditions that must, if an import is to be made, be met in the country of origin or export, during transit, during importation and quarantine, and after introduction.

Inspector
Inspector under the Biosecurity Act (1993).

ISTA
International Seed Testing Association.

International Plant Protection Convention (IPPC)
International Plant Protection Convention, as deposited with FAO in Rome in 1951 and as subsequently amended [FAO, 1990]

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

Level 1, Level 2 or Level 3 Quarantine
A system of post entry quarantine screening whereby seed is grown under certain specified conditions on a property and by a person registered by MAF as specified in MAF Regulatory Authority Standard 155.04.01: Specification for the Registration of a Plant Quarantine or Containment Facility, and Operator.

MAF
The New Zealand Ministry of Agriculture and Forestry.

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

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

Pelleted Seed
Seed encased in a man-made nutritive or protective covering.
**Permit (Permit to Import)**
A Permit to Import issued by MAF Biosecurity New Zealand that specifies the conditions under which a particular commodity may be imported into New Zealand.

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

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

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

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

**Phytosanitary Certificate**
The certificate is issued by the exporting country’s NPPO, in accordance with the requirements of the IPPC, to verify that the requirements of the relevant import health standard have been met. The certificate must follow the pattern set out in the model phytosanitary certificate, ISPM Pub. No. 12, 2001, “Guidelines for phytosanitary certificate”.

**Post Entry Quarantine (PEQ)**
The quarantine conditions [either Level 3 or Level 1/Level 2] under which certain seeds must be grown.

**Pre-Germinated Seed**
Seed with only the radicle (embryonic root) emerged.

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

**Reference Index**
Plants Biosecurity Index.

**SAC**
Seed Analysis Certificate.

**Seed**
A unit of reproduction used for sowing. This includes spores but excludes vegetative propagules.
1.4 GENERAL

Seeds of plant species for which entry conditions have been developed are listed in the MAF Biosecurity New Zealand Plants Biosecurity Index http://www1.maf.govt.nz/cgi-bin/bioindex/bioindex.pl

If a species is not listed in the Plants Biosecurity Index, it means that conditions for import into New Zealand have not been developed. Proposals for the deliberate introduction of new organisms (including genetically modified organisms) as defined by the Hazardous Substances and New Organisms Act 1996 should be referred to:

Environmental Risk Management Authority
PO Box 131
Wellington
NEW ZEALAND
Phone: +64 4 916 2426
Fax: +64 4 914 0433
E-mail: info@ermanz.govt.nz
Website: http://www.ermo.govt.nz

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

If ERMA approves an application, MAF Biosecurity New Zealand will undertake pest risk analyses and develop import health standards in accordance with the requirements of the Biosecurity Act 1993.

For plant species requiring phytosanitary certification entry conditions are given in section 3.6 of this standard. Pest risk analyses are required for imports of these species for countries other than those listed.

MAF Biosecurity New Zealand can be contacted for information on permit application procedures, risk analyses and import health standards at the following address:

Plant Imports
MAF Biosecurity New Zealand
Ministry of Agriculture and Forestry
PO Box 2526
Wellington
NEW ZEALAND
Fax: +64 4 894 0662
E-mail: plantimports@maf.govt.nz
1.5 APPENDICES

1.5.1 QUARANTINE IMPURITIES

No seed lot will be released for sowing in New Zealand if it contains:

- unidentified seed
- regulated pests
- in excess of 0.1% by weight of soil particles
- seed of any of the quarantine weed species listed in the schedule below

1.5.2 SCHEDULE OF REGULATED (QUARANTINE) WEED SEEDS

<table>
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<th>Acacia nilotica</th>
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<td>Acaena affinis</td>
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<td>Acaena aridula</td>
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<td>Acaena echinata</td>
<td>Callilepis laureola</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
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<td>Acaena ovalifolia</td>
<td>Calotis lappulacea</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
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<td>Acaena pinnatifida</td>
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<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
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<td>Acaena sericea</td>
<td>Cardaria chalepensis</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
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<td>Acaena subantarctica</td>
<td>Cardaria pubescens</td>
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<td>Acanthospermum hispidum</td>
<td>Cardaus (all species except C. pyrocephalus &amp; C. tenuiflorus)</td>
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<td>Acroptilon repens</td>
<td>Carex aurea</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
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<td>Actinidia harenensis</td>
<td>Carex baldensis</td>
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<td>Actinidia rubricaulis</td>
<td>Carex longibrachiatia</td>
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<td>Adonis microcarpa</td>
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<td>Aethusa cynapium</td>
<td>Carthamus lanatus</td>
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<td>Ageratina adenophora</td>
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<td>Ageratina altissima</td>
<td>Cenchrus caliculatus</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
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<td>Ageratina riparia</td>
<td>Cenchrus echinatus</td>
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<td>Ageratum conyzoides</td>
<td>Cenchrus incertus</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
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<td>Agrimonia procera</td>
<td>Cenchrus longibrachiatia</td>
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<td>Ailanthus altissima</td>
<td>Centaurea repens</td>
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<td>Amaranthus blitoides</td>
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<td>Chamaecrista rotundifolia</td>
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<td>Ambrosia tenuifolia</td>
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<td>Andropogon virginicus</td>
<td>Chondrilla juncea</td>
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<td>Anemia californica</td>
<td>Chromolaena odorata</td>
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<td>Chrysopogon aciculatus</td>
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<td>Cirsium acaule</td>
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<td>Argemone munita</td>
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<td>Aristida pallens</td>
<td>Cirsium crinitum</td>
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<td>Artemisia verlotiorum</td>
<td>Cirsium esculentum</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
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<td>Arundo donax</td>
<td>Cirsium kamtschaticum</td>
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<td>Asclepias tuberosa</td>
<td>Cirsium lactucicola</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
</tr>
<tr>
<td>Aspalathus linearis</td>
<td>Cirsium scariosum</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
</tr>
<tr>
<td>Aspalathus nivea</td>
<td>Cirsium scopulorum</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
</tr>
<tr>
<td>Baccharis halimifolia</td>
<td>Cnidoscolix formosana</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
</tr>
<tr>
<td>Berbersis camadensis</td>
<td>Cleome spinosa</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
</tr>
<tr>
<td>Berbersis fendleri</td>
<td>Cleome tenuiflora</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
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<tr>
<td>Berbersis glaucocarpa</td>
<td>Cleome tenuiflora</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
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<tr>
<td>Berbersis haematocarpa</td>
<td>Cleome tenuiflora</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
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<tr>
<td>Berbersis trifoliatella</td>
<td>Cleome tenuiflora</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
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<tr>
<td>Berkheya rigida</td>
<td>Cleome tenuiflora</td>
<td>Crotalaria (all species except C. fulvida, C. jubata, C. richardi, C. selloana, C. splendens, C. toetoe &amp; C. turbaria)</td>
</tr>
<tr>
<td>Plant Name</td>
<td>Import Health Standard</td>
<td>Plant Name</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Eragrostis trichodes</td>
<td>Monochoria hastata</td>
<td>Rubus ellipiticus</td>
</tr>
<tr>
<td>Eremocarpus setigerus</td>
<td>Monochoria vaginalis</td>
<td>Rubus moluccanus</td>
</tr>
<tr>
<td>Erica cinerea</td>
<td>Montanoa hibiscifolia</td>
<td>Sagittaria graminea</td>
</tr>
<tr>
<td>Erica lusitanica</td>
<td>Myagrum perfoliatum</td>
<td>Sagittaria latifolia</td>
</tr>
<tr>
<td>Euonymus japonicus</td>
<td>Myrica californica</td>
<td>Sagittaria subulata</td>
</tr>
<tr>
<td>Euonymus monbeigii</td>
<td>Myrica nana</td>
<td>Salvinia molesta</td>
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<tr>
<td>Euphorbia esula</td>
<td>Nassella neesiana</td>
<td>Sambucus nigra</td>
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<tr>
<td>Ficus rubiginosa</td>
<td>Nassella trichotoma</td>
<td>Scolymus hispanicus</td>
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<tr>
<td>Galega officinalis</td>
<td>Nassella viridula</td>
<td>Scolymus maculatus</td>
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<tr>
<td>Galeobdolon luteum</td>
<td>Nephtroplis cordifolia</td>
<td>Senecio jacobae</td>
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<tr>
<td>Geitonoplesium cymosum</td>
<td>Notothixos</td>
<td>Senecio pterophorus</td>
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<tr>
<td>Ginalloa (all species)</td>
<td>Nuysia floribunda</td>
<td>Senna occidentalis</td>
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<td>Gymnema balsamica</td>
<td>Nymphoides aquatica</td>
<td>Setaria lutescens</td>
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<td>Gymnema dentata</td>
<td>Oenopordum acanthium</td>
<td>Silybum marianum</td>
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<td>Gymnema viscida</td>
<td>Oenopordum acaulon</td>
<td>Sorghum alnum</td>
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<tr>
<td>Hakea lissocarpa</td>
<td>Oenopordum illyricum</td>
<td>Sorghum halepense</td>
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<td>Halogenton glomeratus</td>
<td>Oplopanum horridum</td>
<td>Sorgum x alnum</td>
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<tr>
<td>Hedera helix</td>
<td>Opuntia aurantiaca</td>
<td>Spartina alterniflora</td>
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<tr>
<td>Helianthus ciliaris</td>
<td>Opuntia ficus-indica</td>
<td>Spartina anglica</td>
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<tr>
<td>Heliotropium amplexicaule</td>
<td>Opuntia imbricata</td>
<td>Spartina txxtovenidii</td>
</tr>
<tr>
<td>Heteropogon contortus</td>
<td>Opuntia stricta</td>
<td>Spirodeola polyrrhiza</td>
</tr>
<tr>
<td>Hieracium alpinum</td>
<td>Ornithoglossum viride</td>
<td>Stipa calamagrostis</td>
</tr>
<tr>
<td>Hieracium bombicinum</td>
<td>Orobanche ramosa</td>
<td>Stipa gigantea</td>
</tr>
<tr>
<td>Hieracium lachenalii</td>
<td>Orobanche spp. (except O. minor)</td>
<td>Stipa hohenackerana</td>
</tr>
<tr>
<td>Hieracium lanatum</td>
<td>Oxylobium lanceolatum</td>
<td>Stipa pennata</td>
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<tr>
<td>Hieracium maculatum</td>
<td>Panicum repens</td>
<td>Stipa tenacissima</td>
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<tr>
<td>Hieracium pilosella</td>
<td>Paraserianthes lophantha</td>
<td>Siriga (all species)</td>
</tr>
<tr>
<td>Hieracium villosum</td>
<td>Parthenium hysterophorus</td>
<td>Srychnos nux-vonica</td>
</tr>
<tr>
<td>Hieracium waldsteinii</td>
<td>Passiflora ampullacea</td>
<td>Tagetes minuta</td>
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<tr>
<td>Hippoproma longiflora</td>
<td>Passiflora caerulea</td>
<td>Teline monspessulana</td>
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<tr>
<td>Hipsurus vulgaris</td>
<td>Peganum harmala</td>
<td>Thamnochortus insignis</td>
</tr>
<tr>
<td>Homeria collina</td>
<td>Pennisetum orientale</td>
<td>Themeda quadravalvis</td>
</tr>
<tr>
<td>Homeria comptonii</td>
<td>Pennisetum pedicellatum</td>
<td>Thunbergia grandiflora</td>
</tr>
<tr>
<td>Homeria miniata</td>
<td>Pennisetum polystachion</td>
<td>Tourretia</td>
</tr>
<tr>
<td>Hyparrhenia (all species)</td>
<td>Pericallis hybridus</td>
<td>Trapa bicornis</td>
</tr>
<tr>
<td>Hypericum androsaemum</td>
<td>Peruxilla flavida</td>
<td>Trianthema portulacastrum</td>
</tr>
<tr>
<td>Impatiens oncidioides</td>
<td>Petasites hybridus</td>
<td>Tribulus cistoides</td>
</tr>
<tr>
<td>Ipomoea caerulea</td>
<td>Phoradendron</td>
<td>Tribulus terrestris</td>
</tr>
<tr>
<td>Ipomoea hederacea</td>
<td>Phrynium dubium</td>
<td>Ulex europaeus</td>
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<tr>
<td>Ipomoea plebeia</td>
<td>Phrynium limosum</td>
<td>Urtica dioica</td>
</tr>
<tr>
<td>Ipomoea triloba</td>
<td>Phrynium reniforme</td>
<td>Utricularia biflora</td>
</tr>
<tr>
<td>Iva axillaris</td>
<td>Pitsia stratiotes</td>
<td>Vallisneria spiralis</td>
</tr>
<tr>
<td>Ixia aquatica</td>
<td>Plecchanthus ecklonii</td>
<td>Veratrum album</td>
</tr>
<tr>
<td>Jasminum polyanthum</td>
<td>Plecchanthus grandis</td>
<td>Verbexina enceloides</td>
</tr>
<tr>
<td>Juglans atlantifolia</td>
<td>Poligala myrtifolia</td>
<td>Vinca major</td>
</tr>
<tr>
<td>Kyllinga monocophala</td>
<td>Polygonum bistorta</td>
<td>Viscaceae (all genera and species)</td>
</tr>
<tr>
<td>Leycesteria formosa</td>
<td>Probossidea altheaeoflia</td>
<td>Viscum album</td>
</tr>
<tr>
<td>Ligustrum sinense</td>
<td>Prospis pallida</td>
<td>Xanthium spinosum</td>
</tr>
<tr>
<td>Lycium chilense</td>
<td>Pueraria lobata</td>
<td>Xanthium strumarium</td>
</tr>
<tr>
<td>Lycium feroxissimum</td>
<td>Racopserma longifolium</td>
<td>Zigadenus venenosus</td>
</tr>
<tr>
<td>Lycium tenuissinosum</td>
<td>Racopserma paradoxum</td>
<td>Zizania (all species except Z. latifolia)</td>
</tr>
<tr>
<td>Macfadyena anguis-cati</td>
<td>Ramunculus acris</td>
<td></td>
</tr>
<tr>
<td>Marsilea mutica</td>
<td>Rhamnus purshiana</td>
<td></td>
</tr>
<tr>
<td>Melianthus major</td>
<td>Rhodomyrtus tomentosa</td>
<td></td>
</tr>
<tr>
<td>Mikania cordata</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mikania micrantha</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monarda punctata</td>
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<td></td>
</tr>
</tbody>
</table>
Note: Interception of other seeds above the Maximum Pest Limit of 0.01% [ie. acceptance number is zero in a sample(s) drawn and analysed by a MAF Biosecurity New Zealand approved method (eg. International Seed Testing Association (ISTA) sampling methods (ISTA International Rules for Seed Testing, Seed Science and Technology 24, 1996)] will result in the consignment being held until an assessment has been made in comparison with the risk of importing the plant species concerned.

1.6 CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES

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

A CITES import permit, issued by the Department of Conservation, may also be required by New Zealand legislation for specimens of selected species. Importers are advised to contact the Department of Conservation (http://www.doc.govt.nz/) for further information.
2 IMPORT SPECIFICATION AND ENTRY CONDITIONS

2.1 IMPORT SPECIFICATION

The Import Specification for seed for sowing is:

2.1.1 FOR QUARANTINE PESTS OTHER THAN WEED SEEDS:

Pest contamination shall not exceed the Maximum Pest Limit (MPL) of 0.9 pests or infected seeds per kg of seed.

To achieve 95% confidence that the MPL (of 0.9 pests or infected seeds per kg of seed) will not be exceeded, no quarantine pests are permitted in an officially drawn sample of 5kg, or in the whole consignment if less than 5kg (ie. acceptance No. = 0).

2.1.2 FOR QUARANTINE WEED SEEDS:

Quarantine weed seed contamination shall not exceed the MPL of 0.01%.

To achieve 95% confidence that the MPL (of 0.01% probability) will not be exceeded, no quarantine weed seeds are permitted (ie. acceptance No. = 0) in a sample(s) drawn and analysed by a MAF Biosecurity New Zealand approved method [eg. International Seed Testing Association (ISTA) sampling methods (ISTA International Rules for Seed Testing, Seed Science and Technology 24, 1999) are approved by the MAF Biosecurity New Zealand].

2.2 ENTRY CONDITIONS

2.2.1 CATEGORIES OF ENTRY CONDITIONS

The following entry conditions have been developed to ensure that seed imported for sowing will meet the Import Specification:

a. Basic Conditions that all seed consignments must meet as indicated in the Plants Biosecurity Index and outlined in Section 2.2.2.
AND
b. Special Conditions that apply to particular seed consignments, as indicated in the Plants Biosecurity Index and outlined in the Schedule of Special Conditions (see Section 3).

Note: On arrival in New Zealand, all seed consignments require inspection for visually detectable pests, unless otherwise specified in this import health standard.

2.2.2 BASIC CONDITIONS

2.2.2.1 Cleanliness

All seed shall be in clean, new packages. Any seed from fleshy fruits shall have all traces of flesh removed with the exception of seed of approved (i.e. listed in the Plants Biosecurity Index) Orchidaceae, which may be imported in dry/green pods.
2.2.2.2 Labelling

Each type of seed in the consignment must be clearly identified by its botanical name to species level.

Note: Numbering or coding of packets is acceptable provided an accompanying list is provided linking this to the botanical names.

2.2.2.3 Phytosanitary Certificate

a. For seed listed in the Plants Biosecurity Index as "Basic"

The Importer may elect one of the following two options:

OPTION 1: Seed with a phytosanitary certificate

(i) The consignment is to be accompanied by a phytosanitary certificate certifying that seed for sowing has been inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests, and conforms to New Zealand’s current import requirements. If visually detectable pests are found which are not listed in the import health standard, the certifying NPPO must establish their regulatory status prior to issuing the certificate. This information is available in MAF’s “Biosecurity Organisms Register for Imported Commodities”: http://www.maf.govt.nz/biosecurity/pests-diseases/registers-lists/boric/

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

(ii) for pre-germinated seed, certifies that the seed has been germinated in an inert medium such as perlite or vermiculite.

Compliance with the above will result in biosecurity clearance.
(Note: audit samples may be drawn).

OPTION 2: Seed without a phytosanitary certificate

On arrival in New Zealand the consignment or samples, drawn in accordance with MAF Biosecurity New Zealand approved sampling rules, are to be inspected by a MAF inspector at the Importer's expense. Biosecurity clearance will be given if the seed meets the basic conditions.

b. For Seed listed in the Plants Biosecurity Index as "see 155.02.05 under......"

(i) The consignment is to be accompanied by a phytosanitary certificate issued by the national plant protection organisation in the country of origin, which certifies that the seed has been inspected in the exporting country according to appropriate procedures and conforms with New Zealand's current entry conditions. The certificate must include any additional declaration(s) listed in the Schedule of Special Conditions (see section 3).
(ii) for pre-germinated seed, certifies that the seed has been germinated in an inert medium such as perlite or vermiculite.

2.2.2.4 Seed Analysis

The Importer may elect one of the following two options:

Option 1: Seed accompanied by a SAC

The seed is to be accompanied by a Seed Analysis Certificate, documenting the status of the seed with respect to quarantine impurities, which shall:

(i) be issued by a MAF Biosecurity New Zealand accepted seed testing station (ISTA or AOSA accredited Seed Testing Stations are accepted by the MAF Biosecurity New Zealand).

(ii) show the actual weight of the sample examined.

(iii) be endorsed that the sample has been officially drawn from an identified seed lot.

(iv) be endorsed that the minimum size of the sample examined was as prescribed for the determination of other species by number in the International Rules for Seed Testing, as published in Seed Science and Technology 24, 1996.

(v) give the botanical name of each identified species of seed or nematode gall found in the sample (any unidentified genera or species are to be recorded as such).

(vi) give the percentage of soil particles found in the sample.

(vii) certify that none of the quarantine weed seeds listed in Appendix 1.5.2 of this standard were present in the sample.

Option 2: Seed not accompanied by a SAC

On arrival in New Zealand, samples of the seed will be inspected by MAFBNZ Inspectors or, where appropriate, sent to a MAF approved seed testing laboratory for analysis for weed seeds and other contaminants at the importer's expense.

Should the consignment not comply with New Zealand’s phytosanitary conditions, the importer will be given the option of treatment (where available), reshipment, or destruction of the consignment at the importer’s expense.

2.2.3 IMPORTATION OF PELLETED SEED

2.2.3.1 Additional Declarations

Any pest/disease additional declarations required for seed in the schedule must also be provided for pelleted seed.
2.2.3.2 Seed Analysis

Samples for seed analysis may be drawn before or after the seed is pelleted. For samples drawn prior to pelleting:

a. The pelleted seed is to be accompanied by the SAC issued for the seed lot from which the seed sample was drawn.

b. The phytosanitary certificate is to include a declaration that the pelleted seed is from the same lot of seed as the accompanying SAC.

For samples drawn after pelleting OR when pelleted seed is not accompanied by correct documentation:
A random sample of 10% or 25 seed, whichever is smaller, is to be drawn and the seed “coating” removed by physical cracking or washing to ensure no restricted seed or other contaminants are pelletised.

MAFBNZ will accept an accompanied phytosanitary certificate and SAC in lieu of inspecting pelleted seed on arrival.

2.2.4 IMPORTATION OF SEED IN HERMETICALLY SEALED CONTAINERS/PACKAGES

a. Private Consignments

All private consignments (not for resale) of seed in hermetically sealed containers/packages shall be inspected on arrival for contamination and/or signs of pest and disease. Seed in hermetically sealed containers/packages requiring only Basic Entry Conditions may be imported without a PC. However, for seed that requires additional declarations, treatments or quarantine, the genus and species names and endorsements must be presented on an accompanying PC.

b. Commercial Consignments

All lines of commercial consignments of seed in hermetically sealed containers/packages shall be sampled for inspection as specified in the sampling plan below. A “line” is a species sourced from any one supplier from one country per consignment.

<table>
<thead>
<tr>
<th>No. of packages in Line</th>
<th>Inspection Sample Size (No. of packages)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-50</td>
<td>2</td>
</tr>
<tr>
<td>51-100</td>
<td>3</td>
</tr>
<tr>
<td>101-200</td>
<td>4</td>
</tr>
<tr>
<td>201-350</td>
<td>6</td>
</tr>
<tr>
<td>351-500</td>
<td>8</td>
</tr>
<tr>
<td>501-750</td>
<td>10</td>
</tr>
<tr>
<td>751-1,200</td>
<td>12</td>
</tr>
<tr>
<td>1,201-2,000</td>
<td>15</td>
</tr>
<tr>
<td>2,001-3,500</td>
<td>20</td>
</tr>
<tr>
<td>3,501-5,000</td>
<td>25</td>
</tr>
<tr>
<td>Over 5,000</td>
<td>40</td>
</tr>
</tbody>
</table>
Where seed is accompanied by a Seed Analysis Certificate, the declaration may be accepted in lieu of inspection. All documentation offered must be originals.

Verification audits may be conducted by MAF to ensure confidence in the declarations. Where both a SAC and PC are supplied, a 1 in 20 verification audit will be conducted to ensure confidence in the documentation offered by the importer. If the audit fails the next 10 consignments for this importer are to be inspected. Respective work sites must keep records of these audits. When contaminants are found on one cultivar in a lot, all other cultivars in that lot must be inspected. If the latter cultivars are found to be clean, they can be released.

Where packets are not intact, or where the contents can be seen without opening to be inconsistent with the labelling, further sampling will be required.

2.2.5 IMPORTATION OF SEED MIXTURES

a. A list of all species in the mixture is to accompany the consignment.

b. The entry requirements for each species in the mixture are to be met.

2.2.6 GENETICALLY MODIFIED SEED TESTING

For information on genetically modified (GM) sampling and testing protocols, including approved testing laboratories, please refer to the following MAF Biosecurity New Zealand website: http://www.biosecurity.govt.nz/regs/imports/plants/gmo

Only original or pdf versions of GM seed testing certificates are acceptable. Importers of consignments that arrive without GM seed testing certificates as required by this import health standard have the following four options available to them:

- reship
- destroy
- have the consignment sampled and the sample forwarded to an approved testing laboratory to determine if GM material is present
- apply for a Permit to Import to grow seed in Post-Entry Quarantine (PEQ)

Note: The current testing protocol offers the option of importing from areas considered free of commercial GM production. This is known as ‘area freedom’ and is granted on a crop:country basis. No such areas have been assessed and granted at this time. Importers cannot use area freedom as a reason for no GM seed test certificates being presented.

2.3 COMPLIANCE PROCEDURES

On arrival in New Zealand the consignment and all associated documentation will be inspected by an Inspector to ensure compliance with the requirements of this standard and the Biosecurity Act 1993.

For all imported consignments of seeds for sowing, MAF reserves the right to validate all testing and audit all treatment processes that have been undertaken. Audits will be conducted
on a regular basis and at the expense of the importer.

Seed that does not meet the requirements described in this import health standard (e.g., additional declarations not provided for all regulated pests) will not be given biosecurity clearance on arrival in New Zealand. The importer will be given the option of an equivalent measure if appropriate (e.g., testing or treatment), reship or destroy the consignment. Such treatments must be carried out in a facility accredited to the MAF Standard General Transitional Facilities for Uncleared Goods (TF Gen), and according to MAF standard BMG-STD-TREAT: Approval of Suppliers Providing Treatment of Imported Risk Goods and Forestry/Plant Related Material for Export.

3. SCHEDULE OF SPECIES REQUIRING ADDITIONAL DECLARATIONS AND/OR POST ENTRY QUARANTINE

3.1 NOTES TO THE SCHEDULE

All seed imported for sowing must meet the basic conditions outlined in section 2.2.2.

Seeds listed in the Schedule have additional requirements, which may include:

- a Permit to Import.
- additional declarations on the Phytosanitary Certificate.
- a requirement for Post Entry Quarantine.

3.2 PERMIT TO IMPORT

Where a Permit to Import is required, an application should be made to Plant Imports stating:

a. the botanical name of the seed (to the species level)
b. the quantity required
c. the country (and state if applicable) of origin of the seed
d. the intended site where the seed will be grown, if a period of post entry quarantine is required

Note: If a species specific import health standard is approved and issued by the Chief Technical Officer prior to the expiry date indicated on a Permit to Import, the conditions on the species specific import health standard, if different, shall override the conditions on the Permit to Import.
3.3 IMPORTATION OF SEED INTO POST ENTRY QUARANTINE

Seed of species which have requirements additional to the basic conditions (as described in section 3.5) may be imported from any country into post-entry quarantine without an accompanying phytosanitary certificate with the required additional declarations, providing that:

- the consignment meets the basic conditions described in section 2; and
- the consignment is accompanied by a valid permit to import.

The permit to import must be obtained prior to import and will specify:

- the information required in section 3.2; and
- the level of post entry quarantine required and the location of the quarantine facility; and
- the inspection, testing and treatment requirements; and
- the minimum quarantine period.

The post-entry quarantine requirements, as specified by the permit to import, must be carried out in a facility accredited to MAF standard PBC-NZ-TRA-PQCON: Specification for the Registration of a Plant Quarantine or Containment Facility, and Operator. The level of post entry quarantine specified will be sufficient to minimise the possibility of entry of associated pests. In accordance with the conditions on the permit to import, the seed will be grown for a minimum quarantine period and will be tested, treated or inspected for regulated pests at the expense of the importer.

Any treatments required by the permit to import must be carried out in a facility accredited to MAF standard 152.04.03F Requirements for Holding and Processing Facilities (Class: Transitional Facilities) for Uncleared Risk Goods, according to MAF standard BMG-STD-TREAT: Approval of Suppliers Providing Treatment of Imported Risk Goods and Forestry/Plant Related Material for Export.

3.4 AMENDMENTS TO THE PLANTS BIOSECURITY INDEX

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

The Plants Biosecurity Index will be continuously updated on the MAF web site (http://www1.maf.govt.nz/cgi-bin/bioindex/bioindex.pl). The information provided within the web site copy of the Plants Biosecurity Index is only intended to be general information to the public. It is not intended to take the place of, or to represent, the written law of New Zealand or other official guidelines or requirements.

3.5 SCHEDULE OF SPECIAL CONDITIONS

The following pages list the seeds that either have additional requirements to the basic conditions, or have approved species specific import health standards.
Abies

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Abies”.

GENERAL CONDITIONS:

For the approved plant species for which NO species specific import health standards have been developed, the following conditions apply:

Countries: All

Quarantine Pests: Verticillium albo-atrum [strain]

Entry Conditions: Basic; PLUS

Phytosanitary Certificate Additional Declaration:

"The seed has been treated with _____ (insert one of the options below) _____ at 2g a.i. per kg seed."

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

- captan
- thiram
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Acer”.

GENERAL CONDITIONS:

For the approved plant species for which NO species specific import health standards have been developed, the following conditions apply:

Countries: All

Quarantine Pests: *Cryphonectria parasitica*

Entry Conditions: Basic; PLUS

1. A prior Permit to import is required:
   
   PEQ: Level 1
   Minimum Period: 1 growing season
   Isolation: 50 metres

2. Phytosanitary Certificate Additional Declarations:
   
   (a) *"Cryphonectria parasitica* is not known to occur in ______ (the country, or state where the seed was produced) ______*"  

   OR

   "The seed was collected from trees that have been officially inspected and found to be free of diseases caused by *Cryphonectria* spp."

   (b) "The seed has been treated with _____ (insert one of the options below) _____ at 2g a.i. per kg seed."

   **Note:** One of the following fungicides is to be used;
   
   - captan
   - thiram
Acrocomia

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Acrocomia*”.

1. **Entry conditions for *Acrocomia* seeds for sowing from approved exporting countries**

   (i) **Pests of Acrocomia**
   
   *Coconut cadang-cadang viroid*
   
   **Note:** Seed covered in a fleshy pericarp will not be permitted entry into New Zealand.

   (ii) **Approved exporting countries**
   
   All countries except Guam, the Philippines and the Solomon Islands.

   (iii) **Documentation**
   
   **Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all consignments of *Acrocomia* seeds for sowing imported into New Zealand.

   (iv) **Phytosanitary requirements**
   
   Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by the MAF have been undertaken.
   
   The *Acrocomia* seeds for sowing have:
   
   − been inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests
   
   **AND**
   
   − been produced in an approved country and have not been produced in Guam, the Philippines or the Solomon Islands.

   (v) **Additional declarations to the phytosanitary certificate**
   
   If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:
   
   "The *Acrocomia* seeds for sowing in this consignment have:
   
   − been produced in an approved country and have not been produced in Guam, the Philippines or the Solomon Islands."
**Actinidia**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Actinidia”.

**Entry conditions for Actinidia seeds from approved countries**
These requirements are in addition to the Basic requirements set out in Section 2 of the standard.

(i) *Pests of Actinidia*
Refer to the pest list.

(ii) *Approved exporting countries*
All countries

(iii) *Documentation*
**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all consignments of Actinidia seed for sowing imported into New Zealand.
**Import permit:** an import permit is required.

(iv) *Phytosanitary requirements*
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The Actinidia seeds for sowing have been:
- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

(v) *Additional declarations to the phytosanitary certificate*
No additional declarations are required.

(vi) *Post-entry quarantine*
**PEQ:** All Actinidia seeds must be imported under permit into post-entry quarantine in a level 3 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON Specification for the registration of a plant quarantine or containment facility, and operator.
**Quarantine Period:** The seed will be grown for a minimum period of 6 months and will be inspected and/or tested for regulated pests at the expense of the importer. Six months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.
Actinidia

Pest List for Actinidia

REGULATED PESTS (actionable)

Virus

genus Capillovirus

*Apple stem grooving virus* [Actinidia infecting strain]

NON-REGULATED PESTS (non-actionable)

Fungus

Ascomycota

Diaporthales

Valsaceae

*Diaporthe actinidiae* phomopsis canker

*Diaporthe perniciosa* (anamorph *Phomopsis mali*) canker

Dothideales

Botryosphaeriaceae

*Botryosphaeria dothidea* (anamorph *Fusicoccum aesculi*) canker

*Botryosphaeria parva* (anamorph *Fusicoccum parvum*) canker

*Botryosphaeria stevensii* (anamorph *Diplodia mutila*) botryosphaeria canker

Hypocreales

Hypocreaceae

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

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

Leotiales

Sclerotiniaceae

*Botryotinia fuckeliana* (anamorph *Botrytis cinerea*) grey mould

*Sclerotinia sclerotiorum* cotty rot

Phyllachorales

Phyllachoraceae

*Glomerella cingulata* (anamorph *Colletotrichum gloeosporioides*) anthracnose

Zygomycota: Zygomycetes

Mucorales

Mucoraceae

*Rhizopus stolonifer* rhizopus soft rot

mitosporic fungi (Coelomycetes)

Sphaeropsidales
Sphaerioidaceae
   *Fusicoccum luteum*  
   *Phoma exigua* 
   *Phoma macrostoma* 
unknown Coelomycetes 
unknown Coelomycetes 
   *Colletotrichum acutatum* 
mitosporic fungi (Hyphomycetes) 
Hyphomycetales 
   Dematiaceae 
   *Alternaria alternata*  
   *Cladosporium oxysporum* 
Moniliaceae 
   *Acremonium alternatum* 
unknown Hyphomycetes 
unknown Hyphomycetes 
   *Aureobasidium pullulans* 
Bacterium 

Pseudomonadaceae 
   *Pseudomonas viridiflava* 

bunch rot 
phoma rot 
fruit and leaf spot 
anthracnose 
black stalk rot 
cladosporium leaf spot 
seed rot 
leaf blight
### Actinidia

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

<table>
<thead>
<tr>
<th>ORGANISM TYPES</th>
<th>NZ MAF ACCEPTABLE METHODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virus</td>
<td><strong>(See notes below)</strong></td>
</tr>
<tr>
<td><em>Apple stem grooving virus</em></td>
<td>ELISA (Bioreba or Loewe) or PCR (Clover <em>et al.</em>, 2003), AND herbaceous indicators Cq, Nb, Ng, No and Pv.</td>
</tr>
</tbody>
</table>

**Notes:**

1. Indicator hosts: *Chenopodium quinoa* (Cq), and *Nicotiana benthamiana* (Nb), *N. occidentalis* cv. 37B (No), *N. glutinosa* (Ng) and *Phaseolus vulgaris* cv. Prince (Pv). At least two plants of each indicator species must be used in mechanical inoculation tests.
2. Indicator plants must be grown under appropriate temperatures and must be shaded for 12-24 hrs prior to inoculation. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks. Inspect inoculated indicator plants at least twice per week for symptoms of virus infection.
3. Enzyme linked immunosorbent assay (ELISA); Polymerase chain reaction (PCR).
4. Testing must be carried out on *Actinidia* plants while they are in active growth. For bioassay and ELISA, plants shall be sampled from at least two positions on every stem including a young, fully expanded leaflet at the top of the stem and an older leaflet from a midway position.
5. PCR and ELISA need to be validated using positive controls/reference material prior to use in quarantine testing.
6. Positive and negative controls must be used in ELISA tests.
7. Positive and negative controls (including a blank water control) must be used in PCR. Ideally positive internal controls and a negative plant control should be used. Internal controls in PCR tests are important to avoid the risk of false negatives.
8. Inspect *Actinidia* plants for signs of pest and disease at least twice per week during periods of active growth and once per week during dormancy.
9. With prior notification, MAF will accept other internationally recognised testing methods.

**References**

**Agropyron**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Agropyron*”.

**GENERAL CONDITIONS:**

**Countries:** All

**Quarantine Pests:** *Tilletia controversa*; other Ustilaginales; *Trogoderma* spp.

**Entry Conditions:** Basic; PLUS

**Phytosanitary Certificate Requirements:**
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The *Agropyron* seeds for sowing have been:
- sourced from a “Pest free area” or “Pest free place of production”, free from *Tilletia controversa*

OR
- a representative sample of 600 seeds, drawn from this consignment according to the International Seed Testing Association’s methodology, has been tested for *Tilletia controversa*

AND
- treated with one of the following fungicide combinations, either
  - i) Carboxin at 0.8g a.i. per kg seed and thiram at 1g a.i. per kg seed.
  - ii) Carboxin at 0.8g a.i. per kg seed and captan at 0.7g a.i. per kg seed.
  - iii) Imazalil at 80mg a.i. per kg seed and triadimenol at 220mg a.i. per kg seed.
  - iv) Imazalil at 80mg a.i. per kg seed and flutriafol at 80mg a.i. per kg seed.

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

(a) "*Tilletia controversa* is not known to occur in ____ (the country or state where the seed was produced)."

OR

"The seed is from a crop that has been inspected during the growing season according to appropriate procedures and no *Tilletia controversa* was detected".

OR

"No spores of *Tilletia controversa* were found in an officially drawn representative sample of 600 seeds".
**Agrostis**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Agrostis”.

**GENERAL CONDITIONS:**

**Countries:** All

**Quarantine Pests:** *Trogoderma* spp.; *Ustilaginales*

**Entry Conditions:** Basic; PLUS

**Phytosanitary Certificate Requirements:**
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken. The *Agrostis* seeds for sowing have been:
- treated with one of the following fungicide combinations, either
  i) Carboxin at 0.8g a.i. per kg seed and thiram at 1g a.i. per kg seed.
  ii) Carboxin at 0.8g a.i. per kg seed and captan at 0.7g a.i. per kg seed.
  iii) Imazalil at 80mg a.i. per kg seed and triadimenol at 220mg a.i. per kg seed.
  iv) Imazalil at 80mg a.i. per kg seed and flutriafol at 80mg a.i. per kg seed.

**Phytosanitary Certificate Additional Declarations:**
If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section. No additional declarations are required.
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Anethum”.

GENERAL CONDITIONS:

For the approved plant species for which NO species specific import health standards have been developed, the following conditions apply:

Countries: All

Quarantine Pests: None

Entry Conditions: Basic; PLUS

1. Genetically modified seed

A permit to import is required. All genetically modified seed must also be imported in accordance with a HSNO approval.

2. Non-GM seed.

A permit to import is not required. All other seed must be accompanied by a supplier’s declaration stating that the seed is not genetically modified. A declaration form is available on the following page of this schedule.
DECLARATION FOR NON-GENETICALLY MODIFIED ORGANISMS

I……………………………………………………………………………………………………………… declare that pursuant to the requirements set out in the Seed for Sowing Import Health Standard, that the *Arabidopsis thaliana* seeds being imported are not genetically modified organisms.

*Genetically modified organism means, unless expressly provided otherwise by regulations, any organism in which any of the genes or any other genetic material have been modified by in vitro techniques or are inherited or otherwise derived, through any number of replications, from any genes or other genetic material which has been modified by in vitro techniques* (as defined by the New Zealand HSNO Act 1996).

Signed by (print name):

Company Name and Details (if appropriate):

Signature:

Date:

**Warning**: Any person who knowingly makes a statement of information or a declaration that is false or misleading in a material particular may on summary conviction, be sentenced to a term of imprisonment and/or a fine not exceeding $500,000.00.
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Avena”.

**Entry conditions for Avena seeds for sowing from approved exporting countries**

These requirements are in addition to the Basic requirements set out in Section 2 of the standard.

(i) *Pests of Avena*

Refer to “Pest List for Avena”.

(ii) *Approved exporting countries*

Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom and United States of America.

(iii) *Documentation*

A completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all Avena seeds for sowing exported to New Zealand.

(iv) *Phytosanitary requirements*

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

The Avena seeds for sowing have been:

- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests, including the regulated insects and mites on MAF’s “Pest List for Avena” and seeds of regulated weed species.

AND

- sourced from a “Pest free area” or “Pest free place of production”, free from *Xanthomonas campestris* pv. *Undulosa* and *High plains virus*.

AND

- sourced from a “Pest free area” or “Pest free place of production”, free from *Anguina tritici*, or inspected microscopically for *Anguina tritici* in accordance with appropriate official procedures.

AND

EITHER

- sourced from a “Pest free area” free from *Cephalosporium gramineum*.

OR

- treated with one of the fungicide combinations described in MAF’s “Approved Treatments for Avena”.
(v) *Additional declarations to the phytosanitary certificate*

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

"The *Avena* seeds for sowing in this consignment have been:

- sourced from a “Pest free area”, free from *Xanthomonas campestris pv. undulosa*, *High plains virus* and/or a “Pest free place of production”, free from *Xanthomonas campestris pv. Undulosa* and *High plains virus*.

AND

- sourced from a “Pest free area” or “Pest free place of production”, free from *Anguina tritici*, or inspected microscopically for *Anguina tritici* [choose ONE option].

AND

- [if appropriate] sourced from a “Pest free area”, free from *Cephalosporium gramineum*."

*MAF Biosecurity New Zealand Import Health Standard 155.02.05: Importation of Seed for Sowing*
## Pest List for *Avena*

### REGULATED PESTS (actionable)

**Insect**
- **Insecta**
  - **Blattodea**
    - **Blattidae**
      - *Blatta orientalis* Oriental cockroach
  - **Coleoptera**
    - **Bostrichidae**
      - *Prostephanus truncatus* larger grain borer
    - **Cryptophagidae**
      - *Cryptophagus schmidtii*
    - **Cucujidae**
      - *Cathartus quadricollis* squarenecked grain beetle
    - **Curculionidae**
      - *Caulophilus oryzae* broadnosed grain weevil
    - **Dermestidae**
      - *Trogoderma granarium* khapra beetle
      - *Trogoderma inclusum* trogoderma beetle
      - *Trogoderma ornatum* trogoderma beetle
      - *Trogoderma simplex* dermestid beetle
      - *Trogoderma sternale* dermestid beetle
      - *Trogoderma variabile* warehouse beetle
    - **Mycetophagidae**
      - *Mycetophagus quadriguttatus* spotted hairy fungus beetle
    - **Nitidulidae**
      - *Carpophilus obsoletus* dried fruit beetle
    - **Ptinidae**
      - *Gibbium psylloides* shiny spider beetle
      - *Mezium americanum* American spider beetle
      - *Niptus hololeucus* golden spider beetle
      - *Pseudeurostus hilleri* spider beetle
      - *Ptinus clavipes* brown spider beetle
      - *Ptinus fur* whitemarked spider beetle
      - *Ptinus villiger* hairy spider beetle
      - *Tipnus unicolor* spider beetle
      - *Trigonogenius globulus*
    - **Tenebrionidae**
      - *Alphitobius laevigatus* black fungus beetle
      - *Alphitophagus bifasciatus* two-banded fungus beetle
      - *Blaps mucronata* cellar beetle
      - *Gnatocerus maxillosus* slenderhorned flour beetle
      - *Latheticus oryzae* longheaded flour beetle
      - *Palorus ratzeburgi* smalleyed flour beetle
Palorus subdepressus  
Tribolium audax  
Tribolium destructor  
Trogossitidae  
Lophocateres pusillus  

Hemiptera  
Lygaeidae  
Elasmolomus sordidus  

Lepidoptera  
Cosmopterigidae  
Pyroderces rileyi  
Oecophoridae  
Anchonoma xeraula  
Pyralidae  
Corcyra cephalonica  
Ephesia figulilella  
Paralipsa gularis  
Tineidae  
Nemapogon variatella  

Mite  
Arachnida  
Acarina  
Eriophyidae  
Aceria tosichella  
Aceria tulipae [vector]  
Siteroptidae  
Siteroptes cerealium  
Tarsonemidae  
Steneotarsonemus spirifex  

Nematode  
Secernentea  
Tylenchida  
Anguinidae  
Anguina tritici [vector]  

Fungus  
Hyphomycetales  
Moniliaceae  
Cephalosporium gramineum  

Bacterium  
Pseudomonadaceae  
Xanthomonas campestris pv. undulosa  
leaf streak
Virus

*High plains virus* -
Approved Treatments for *Avena*

**Fungicides**

One of the following treatments is required:

i) Carboxin at 0.8 g a.i. per kg of seed and Thiram at 0.8 g a.i. per kg of seed.

ii) Flutriafol at 0.05 g a.i. per kg of seed and Imazalil at 0.05 g a.i. per kg of seed.

iii) Triadimenol at 0.23 g a.i. per kg of seed, Imazalil 0.075 g per kg of seed and Fuberidazole 0.15g a.i per kg of seed.

iv) Tebuconazole at 0.025 g a.i. per kg of seed and Imazalil at 0.05 g a.i. per kg of seed.

As required, MAF may evaluate other treatments and if effective, will approve these treatments and add them to this schedule.
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Beta”.

1. Entry conditions for Beta seeds for sowing from approved exporting countries

(i) Pests of Beta
Clavibacter michiganensis subsp. sepedonicus.

(ii) Approved exporting countries
All countries

(iii) Documentation
Phytosanitary certificate: a completed phytosanitary certificate issued by the national plant protection organisation (NPPO) of the exporting country must accompany all consignments of Beta seeds for sowing imported into New Zealand.

(iv) Phytosanitary requirements
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by the MAF have been undertaken.

The Beta seeds for sowing have been:
- 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”, free from Clavibacter michiganensis subsp. sepedonicus.

OR
- A representative sample of 3200 seeds, drawn from this consignment according to the International Seed Testing Association’s methodology, has been tested for Clavibacter michiganensis pv. sepedonicus.

(v) Additional declarations to the phytosanitary certificate
If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:
"The Beta seeds for sowing in this consignment have been:
- sourced from a “Pest free area”, free from Clavibacter michiganensis subsp. sepedonicus.

OR
- Clavibacter michiganensis pv. sepedonicus was not detected in a representative sample of 3200 seeds drawn from this consignment."
Brassica napus

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Brassica napus”.

1. **Species-specific entry conditions for Brassica napus seeds for sowing from approved exporting countries**

   (i) **Pests of Brassica napus**
   
   None

   (ii) **Approved exporting countries**
   
   All countries

   (iii) **Documentation**
   
   **Phytosanitary certificate:** A completed phytosanitary certificate issued by the national plant protection organisation (NPPO) of the exporting country must accompany all consignments of Brassica napus seeds for sowing exported to New Zealand. For positive identification of the imported consignment, the full scientific name of the Brassica napus sub-species or variety plus the appropriate common name must be specified on the phytosanitary certificate, e.g. *Brassica napus* var. *biennis* (forage rape) or *Brassica napus* var. *oleifera* (oilseed rape). Importers of consignments of Brassica napus that are not identified appropriately will be offered the options of re-shipment, destruction or tested for the presence of unapproved GM seeds, see section (vi).

   **Genetically modified seed test certificate:** The New Zealand Ministry of Agriculture and Forestry requires that all consignments of Brassica napus var. *oleifera* (oilseed rape) that are imported into New Zealand are tested for the presence of unapproved genetically modified seeds, see section (vi).

   **Import permit:** An import permit is only required for seeds that must be grown in a registered quarantine facility as described in section (vi) and 4.

   (iv) **Phytosanitary requirements**
   
   Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

   The Brassica napus seeds for sowing have been:
   
   - inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

   (v) **Additional declarations to the phytosanitary certificate**
   
   No additional declarations are required.

   (vi) **Sampling and testing Brassica napus var. oleifera seed consignments for adventitious presence of unapproved genetically modified seeds**
   
   The New Zealand Ministry of Agriculture and Forestry (MAF) requires that all consignments of Brassica napus var. *oleifera* (oilseed rape) that are imported into New Zealand are representatively sampled, tested, and found to be free of unapproved GM seeds. Alternatively, the seeds must be sourced from companies with MAF approved quality assurance systems which demonstrate equivalence with PCR testing every consignment of GM Brassica napus var. *oleifera*. Any consignment that is found to contain unapproved GM seeds will not be permitted to enter New Zealand and will be re-shipped or destroyed. Complete guidelines for
sampling and testing for the presence of GM seeds are specified in the Protocol for Testing Seed Imports for the Presence of Genetically Modified Seed. The protocol includes three further options for importers of small volumes of seed (defined as less than 100g for Brassica napus var. oleifera) for cultivar trials and multiplication.

Testing may be conducted by facilities approved by MAF under the requirements specified in the Standard “Approval of Facilities for Genetically Modified Organism Testing”. If testing is conducted offshore, a copy of the completed test certificate (from a MAF-approved facility) must accompany the consignment imported into New Zealand. MAF will examine the test certificates on arrival to confirm that they reconcile with the actual consignment. Importers must ensure that MAF has access to all pertinent testing records held by MAF-approved testing facilities for audit purposes.

If consignments arrive at the New Zealand border without having been tested for the presence of unapproved GM seeds, MAF will offer the importer the options of re-shipping or destroying the consignment, or having the consignment sampled and tested as above at the importer’s expense. Any consignment held at the New Zealand border that is tested and found to contain unapproved GM seeds will not be permitted to enter New Zealand and will be re-shipped or destroyed.

The protocol and a list of MAF-approved facilities for testing for the presence of GM material in Brassica napus var. oleifera are located at the following address on the MAF web site: http://www.biosecurity.govt.nz/regs/imports/plants/gmo

2. Validation of Brassica napus varieties (including all sub-species)
MAF reserves the right to undertake validation audits to confirm that the variety is that which is stated on the phytosanitary certificate accompanying the consignment. This may be done by growing a sample of the seed, or by auditing the crop in situ. Audits may be conducted on a random basis and if required, growth of samples will be conducted at MAF accredited facilities at the expense of the importer.
**Camellia sinensis**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Camellia sinensis*”.

**GENERAL CONDITIONS:**

**Countries:** All

**Quarantine Pests:** *Exobasidium vexans*; Phloem necrosis

**Entry Conditions:** Basic; PLUS

1. **A prior permit to import is required:**
   
   **PEQ:** Level 1  
   **Minimum Period:** 1 growing season  
   **Isolation:** 50 m

2. **Phytosanitary Certificate Requirements:**
   
   Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.
   
   The *Camellia sinensis* seeds for sowing have been:
   
   - sourced from a “Pest free area” free from *Exobasidium vexans* and phloem necrosis.
   
   AND
   
   - treated with one of the following fungicide combinations, either
   
   i) captan at 2 g a.i. per kg seed; or
   
   ii) thiram at 2 g a.i. per kg seed.

3. **Phytosanitary Certificate Additional Declarations:**
   
   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:

   (a) "*Exobasidium vexans* and phloem necrosis are not known to occur in _____ (the country or state where the seed was produced) _____."
Camissonia

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Camissonia”.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Peronospora arthurii*

Entry Conditions: Basic; PLUS

Phytosanitary Certificate Requirements:
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.
The *Camissonia* seeds for sowing have been:
- treated with one of the following fungicide combinations, either
  i) captan at 2g a.i. per kg seed; or
  ii)thiram at 2 g a.i. per kg seed.

Phytosanitary Certificate Additional Declarations:
If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by **recording the treatments** applied in the “Disinfestation and/or Disinfection Treatment” section. No additional declarations required.
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Cannabis sativa”.

Note: Importers of Cannabis sativa (low THC hemp seed) must contact the Ministry of Health prior to importation for advice on licensing for low THC hemp seed.

Ministry of Health
P O Box 5013
Wellington
Attention: Advisor, Controlled Drug Licensing
Telephone: 04 496 2000

Entry conditions for Cannabis sativa (low THC Hemp seed variety) seeds for sowing from approved exporting countries

These requirements are in addition to the Basic requirements set out in Section 2 of the standard.

(i) Pests of Cannabis sativa
Refer to “Pest List for Cannabis sativa”.

(ii) Approved exporting countries
All countries

(iii) Documentation
Phytosanitary certificate: A completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all Cannabis sativa seeds for sowing exported into New Zealand.

(iv) Phytosanitary certification
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The Cannabis sativa seeds for sowing have been:
- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests and regulated weed species, including the regulated insects and mites on MAF’s “Pest List for Cannabis sativa”.

AND EITHER
- sourced from a “Pest free area” or “Pest free place of production”, free from the named regulated bacteria (Pseudomonas syringae pv. cannabina and Xanthomonas campestris pv. cannabis).
  OR
- treated with the hot water treatment as described in MAF’s “Approved Treatments for Cannabis sativa”;

AND EITHER
- sourced from a “Pest free area” free from the named regulated fungi (Leptosphaeria woroninii, Septoria cannabis and Curvularia cymbopogonis
  OR
- treated with one of the fungicide combinations described in MAF’s “Approved Treatments
for Cannabis sativa”,
AND EITHER
- sourced from a “Pest free area” or “Pest free place of production”, free from the named regulated viruses (Hemp mosaic virus and Hemp streak virus).

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

"The Cannabis sativa seeds for sowing in this consignment have been:
- [if appropriate] sourced from a “Pest free area”, free from _____ (name of the regulated bacteria) _____, and/or a “Pest free place of production”, free from _____ (name of the regulated bacteria) _____.

AND
- [if appropriate] sourced from a “Pest free area”, free from _____ (name of the regulated fungi) _____;

AND
- sourced from a “Pest free area”, free from _____ (name of the regulated virus) _____, and/or a “Pest free place of production”, free from _____ (name of the regulated virus) _____.

Approved Testing and Treatments for Cannabis sativa

Hot water treatment (for bacteria and parasitic weed) prior to shipment
The Cannabis sativa seeds must be treated using a hot water dip for the eradication of bacterial organisms (Pseudomonas syringae pv. cannabina and Xanthomonas campestris pv. cannabis). Hot water treatment must be conducted either at 50°C for 30 minutes or at 60°C for 10 minutes (Hemp Diseases and Pests: Management and Biological Control. J. M. McPartland, R. C. Clarke and D. P. Watson 2000. CAB International).

Note: The hot water treatment that would be carried out in New Zealand as an alternative to the same treatment prior to shipment, cannot be permitted as no MAF-approved facility is currently available in New Zealand.

Fungicides
The Cannabis sativa seeds must be treated (in lieu of pest free area) with the active ingredients in one of the following treatments

(i) Carboxin at 0.8g a.i. per kg seed and thiram at 1g a.i. per kg seed.
(ii) Carboxin at 0.8g a.i. per kg seed and captan at 0.7g a.i. per kg seed.
(iii) Imazalil at 80mg a.i. per kg seed and triadimenol at 220mg a.i. per kg seed.
(iv) Imazalil at 80mg a.i. per kg seed and flutriafol at 80mg a.i. per kg seed.

As required, MAF may evaluate other treatments and if effective, will approve these treatments and add them to this schedule.
Pest List for *Cannabis sativa* (Seed for Sowing)

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Organism type</th>
<th>Common name</th>
<th>Quarantine status</th>
<th>Measures to prevent entry</th>
<th>Actions on interception</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Pseudomonas syringae pv. cannabina</em></td>
<td>bacterium</td>
<td>-</td>
<td>Regulated</td>
<td>5 or 7 or 8</td>
<td>3</td>
</tr>
<tr>
<td><em>Xanthomonas campestris pv. cannabis</em></td>
<td>bacterium</td>
<td>-</td>
<td>Regulated</td>
<td>5 or 7 or 8</td>
<td>3</td>
</tr>
<tr>
<td><em>Curvularia cymbopogonis</em></td>
<td>fungus</td>
<td>-</td>
<td>Regulated</td>
<td>5 or 7</td>
<td>3</td>
</tr>
<tr>
<td><em>Leptosphaeria woroninii</em></td>
<td>fungus</td>
<td>-</td>
<td>Regulated</td>
<td>5 or 7</td>
<td>3</td>
</tr>
<tr>
<td><em>Septoria cannabis</em></td>
<td>fungus</td>
<td>yellow leaf spot</td>
<td>Regulated</td>
<td>5 or 7</td>
<td>3</td>
</tr>
<tr>
<td><em>Hemp mosaic virus</em></td>
<td>virus</td>
<td>-</td>
<td>Regulated</td>
<td>7 or 8</td>
<td>3</td>
</tr>
<tr>
<td><em>Hemp streak virus</em></td>
<td>virus</td>
<td>-</td>
<td>Regulated</td>
<td>7 or 8</td>
<td>3</td>
</tr>
<tr>
<td><em>Pyrrhocoris apterus</em></td>
<td>Insect</td>
<td>fire bug</td>
<td>Regulated</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><em>Episyrphus balteatus</em></td>
<td>Insect</td>
<td>Regulated</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><em>Ischiodon scutellaris</em></td>
<td>Insect</td>
<td>syrphid fly</td>
<td>Regulated</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><em>Metasyrphus latifasciatus</em></td>
<td>Insect</td>
<td>syrphid fly</td>
<td>Regulated</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><em>Sphaerophoria scripta</em></td>
<td>Insect</td>
<td>hover fly</td>
<td>Regulated</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><em>Syritta pipiens</em></td>
<td>Insect</td>
<td>hover fly</td>
<td>Regulated</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><em>Aculops cannabica</em></td>
<td>mite</td>
<td>hemp russett mite</td>
<td>Regulated</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><em>Orobanche ramosa</em></td>
<td>Weed</td>
<td>branched broomrape</td>
<td>Regulated</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Measures to prevent entry and establishment**

1. No measures.
2. Seed and associated packaging inspected and found to be free from visually detectable regulated pests.
3. Consignments are free from extraneous material, e.g., soil, plant residue that may carry regulated pests.
4. Undergone effective treatment for regulated pests.
5. Undergone specified treatment for regulated pests.
6. Undergone specified testing for regulated pests.
7. Sourced from a pest free area.
8. Sourced from a pest free place of production.
**Actions on interception**

1. Removal of extraneous material, e.g., soil, plant residue that may carry regulated pests.
2. Treat (if appropriate), reship or destroy.
3. No action if pest not viable.
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Carpinus”.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Cladosporium caryigenum; Cryphonectria parasitica

Entry Conditions: Basic; PLUS

1. A prior permit to import is required:

   PEQ: Level 1
   Minimum Period: 1 growing season
   Isolation: 50 metres

2. Phytosanitary Certificate Requirements:
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

   The Carpinus seeds for sowing have been:
   - sourced from a “Pest free area” free from Cladosporium caryigenum and Cryphonectria parasitica.
   AND
   - treated with one of the following fungicide combinations, either
     i) captan at 2g a.i. per kg seed; or
     ii) thiram at 2 g a.i. per kg seed.

3. Phytosanitary Certificate Additional Declarations:
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:

"Cladosporum caryigenum and Cryphonectria parasitica are not known to occur in ______ (country or state where the seed was produced) ______".
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Carthamus tinctorius”.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Alternaria carthami; Cercospora carthami; Trogoderma spp.

Entry Conditions: Basic; PLUS

Phytosanitary Certificate Requirements:
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken. The Carthamus tinctorius seeds for sowing have been treated with Iprodione at 2.5g a.i. per kg seed.

Phytosanitary Certificate Additional Declarations:
If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section. No additional declarations are required.
**Carya**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Carya*”.

**GENERAL CONDITIONS:**

**Countries:** Australia, USA

**Quarantine Pests:** *Cladosporium caryigenum*; *Conotrachelus* spp.; *Curculio caryae*; *Cydia caryana*; *Trogoderma* spp.

**Entry Conditions:** Basic; PLUS

**Phytosanitary Certificate Additional Declarations:**

(a) "*Conotrachelus* spp., *Curculio caryae* and *Cydia caryana* are not known to attack *Carya* seed or nuts in ____ (the country or state where the seed was produced) ____”.

OR

"The seed was fumigated with methyl bromide at _____ pressure for ____ hours at _____ g/m³ at a temperature of _____ °C”.

**Note:** The pressure/time/rate temperature combination used is to be in accordance with the following scale:

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Rate (g/m³)</th>
<th>Time (hours)</th>
<th>Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 - 21°C</td>
<td>32</td>
<td>12</td>
<td>atmospheric</td>
</tr>
<tr>
<td>21°C or above</td>
<td>16</td>
<td>12</td>
<td>atmospheric</td>
</tr>
<tr>
<td>15 - 21°C</td>
<td>48</td>
<td>1.5</td>
<td>91 kpa vacuum</td>
</tr>
<tr>
<td>21°C or above</td>
<td>48</td>
<td>1.0</td>
<td>91 kpa vacuum</td>
</tr>
</tbody>
</table>

(b) "*Cladosporium caryigenum* is not known to occur in _____ (the country or state where the seed was produced) ____”

(c) "The seed has been treated with _______ (insert one of the options below) _______ at 2g a.i. per kg seed.”

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

- captan
- thiram
**Carya ovata**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Carya ovata*”.

**GENERAL CONDITIONS:**

**Countries:** Australia

**Quarantine Pests:** *Cladosporium caryigenum; Cryphonectria parasitica; Conotrachelus spp.; Curculio caryae; Cydia caryana; Trogoderma spp.*

**Entry Conditions:** Basic; PLUS

1. **A prior permit to import is required:**
   - **PEQ:** Level 1
   - **Minimum Period:** 1 growing season
   - **Isolation:** 50 m

2. **Phytosanitary Certificate Additional Declarations:**
   - (a) "*Cladosporum caryigenum* and *Cryphonectria parasitica* are not known to occur in ______ (the country or state where the seed was produced) ______".
   - (b) "*Conotrachelus spp., Curculio caryae and Cydia caryana* are not known to attack *Carya* seed or nuts in ______ (the country or state where the seed was produced) ______”
   
   OR
   
   "The seed was fumigated with methyl bromide at ___ pressure for ___ hours at ___ g/m³ at a temperature of ___ °C".

**Note:** The pressure/time/rate temperature combination used is to be in accordance with the following scale:

(Continued next page)
### Carya ovata

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Rate (g/m³)</th>
<th>Time (hours)</th>
<th>Pressure</th>
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<tr>
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</tr>
<tr>
<td>15 - 21°C</td>
<td>48</td>
<td>1.5</td>
<td>91 kpa vacuum</td>
</tr>
<tr>
<td>21°C or above</td>
<td>48</td>
<td>1.0</td>
<td>91 kpa vacuum</td>
</tr>
</tbody>
</table>

(c) "The seed has been treated with _____ (insert one of the options below) _____ at 2g a.i. per kg seed".

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

- captan
- thiram
**Castanea**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Castanea”.

**GENERAL CONDITIONS:**

**Countries:** All

**Quarantine Pests:** *Ceratocystis fagacearum; Cryphonectria parasitica; Curculio spp.; Cyrtepistomus castaneus*

**Entry Conditions:** Basic; PLUS

**A prior permit to import is required:**

- **PEQ:** Level 3
- **Minimum Period:** 1 growing season
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Cicer”.

1. Entry conditions for Cicer seeds for sowing from approved exporting countries:

   (i) Pests of Cicer
   Ascochyta rabiei; Megaselia arietina; Trogoderma spp.

   (ii) Approved exporting countries
   All countries

   (iii) Documentation
   Phytosanitary certificate: a completed phytosanitary certificate issued by the national plant protection organisation (NPPO) of the exporting country must accompany all consignments of Cicer seeds for sowing imported into New Zealand.

   (iv) Phytosanitary requirements
   Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by the MAF have been undertaken. The Cicer seeds for sowing have:
   – been sourced from a “Pest free area” or “Pest free place of production”.

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

   “The Cicer seeds for sowing in this consignment have:
   – been sourced from a “Pest free area” or “Pest free place of production”, free from Ascochyta rabiei.”


**Citrus**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Citrus*”.

**GENERAL CONDITIONS:**

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

**Quarantine Pests:** *Xanthomonas campestris* pv. *citri*

**Entry Conditions:** Basic; PLUS

**Phytosanitary Certificate Additional Declaration:**

"*Xanthomonas campestris* pv. *citri* is not known to occur in _____ (the country or state where the seed was produced) ______".
Cocos

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Cocos”.

1. Entry conditions for Cocos seeds for sowing from approved exporting countries

(i) Pests of Cocos
Coconut cadang-cadang viroid

Note: Seed covered in a fleshy pericarp will not be permitted entry into New Zealand.

(ii) Approved exporting countries
All countries except Guam, the Philippines and the Solomon Islands.

(iii) Documentation
Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all consignments of Cocos seeds for sowing imported into New Zealand.

(iv) Phytosanitary requirements
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by the MAF.
The Cocos seeds for sowing have:
- been inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.
AND
- been produced in an approved country and have not been produced in Guam, the Philippines or the Solomon Islands.
AND
- been produced in a “Pest free area”, free from Coconut cadang-cadang viroid.

(v) Additional declarations to the phytosanitary certificate
If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:
"The Cocos seeds for sowing in this consignment have:
- been produced in an approved country and have not been produced in Guam, the Philippines or the Solomon Islands.
AND
- been sourced from a “Pest free area”, free from Coconut cadang-cadang viroid."
**Coffea**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Coffea”.

**GENERAL CONDITIONS:**

**Countries:** Australia, Cook Islands, Hawaii, Samoa, Tonga

**Quarantine Pests:** *Stephanoderes hampei*

**Entry Conditions:** Basic; PLUS

**Phytosanitary Certificate Requirements:**
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.
The *Coffea* seeds for sowing have been:
- treated with one of the following fungicide combinations, either
  i) captan at 2g a.i. per kg seed; or
  ii)thiram at 2 g a.i. per kg seed.

**Phytosanitary Certificate Additional Declarations:**
If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by **recording the treatments** applied in the “Disinfestation and/or Disinfection Treatment” section. No additional declarations required.
**Coriandrum**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Coriandrum”.

**GENERAL CONDITIONS:**

**Countries:** All

**Quarantine Pests:** *Ramularia coriandri; Trogoderma spp*

**Entry Conditions:** Basic; PLUS

**Phytosanitary Certificate Requirements:**
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The *Coriandrum* seeds for sowing have been:
- sourced from a “Pest free area” or “Pest free place of production”, free from *Ramularia coriandri*

AND
- treated with one of the following fungicide combinations, either
  1) Benomyl at 2.5 g a.i. per kg seed
  2) Carbendazim at 2.5 g a.i. per kg seed
  3) Thiophanate methyl at 2.5 a.i. per kg seed

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

"*Ramularia coriandri* is not known to occur in _____ (the country or state where the seed was produced) ______".

OR

"The seed is from a crop that has been inspected during the growing season according to appropriate procedures and no *Ramularia coriandri* was detected".

**Corylus**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Corylus*”.

1. Species-specific entry conditions for *Corylus* seeds for sowing from approved exporting countries

   (i) **Pests of Corylus**
       *Cydia latiferreana, Curculio nucum*

   (ii) **Approved exporting countries**
       All countries

There are no specific entry conditions for *Corylus* seeds for sowing aside from the requirement that all *Corylus* seeds imported into New Zealand must have their shells removed to permit inspection prior to entry.
Corypha

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Corypha”.

1. Entry conditions for Corypha seeds for sowing from approved exporting countries

(i) Pests of Corypha
Coconut cadang-cadang viroid

Note: Seed covered in a fleshy pericarp will not be permitted entry into New Zealand.

(ii) Approved exporting countries
All countries except Guam, the Philippines and the Solomon Islands.

(iii) Documentation
Phytosanitary certificate: a completed phytosanitary certificate issued by the national plant protection organisation (NPPO) of the exporting country must accompany all consignments of Corypha seeds for sowing imported into New Zealand.

(iv) Phytosanitary requirements
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by the MAF have been undertaken.
The Corypha seeds for sowing have:
- been inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.
AND
- been produced in an approved country and have not been produced in Guam, the Philippines or the Solomon Islands.
AND
- been produced in a “Pest free area”, free from Coconut cadang-cadang viroid.

(v) Additional declarations to the phytosanitary certificate
If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:
"The Corypha seeds for sowing in this consignment have:
- been produced in an approved country and have not been produced in Guam, the Philippines or the Solomon Islands.
AND
- been sourced from a “Pest free area”, free from Coconut cadang-cadang viroid."
Cucurbita pepo

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Cucurbita pepo”.

1. Species-specific entry conditions for Cucurbita pepo seeds for sowing from approved exporting countries

(i) Pests of Cucurbita pepo
   None

(ii) Approved exporting countries
   All countries

There are no specific entry conditions for Cucurbita pepo seeds for sowing except for the following genetically modified varieties which are prohibited entry to New Zealand without HSNO approval:
   - Yellow crook neck squash variety ZW20 and CZW3
   - Yellow crook neck squash variety “Revenue” and “Tigress”
   - Yellow crook neck squash variety Destiny III and Prelude II

(iii) Documentation:
   Documentation accompanying imports should declare that the consignment does not contain seeds of the above prohibited varieties.

The required declaration may be contained on either:
   - an importer’s declaration, or
   - an exporter’s declaration.
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Cuminum”.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Alternaria burnsii*

Entry Conditions: Basic; PLUS

Phytosanitary Certificate Requirements:
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken. The *Cuminum* seeds for sowing have been:

- sourced from a “Pest free area” or “Pest free place of production”, free from *Alternaria burnsii*

AND

- treated with Iprodione at 2.5g a.i. per kg seed.

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

"*Alternaria burnsii* is not known to occur in _____ (the country or state where the seed was produced) _______".

OR

"The seed is from a crop that has been inspected during the growing season according to appropriate procedures and no *Alternaria burnsii* was detected".
**Desmodium**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Desmodium*”.

**GENERAL CONDITIONS:**

**Countries:** All

**Quarantine Pests:** Desmodium mosaic virus; *Trogoderma* spp.

**Entry Conditions:** Basic; PLUS

**Phytosanitary Certificate Additional Declaration:**

"Desmodium mosaic virus is not known to occur in ______ (the country or state where the seed was produced) ______".

**OR**

"The seed is from a crop that has been inspected during the growing season according to appropriate procedures and no Desmodium mosaic virus was detected".
**Echinochloa**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Echinochloa”.

**GENERAL CONDITIONS:**

**Countries:** All

**Quarantine Pests:** Sclerospora graminicola; Trogoderma spp.; Ustilaginales

**Entry Conditions:** Basic; PLUS

**Phytosanitary Certificate Requirements:**

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

The *Echinochloa* seeds for sowing have been:

- sourced from a “Pest free area” or “Pest free place of production”, free from *Sclerospora graminicola*

AND

- treated with one of the following fungicide combinations, either

  i) Carboxin at 0.8g a.i. per kg seed and thiram at 1g a.i. per kg seed.

  ii) Carboxin at 0.8g a.i. per kg seed and captan at 0.7g a.i. per kg seed.

  iii) Imazalil at 80mg a.i. per kg seed and triadimenol at 220mg a.i. per kg seed.

  iv) Imazalil at 80mg a.i. per kg seed and flutriafol at 80mg a.i. per kg seed.

**Phytosanitary Certificate Additional Declarations:**

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

"*Sclerospora graminicola* is not known to occur in ____ (the country or state where the seed was produced) ____”.

**OR**

"The seed is from a crop that has been inspected during the growing season according to appropriate procedures and no *Sclerospora graminicola* was detected".
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Elaeis*”.

1. Entry conditions for *Elaeis* seeds for sowing from approved exporting countries

(i) *Pests of Elaeis*

*Coconut cadang-cadang viroid*

Note: Seed covered in a fleshy pericarp will not be permitted entry into New Zealand.

(ii) *Approved exporting countries*

All countries except Guam, the Philippines and the Solomon Islands.

(iii) *Documentation*

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all consignments of *Elaeis* seeds for sowing imported into New Zealand.

(iv) *Phytosanitary requirements*

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

The *Elaeis* seeds for sowing have:

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

AND

- been produced in an approved country and have not been produced in Guam, the Philippines or the Solomon Islands.

AND

- been produced in a “Pest free area”, free from *Coconut cadang-cadang viroid*.

(v) *Additional declarations to the phytosanitary certificate*

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

"The *Elaeis* seeds for sowing in this consignment have:

- been produced in an approved country and have not been produced in Guam, the Philippines or the Solomon Islands.

AND

- been sourced from a “Pest free area”, free from *Coconut cadang-cadang viroid*.  

*Elaeis*
**Eriobotrya**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Eriobotrya”.

**GENERAL CONDITIONS:**

Countries: All

Quarantine Pests: *Pseudomonas syringae* pv. *eriobotryae*

Entry Conditions: Basic; PLUS

**OPTION 1**

1. A prior permit to import is required:

2. Phytosanitary Certificate Additional Declaration:

   “*Pseudomonas syringae* pv. *eriobotryae* is not known to occur in ______ (the country or state where the seed was produced) ______”.

**OPTION 2**

PEQ: Level 3

Minimum Period: 2 growing seasons
**Fagus**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Fagus*”.

**GENERAL CONDITIONS:**

For the approved plant species for which **NO** species specific import health standards have been developed, the following conditions apply:

**Countries:** All

**Quarantine Pests:** Tortricidae

**Entry Conditions:** Basic; PLUS

**Phytosanitary Certificate Additional Declaration:**

"The seed has been treated with _____ (insert one of the options below) _____ at 2g a.i. per kg seed."

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

- captan
- thiram
Fragaria

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Fragaria”.

Entry conditions for Fragaria seeds from approved countries
These requirements are in addition to the Basic requirements set out in Section 2 of the standard.

(i) Pests of Fragaria
Refer to the pest list.

(ii) Approved exporting countries
All countries

(iii) Documentation
Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all consignments of Ribes seed for sowing imported into New Zealand.
Import permit: an import permit is required.

(iv) Phytosanitary requirements
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The Fragaria seeds for sowing have been:
- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

(v) Additional declarations to the phytosanitary certificate
No additional declarations are required.

(vi) Post-entry quarantine
PEQ: All Fragaria seeds must be imported under permit into post-entry quarantine in a level 3 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON Specification for the registration of a plant quarantine or containment facility, and operator.
Quarantine Period: The seed will be grown for a minimum period of 6 months and will be inspected and/or tested for regulated pests at the expense of the importer. Six months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.
Fragaria

Pest List for Fragaria

REGULATED PESTS (actionable)

Viruses

Fragaria chiloensis latent virus
Raspberry ringspot virus
Strawberry latent ringspot virus (Strains not in New Zealand)
Tobacco streak virus
Tomato black ring virus
Tomato ringspot virus (Strains not in New Zealand)

*For organisms intercepted that are not listed within this pest list refer to the Biosecurity Organisms Register for Imported Commodities to determine the regulatory status.
**Fragaria**

**Inspection, Testing and Treatment Requirements for Fragaria**

<table>
<thead>
<tr>
<th>ORGANISM TYPES</th>
<th>NZ MAF ACCEPTABLE METHODS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(See notes below)</td>
</tr>
<tr>
<td><strong>Virus</strong></td>
<td></td>
</tr>
<tr>
<td><em>Fragaria chiloensis latent virus</em></td>
<td>Herbaceous indexing with Cq</td>
</tr>
<tr>
<td><em>Raspberry ringspot virus</em></td>
<td>ELISA or PCR and herbaceous indexing with Cq</td>
</tr>
<tr>
<td><em>Strawberry latent ringspot virus</em></td>
<td>ELISA or PCR and herbaceous indexing with Cq</td>
</tr>
<tr>
<td><em>Tomato black ring virus</em></td>
<td>ELISA or PCR and herbaceous indexing with Cq</td>
</tr>
<tr>
<td><em>Tomato ringspot virus</em></td>
<td>ELISA or PCR and herbaceous indexing with Cq</td>
</tr>
</tbody>
</table>

Key   
Cq – Chenopodium quinoa  
ELISA - Enzyme linked immunosorbent assay  
PCR - Polymerase chain reaction

**Notes:**

1. Tests are to be carried out on plants germinated from the imported seeds.

2. The unit for testing is an individual seedling unless evidence is supplied by the exporting NPPO that seeds have been derived from the same mother plant. Bulking of up to 5 seedlings derived from the same mother plant, for ELISA or PCR testing, is acceptable. Samples must be tested individually by herbaceous indexing.

3. Testing must be carried out on plants while they are in active growth.

4. Indicator plants must be grown under appropriate temperatures.

5. Indicator plants must be shaded for 12-24 hrs prior to inoculation.

6. For each *Fragaria* plant, at least two young fully-expanded leaves must be sampled from the apical crown region.

7. Post-inoculated indicator plants must be maintained under appropriate glasshouse conditions for at least 4 weeks.

8. Post-inoculated indicator plants must be inspected at least twice per week for signs of virus infection with observations being recorded on a weekly basis.

9. PCR and ELISA need to be validated using positive controls/reference material prior to use in quarantine testing.

10. Positive, negative, and buffer controls must be used in ELISA tests.

11. Positive controls must be used in PCR.
12. Inspection of the *Fragaria* plants by the operator of the PEQ facility for signs of pest and disease must be at least once per week.

13. Other internationally recognised testing methods may be accepted by MAF with prior notification.

**References**


**Glycine**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Glycine*”.

1. **Entry conditions for *Glycine* seeds for sowing from approved exporting countries**
   
   (i) **Pests of *Glycine***  
   *Peronospora manshurica; Trogoderma* spp.

   (ii) **Approved exporting countries**  
   All countries

   (iii) **Documentation**  
   **Phytosanitary certificate:** a completed phytosanitary certificate issued by the national plant protection organisation (NPPO) of the exporting country must accompany all consignments of *Glycine* seeds for sowing that are imported into New Zealand.  
   **Genetically modified seed test certificate:** MAF requires that all consignments of *Glycine max* (soybean) that are imported into New Zealand are tested for the presence of unapproved genetically modified seeds (see (vi) in this schedule).  
   **Import permit:** an import permit is required only for consignments of seeds that must undergo post-entry quarantine as described in section 4 of this schedule “Seed imported under permit into post-entry quarantine”. The permit should be obtained prior to the seed arriving at the New Zealand border.

   (iv) **Phytosanitary requirements**  
   Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken. The *Glycine* seeds for sowing have been:
   - inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests, including *Trogoderma* spp.
   AND
   - sourced from a “Pest free area” or “Pest free place of production”, free from *Peronospora manshurica*.
   AND
   - treated against *Peronospora manshurica* using one of the following fungicide combinations, either
     i) metalaxyl at 0.7 g a.i. per kg seed and captan at 0.7 g a.i. per kg seed; or
     ii) metalaxyl at 0.7 g a.i. per kg seed and thiram at 1 g a.i. per kg seed.
   With prior approval, MAF may evaluate other treatments and if effective, will approve these treatments and add them to this schedule.

   (v) **Additional declarations to the phytosanitary certificate**
   If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section and must confirm this by providing the following additional declarations to the phytosanitary certificate:
"The \textit{Glycine} seeds for sowing in this consignment have been:
\begin{itemize}
  \item inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests, including \textit{Trogoderma} spp.
  \item AND
  \item sourced from a “Pest free area” or “Pest free place of production”, free from \textit{Peronospora manshurica}.
\end{itemize}

(vi) \textit{Sampling and testing} \textit{Glycine max} seed consignments for adventitious presence of unapproved genetically modified seeds.

MAF requires all consignments of \textit{Glycine max} (soybean) imported into New Zealand to be representatively sampled, tested, and found to be free of unapproved GM seeds. Alternatively, the seeds must be sourced from companies with MAF approved quality assurance systems which demonstrate equivalence with PCR testing every consignment of GM \textit{Glycine max}. Any consignment that is found to contain unapproved GM seeds will not be permitted to enter New Zealand and will be re-shipped or destroyed. Complete guidelines for sampling and testing for the presence of GM seeds are specified in the \textit{Protocol for Testing Seed Imports for the Presence of Genetically Modified Seed}. The protocol includes three further options for importers of small volumes of seed (defined as less than 5kg for \textit{Glycine max}) for cultivar trials and multiplication.

Testing may be conducted by facilities approved by MAF under the requirements specified in the Standard “\textit{Approval of Facilities for Genetically Modified Organism Testing}”. If testing is conducted offshore, a copy of the completed test certificate (from a MAF-approved facility) must accompany the consignment imported into New Zealand. MAF will examine the test certificates on arrival to confirm that they reconcile with the actual consignment. Importers must ensure that MAF has access to all pertinent testing records held by MAF-approved testing facilities for audit purposes.

If consignments arrive at the New Zealand border without having been tested for the presence of unapproved GM seeds, MAF will offer the importer the options of re-shipping or destroying the consignment, or having the consignment sampled and tested as above at the importer’s expense. Any consignment held at the New Zealand border that is tested and found to contain unapproved GM seeds will not be permitted to enter New Zealand and will be re-shipped or destroyed.

The protocol and a list of MAF-approved facilities for testing for the presence of GM material in \textit{Glycine max} are located at the following address on the MAF web site:
\url{http://www.biosecurity.govt.nz/regs/imports/plants/gmo}

\textbf{Seed imported under permit into post-entry quarantine}

If a phytosanitary certificate with the required additional declarations can not be obtained, \textit{Glycine} seed may be imported under permit into post-entry quarantine in a transitional facility accredited to MAF standard PBC-NZ-TRA-PQCON: \textit{Specification for the Registration of a}
Glycine

*Plant Quarantine or Containment Facility, and Operator.* The seed will be grown for a minimum period of one growing season and will be tested or inspected for regulated pests at the expense of the importer. Such seed must be accompanied by an import permit directing the seed from the border to the transitional facility. The permit should be obtained prior to the seed arriving at the New Zealand border.
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Gossypium”.

**GENERAL CONDITIONS:**

Countries: Australia

**Quarantine Pests:** *Anthonomus grandis; Trogoderma* spp.

**Entry Conditions:** Basic; PLUS

**Phytosanitary certificate:** A completed phytosanitary certificate issued by the national plant protection organisation of the exporting country must accompany all consignments of *Gossypium* seeds for sowing exported to New Zealand. The phytosanitary certificate must include the following additional declaration:

"The seed has been cleaned and is completely free of lint".

**Import permit:** An import permit is required for all consignments of *Gossypium hirsutum* seeds for sowing exported to New Zealand. The permit should be obtained prior to the seed arriving at the New Zealand border (see section 1.4). When applying for an import permit, the importer will be required to provide appropriate assurances that the consignment to be imported does not contain unauthorised genetically modified seeds. Appropriate assurances include testing the consignment, or testing the parent plants and isolating the crop during production. The New Zealand Ministry of Agriculture and Forestry will develop a specific testing protocol for *Gossypium hirsutum* seeds for sowing if a significant number of consignments are exported to New Zealand.
Helianthus

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Helianthus”.

GENERAL CONDITIONS:

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

Quarantine Pests: Alternaria helianthi; Lasioptera murtfeldtiana; Plasmopara halstedii; Septoria helianthi; Sunflower mosaic virus; Trogoderma spp.

Entry Conditions: Basic; PLUS

Phytosanitary Certificate Additional Declarations:

(a) "Alternaria helianthi, Lasioptera murtfeldtiana, Plasmopara halstedii, Septoria helianthi, and Sunflower mosaic virus are not known to occur in _____ (the country or state where the seed was produced) ______".

OR

"The seed is from a crop that has been inspected during the growing season according to appropriate procedures and no Alternaria helianthi, Lasioptera murtfeldtiana, Plasmopara halstedii, Septoria helianthi or Sunflower mosaic virus was detected".

OR

(i) "The seed is from a crop that has been inspected during the growing season according to appropriate procedures and no Lasioptera murtfeldtiana, Plasmopara halstedii or Sunflower mosaic virus was detected".

(ii) “No evidence of contamination with Alternaria helianthi or Septoria helianthii was found in 600 pure seeds drawn and tested in accordance with the general directions for seed health testing in the current International Rules for Seed Testing”.

(Continued next page)
(b) "The seed has been treated with _____ (insert one of the options below) _____ ".

**Note:** One of the following fungicide combinations is to be used:

(i) Metalaxyl at 0.7g a.i. per kg seed and captan at 0.7g a.i. per kg seed.

(ii) Metalaxyl at 0.7g a.i. per kg seed and thiram at 1g a.i. per kg seed.
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Hordeum”.

**Entry conditions for Hordeum seeds for sowing from approved exporting countries**

These requirements are in addition to the Basic requirements set out in Section 2 of the standard.

(i) **Pests of Hordeum**
Refer to “Pest List for Hordeum”.

(ii) **Approved exporting countries**
Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom and United States of America.

(iii) **Documentation**
A completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all Hordeum seeds for sowing exported to New Zealand.

(iv) **Phytosanitary requirements**
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.
The Hordeum seeds for sowing have been:
- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests, including the regulated insects and mites on MAF’s “Pest List for Hordeum” and seeds of regulated weed species.
AND
- sourced from a “Pest free area” or “Pest free place of production”, free from the named regulated bacteria (*Pseudomonas syringae* pv. *sphaceli*, *Rathayibacter tritici*, *Xanthomonas campestris* pv. *undulosa*) and viruses (*Barley mosaic virus*, *High plains virus*).
AND
   EITHER
- sourced from a “Pest free area” free from the named regulated fungi (*Cephalosporium gramineum*, *Fusarium longipes*).
   OR
- treated with one of the fungicide combinations described in MAF’s “Approved Treatments for Hordeum”;
AND
   EITHER
- sourced from a “Pest free area” free from *Tilletia controversa*
   OR
- sourced from a “Pest free place of production”, free from *Tilletia controversa*, **AND treated** with one of the fungicide combinations described in MAF’s “Approved Treatments for Hordeum”.
   OR
- a representative sample of 600 seeds, drawn from this consignment according to the International Seed Testing Association’s methodology, has been tested for *Tilletia*.
controversa, AND treated with one of the fungicide combinations described in MAF’s “Approved Treatments for Hordeum”.

(v) **Additional declarations to the phytosanitary certificate**
If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section (if applicable), and by providing the following additional declaration to the phytosanitary certificate:

"The Hordeum seeds for sowing in this consignment have been:
- sourced from a “Pest free area”, free from (name of the above regulated bacteria and viruses) ,
  and/or a “Pest free place of production”, free from (name of the above regulated bacteria and viruses) .
AND
- sourced from a “Pest free area”, free from (name of the above regulated fungi) ;
AND
  EITHER [choose ONE option]
- sourced from a “Pest free area”, free from Tilletia controversa,
  OR
- sourced from a “Pest free place of production”, free from Tilletia controversa,
  OR
- No spores of Tilletia controversa were found in a representative sample of 600 seeds drawn from this consignment."

**Approved Treatments for Hordeum**

**Fungicides**
One of the following treatments is required:

i) Carboxin at 0.8 g a.i. per kg of seed and Thiram at 0.8 g a.i. per kg of seed.
ii) Carboxin at 0.8 g a.i. per kg of seed and Imazalil at 0.05 g a.i. per kg of seed.
iii) Flutriafol at 0.05 g a.i. per kg of seed and Imazalil at 0.05 g a.i. per kg of seed.
iv) Triadimenol at 0.23 g a.i. per kg of seed, Imazalil 0.075 g per kg of seed and Fuberidazole 0.15g a.i per kg of seed.
v) Tebuconazole at 0.025 g a.i. per kg of seed and Imazalil at 0.05 g a.i. per kg of seed.

As required, MAF may evaluate other treatments and if effective, will approve these treatments and add them to this schedule.
Pest List for *Hordeum*

REGULATED PESTS (actionable)

**Insect**

**Insecta**

**Blattodea**

**Blattidae**

*Blatta orientalis*  
oriental cockroach

**Coleoptera**

**Curculionidae**

*Caulophilus oryzae*  
broadnosed grain weevil

**Dermestidae**

*Trogoderma granarium*  
khapra beetle

*Trogoderma grassmani*  
trogoderma beetle

*Trogoderma inclusum*  
trogoderma beetle

*Trogoderma irroratum*  
trogoderma beetle

*Trogoderma ornatum*  
trogoderma beetle

*Trogoderma simplex*  
dermestid beetle

*Trogoderma sternale*  
dermestid beetle

*Trogoderma variabile*  
warehouse beetle

**Languriidae**

*Pharaxonotha kirschii*  
Mexican grain beetle

**Tenebrionidae**

*Embaphion muricatum*  
false wireworm

*Latheticus oryzae*  
longheaded flour beetle

*Palorus ratzeburgi*  
smalleyed flour beetle

*Palorus subdepressus*  
depressed flour beetle

*Tribolium audax*  
American black flour beetle

*Tribolium destructor*  
dark flour beetle

**Lepidoptera**

**Tineidae**

*Haplotinea insectella*  
casemaking moth

*Tinea fictrix*  
casemaking moth

**Mite**

**Arachnida**

**Acarina**

**Acaridae**

*Acarophenax tribolii* [Animals Biosecurity]  
grain mite

**Eriophyidae**

*Aceria tosichella*  
wheat curl mite

*Aceria tulipae* [vector]  
wheat curl mite

**Pyemotidae**

*Pyemotes herfsi*  
straw itch mite

**Fungus**

**Basidiomycota: Ustomycetes**

**Tilletiaceae**

*Tilletia controversa*  
dwarf bunt
mitosporic fungi (Hyphomycetes)

**Hyphomycetales**

**Moniliaceae**

*Cephalosporium gramineum*  
stripe

**Tuberculariales**

**Tuberculariaceae**

*Fusarium longipes*  
fusarium head blight

**Bacterium**

**Corynebacteriaceae**

*Rathayibacter tritici*  
yellow ear rot

**Pseudomonadaceae**

*Pseudomonas syringae pv. striafaciens*  
bacterial stripe blight

*Xanthomonas campestris pv. undulosa*  
leaf streak

**Virus**

*Barley mosaic virus*  
-

*High plains virus*  
-
**Humulus**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Humulus lupulus*”.

**GENERAL CONDITIONS:**

**Countries:** All

**Quarantine Pests:** *Pseudoperonospora humuli; Verticillium albo-atrum*

**Entry Conditions:** Basic; PLUS

**A prior permit to import is required:**

- **PEQ:** Level 3
- **Minimum Period:** 1 growing season
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Juglans*”.

**GENERAL CONDITIONS:**

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

Quarantine Pests: *Gnomonia leptostyla*; Pyralidae; Tortricidae; *Trogoderma* spp; Cherry leaf roll virus

Entry Conditions: Basic; PLUS

A prior permit to import is required:

- **PEQ:** Level 1
- **Minimum Period:** 2 growing seasons
- **Isolation:** 50m

Phytosanitary Certificate Additional Declarations:

(a) "*Gnomonia leptostyla* and Cherry leaf roll virus are not known to occur in ______ (the country or state where the seed was produced) ______.”

OR

"The seed is from trees that have been inspected during the growing season according to appropriate procedures and no *Gnomonia leptostyla* or Cherry leaf roll virus was detected”.

(b) "The seed was fumigated with methyl bromide at ___ pressure for ___ hours at ___ g/m³ at a temperature of ___°C”.

Note: The pressure/time/rate temperature combination used is to be in accordance with the following scale:

(Continued next page)
### Juglans

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Rate (g/m³)</th>
<th>Time (hours)</th>
<th>Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 - 21°C</td>
<td>32</td>
<td>12</td>
<td>Atmospheric</td>
</tr>
<tr>
<td>21°C or above</td>
<td>16</td>
<td>12</td>
<td>Atmospheric</td>
</tr>
<tr>
<td>15 - 21°C</td>
<td>48</td>
<td>1.5</td>
<td>91 kpa vacuum</td>
</tr>
<tr>
<td>21°C or above</td>
<td>48</td>
<td>1.0</td>
<td>91 kpa vacuum</td>
</tr>
</tbody>
</table>
**Lablab**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Lablab*”.

**GENERAL CONDITIONS:**

**Countries:** All

**Quarantine Pests:** *Earias vitella*; *Maruca testulalis*; *Trogoderma* spp.

**Entry Conditions:** Basic; PLUS

**For seed In pods:**

**Phytosanitary Certificate Additional Declaration:**

"The pods were inspected before export and no caterpillars of *Earias vitella* or *Maruca testulalis* were found in a 600 unit sample".
Lavandula

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Lavandula”.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Coniothyrium lavandulae; Phoma lavandulae

Entry Conditions: Basic; PLUS

Phytosanitary Certificate Requirements:
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.
The Lavandula seeds for sowing have been:
– sourced from a “Pest free area” or “Pest free place of production”, free from Coniothyrium lavandulae and Phoma lavandulae

AND
- treated with one of the following fungicide combinations, either
  i) Benomyl at 2.5 g a.i. per kg seed
  (ii) Carbendazim at 2.5 g a.i. per kg seed
  (iii) Thiophanate methyl at 2.5 a.i. per kg seed

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

"Coniothyrium lavandulae and Phoma lavandulae are not known to occur in _____ (the country or state where the seed was produced) ______".

OR

"The seed is from a crop that has been inspected during the growing season according to appropriate procedures and no Coniothyrium lavandulae or Phoma lavandulae was detected".
**Lens**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Lens”.

1. **Entry conditions for Lens seeds for sowing from approved exporting countries**

   (i) **Pests of Lens**
   *Trogoderma granarium.*

   (ii) **Approved exporting countries**
   All countries

   (iii) **Documentation**
   **Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all consignments of *Lens* seeds for sowing imported into New Zealand.

   (iv) **Phytosanitary requirements**
   Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by the MAF have been undertaken.

   The *Lens* seeds for sowing have been:
   - inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests, including *Trogoderma granarium*.

   (v) **Additional declarations to the phytosanitary certificate**
   If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:
   "The *Lens* seeds for sowing in this consignment have:
   - inspected in accordance with appropriate official procedures and found to be free of *Trogoderma granarium*. **
Linum usitatissimum

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under “Linum usitatissimum”.

1. Species-specific entry conditions for Linum usitatissimum seeds for sowing from approved exporting countries

(i) Pests of Linum usitatissimum
   None

(ii) Approved exporting countries
   All countries

There are no specific entry conditions for Linum usitatissimum seeds for sowing except for the following genetically modified variety which is prohibited entry to New Zealand without HSNO approval:
   Linum usitatissimum var. FP967 (CDC Triffid)

(iii) Documentation:
   Importers should declare that the consignment is not known to contain seeds of the above prohibited variety.

A declaration form is available on the following page of this schedule.
DECLARATION FOR NON-GENETICALLY MODIFIED ORGANISMS

I……………………………………………………………… declare that pursuant to the requirements set out in the Seed for Sowing Import Health Standard, that the Linum usitatissimum seeds for sowing being imported are not known to contain genetically modified organisms.

Genetically modified organism means, unless expressly provided otherwise by regulations, any organism in which any of the genes or any other genetic material have been modified by in vitro techniques or are inherited or otherwise derived, through any number of replications, from any genes or other genetic material which has been modified by in vitro techniques (as defined by the New Zealand HSNO Act 1996).

Signed by (print name):

Company Name and Details (if appropriate):

Signature:

Date:

Warning: Any person who knowingly makes a statement of information or a declaration that is false or misleading in a material particular may on summary conviction, be sentenced to a term of imprisonment and/or a fine not exceeding $500,000.00.
**Lithocarpus densiflorus**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Lithocarpus densiflorus*”.

**GENERAL CONDITIONS:**

For the approved plant species for which NO species specific import health standards have been developed, the following conditions apply:

**Countries:** Australia, Canada, Germany, India, Israel, Japan, Mexico, Tunisia, UK, USA

**Quarantine Pests:** *Ceratocystis fagacearum*; Tortricidae

**Entry Conditions:** Basic; PLUS

1. **A prior permit to import is required:**

   **PEQ:** Level 1  
   **Minimum Period:** 1 growing season  
   **Isolation:** 50 m

2. **Phytosanitary Certificate Additional Declarations:**

   "*Ceratocystis fagacearum* is not known to occur in _____ (the country or state where the seed was produced) _____".

   OR

   (i) "Seed has been collected from trees that have been officially inspected for disease caused by *Ceratocystis fagacearum* and no disease was detected".

   (ii) "The seed has been treated with _____ (insert one of the options below) _____ at 2g a.i. per kg seed."

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

- captan
- thiram
**Livistona**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Livistona”.

1. **Entry conditions for Livistona seeds for sowing from approved exporting countries**

   (i) *Pests of Livistona*
   
   **Coconut cadang-cadang viroid**
   
   **Note:** Seed covered in a fleshy pericarp will not be permitted entry into New Zealand.

   (ii) *Approved exporting countries*
   
   All countries except Guam, the Philippines and the Solomon Islands.

   (iii) *Documentation*
   
   **Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all consignments of Livistona seeds for sowing imported into New Zealand.

   (iv) *Phytosanitary requirements*
   
   Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by the MAF have been undertaken.
   
   The Livistona seeds for sowing have:
   
   – been inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.
   
   AND
   
   – been produced in an approved country and have not been produced in Guam, the Philippines or the Solomon Islands.
   
   AND
   
   – been produced in a “Pest free area”, free from Coconut cadang-cadang viroid.

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

   "The Livistona seeds for sowing in this consignment have:

   – been produced in an approved country and have not been produced in Guam, the Philippines or the Solomon Islands.
   
   AND
   
   – been sourced from a “Pest free area”, free from Coconut cadang-cadang viroid."
**Lophophora williamsii**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.06 under *Lophophora williamsii*”.

**GENERAL CONDITIONS:**

**Countries:** All

**Entry Conditions:** Basic; PLUS:

**Import permit and licence:** an import permit and a licence to import controlled drugs are both required. Before applying for an import permit from the Ministry of Agriculture and Forestry, the importer must obtain a licence to import controlled drugs from:

```
Director General of Health
Ministry of Health
P O Box 5013
Wellington
Attention: Advisor, Controlled Drug Licensing

Telephone: 04 496 2438
```
**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Lotus*”.

**GENERAL CONDITIONS:**

**Countries:** All

**Quarantine Pests:** *Cercospora loti; Trogoderma* spp.

**Entry Conditions:** Basic; PLUS

**Phytosanitary Certificate Additional Declaration:**

"*Cercospora loti* is not known to occur in _____ (the country or state where the seed was produced) _____."

OR

"The seed is from a crop that has been inspected during the growing season according to appropriate procedures and no *Cercospora loti* was detected".
Macadamia

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Macadamia*”.

**GENERAL CONDITIONS:**

**Countries:** All

**Quarantine Pests:** *Cryptophlebia ombrodelta; Deudorix epijarbos; Dichocrocis punctiferalis; Isotenes miserana*

**Entry Conditions:** Basic; PLUS

**Phytosanitary Certificate Additional Declaration:**

"The seed was fumigated with methyl bromide at ___ pressure for ___ hours at ___ g/m³ at a temperature of ___ °C".

**Note:** The pressure/time/rate temperature combination used is to be in accordance with the following scale:

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Rate (g/m³)</th>
<th>Time (hours)</th>
<th>Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 - 21°C</td>
<td>32</td>
<td>12</td>
<td>atmospheric</td>
</tr>
<tr>
<td>21°C or above</td>
<td>16</td>
<td>12</td>
<td>atmospheric</td>
</tr>
<tr>
<td>15 - 21°C</td>
<td>48</td>
<td>1.5</td>
<td>91 kpa vacuum</td>
</tr>
<tr>
<td>21°C or above</td>
<td>48</td>
<td>1.0</td>
<td>91 kpa vacuum</td>
</tr>
</tbody>
</table>
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Malus”.

1. Entry conditions for Malus seeds for sowing from approved exporting countries

(i) Pests of Malus
Apple scar skin viroid; Monilinia fructigena; Sowbane mosaic virus; Tomato bushy stunt virus.

(ii) Approved exporting countries
All countries

(iii) Documentation
Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all consignments of Malus seeds for sowing imported into New Zealand.
Import permit: an import permit must be obtained from the MAF prior to the Malus seeds arriving at the New Zealand border.

(iv) Phytosanitary requirements
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The Malus seeds for sowing have been
– inspected in accordance with appropriate official procedures and found to be free of the regulated pests (regulated weed species) specified by MAF.

(v) Post-entry quarantine requirements
All Malus seeds must be imported under permit into post-entry quarantine in a Level 3 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON: Specification for the Registration of a Plant Quarantine or Containment Facility, and Operator. The seed will be grown for a minimum period of 6 months and will be tested or inspected for regulated pests at the expense of the importer.
Malus

Inspection, testing and treatment requirements for Malus

<table>
<thead>
<tr>
<th>ORGANISM TYPES</th>
<th>MAF ACCEPTABLE METHODS (See notes below)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fungi</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Monilinia fructigena</em></td>
<td>Growing season inspection in PEQ for disease symptom expression.</td>
<td></td>
</tr>
<tr>
<td>Viroid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virus</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Sowbane mosaic virus</em></td>
<td>Herbaceous indicators Ca &amp; Cq.</td>
<td></td>
</tr>
<tr>
<td><em>Tomato bushy stunt virus</em></td>
<td>ELISA (Agdia) or PCR AND herbaceous indicators Cq, Nc.</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. Indicator hosts: *Chenopodium amaranticolor* (Ca), *C. quinoa* (Cq) and *Nicotiana clevelandi* (Nc).
2. Enzyme linked immunosorbent assay (ELISA).
3. Polymerase chain reaction (PCR).
4. With prior notification, MAF will accept other internationally recognised testing methods.
5. For bioassay and ELISA, plants shall be sampled from at least two positions on every stem including a young, fully expanded leaflet at the top of each stem and an older leaflet from a midway position.
6. Indicator plants must be grown under appropriate temperatures.
7. Indicator plants must be shaded for 12-24 hrs prior to inoculation.
8. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks.
9. Inspect plants at least once per week for signs of pest and disease.
10. Inspect inoculated herbaceous indicator plants at least twice per week for symptoms of virus infection.
11. PCR and ELISA need to be validated using positive controls/reference material prior to use in quarantine testing.
12. At least two plants of each indicator species unless otherwise stated must be used in mechanical inoculation tests.
13. Positive and negative controls must be used in ELISA tests.
14. Testing must be carried out on plants while they are in active growth.
15. Positive and negative controls (including a blank water control) must be used in PCR. Ideally positive internal controls and a negative plant control should be used. Internal controls in PCR tests are important to avoid the risk of false negatives.
Reference

Mangifera

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Mangifera”.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Sternochetus mangiferae; Xanthomonas campestris pv. mangiferae-indicae

Entry Conditions: Basic; PLUS

1. A prior permit to import is required:

   PEQ: Level 1
   Minimum Period: 2 growing seasons
   Isolation: 50 m

2. Phytosanitary Certificate Additional Declaration:

   "The trees from which the seed was harvested were inspected during the growing season Xanthomonas campestris pv. mangiferae-indicae was not detected".
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Medicago”.

1. Entry conditions for Medicago seeds for sowing from approved exporting countries

(i) Pests of Medicago
Pea early browning virus; Peanut stunt virus; Trogoderma granarium; Xanthomonas campestris pv. alfalfa.

(ii) Approved exporting countries
All countries

(iii) Documentation
Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all consignments of Medicago seeds for sowing imported into New Zealand.

Genetically modified seed test certificate: MAF requires that all consignments of Medicago sativa (alfalfa/lucerne) that are imported into New Zealand are tested for the presence of unapproved genetically modified seeds (see (vi) in this schedule).

(iv) Phytosanitary requirements
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by the MAF have been undertaken. The Medicago seeds for sowing have been:

– inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests, including Trogoderma granarium.

AND

– sourced from a “Pest free area” or “Pest free place of production”, free from Pea early browning virus, Peanut stunt virus and Xanthomonas campestris pv. alfalfa.

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

"The Medicago seeds for sowing in this consignment have been:

– inspected in accordance with appropriate official procedures and found to be free of Trogoderma granarium.

AND

– sourced from a “Pest free area” or “Pest free place of production”, free from Pea early browning virus, Peanut stunt virus and Xanthomonas campestris pv. alfalfa.

(vi) Sampling and testing Medicago sativa seed consignments for adventitious presence of unapproved genetically modified seeds
MAF requires all consignments of Medicago sativa (alfalfa/lucerne) imported into New Zealand to be representatively sampled, tested, and found to be free of unapproved GM seeds. Alternatively, the seeds must be sourced from companies with MAF approved quality assurance systems which demonstrate equivalence with PCR testing every consignment of GM
Medicago sativa. Any consignment that is found to contain unapproved GM seeds will not be permitted to enter New Zealand and will be re-shipped or destroyed. Complete guidelines for sampling and testing for the presence of GM seeds are specified in the Protocol for Testing Seed Imports for the Presence of Genetically Modified Seed. The protocol includes three further options for importers of small volumes of seed (defined as less than 100g for Medicago sativa) for cultivar trials and multiplication.

Testing may be conducted by facilities approved by MAF under the requirements specified in the Standard “Approval of Facilities for Genetically Modified Organism Testing”. If testing is conducted offshore, a copy of the completed test certificate (from a MAF-approved facility) must accompany the consignment imported into New Zealand. MAF will examine the test certificates on arrival to confirm that they reconcile with the actual consignment. Importers must ensure that MAF has access to all pertinent testing records held by MAF-approved testing facilities for audit purposes.

If consignments arrive at the New Zealand border without having been tested for the presence of unapproved GM seeds, MAF will offer the importer the options of re-shipping or destroying the consignment, or having the consignment sampled and tested as above at the importer’s expense. Any consignment held at the New Zealand border that is tested and found to contain unapproved GM seeds will not be permitted to enter New Zealand and will be re-shipped or destroyed.

The protocol and a list of MAF-approved facilities for testing for the presence of GM material in Medicago sativa are located at the following address on the MAF web site:

Nicotiana tabacum

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Nicotiana tabacum”.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Peronospora tabacina

Entry Conditions: Basic; PLUS

OPTION 1:

Phytosanitary Certificate Additional declarations:

"Peronospora tabacini is not known to occur in _____ (the country or state where the seed was produced) ______".

OR

(i) "The seed is from a crop that has been inspected during the growing season and no Peronospora tabacini was detected".

(ii) "The seed was treated with ______ (insert one of the options below) ______".

Note: One of the following fungicide combinations is to be used:

(i) metalaxyl at 0.7g a.i. per kg seed and captan at 0.7g a.i. per kg seed.

(ii) metalaxyl at 0.7g a.i. per kg seed and thiram at 1g a.i. per kg seed.

(Continued next page)
OPTION 2:

1. The seed is to be untreated before despatch.

2. The seed is to be consigned to a Ministry of Agriculture and Forestry Biosecurity Authority approved Seed Testing Station to test for *Peronospora tabacini*, at the expense of the importer.

   (a) If the tests are negative the seed is to be treated with one of the following fungicide combinations before release to the importer:

   (i) metalaxyl at 0.7 g a.i. per kg seed and captan at 0.7 g a.i. per kg seed.

   (ii) metalaxyl at 0.7 g a.i. per kg seed and thiram at 1 g a.i. per kg seed.

   (b) If the tests are positive the seed is to be reshipped or destroyed.

OPTION 3:

A prior permit to import is required:

PEQ: Level 3
Minimum Period: 1 growing season

Nicotiana tabacum
**Oxyria**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Oxyria*”.

**GENERAL CONDITIONS:**

**Countries:** All

**Quarantine Pests:** *Ustilago vinosa*

**Entry Conditions:** Basic; PLUS

**Phytosanitary Certificate Requirements:**
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken. The *Oxyria* seeds for sowing have been:
- treated with one of the following fungicide combinations, either
  i) Carboxin at 0.8g a.i. per kg seed and thiram at 1g a.i. per kg seed.
  (ii) Carboxin at 0.8g a.i. per kg seed and captan at 0.7g a.i. per kg seed.
  (iii) Imazalil at 80mg a.i. per kg seed and triadimenol at 220mg a.i. per kg seed.
  (iv) Imazalil at 80mg a.i. per kg seed and flutriafol at 80mg a.i. per kg seed.

**Phytosanitary Certificate Additional Declarations:**
If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by **recording the treatments** applied in the “Disinfestation and/or Disinfection Treatment” section. No additional declarations are required.
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Panicum”.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Peronosclerospora sorghi; Sclerospora graminicola; Trogoderma* spp.; *Ustilaginales*

Entry Conditions: Basic; PLUS

Phytosanitary Certificate Requirements: Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken. The Panicum seeds for sowing have been:
- sourced from a “Pest free area” or “Pest free place of production”, free from *Peronosclerospora sorghi* and *Sclerospora graminicola*

AND
- treated with one of the following fungicide combinations, either
  - i) Carboxin at 0.8g a.i. per kg seed and thiram at 1g a.i. per kg seed.
  - ii) Carboxin at 0.8g a.i. per kg seed and captan at 0.7g a.i. per kg seed.
  - iii) Imazalil at 80mg a.i. per kg seed and triadimenol at 220mg a.i. per kg seed.
  - iv) Imazalil at 80mg a.i. per kg seed and flutriafol at 80mg a.i. per kg seed.

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

"*Peronosclerospora sorghi* and *Sclerospora graminicola* are not known to occur in ______ (the country or state where the seed was produced) ______.”

OR

"The seed is from a crop that has been inspected during the growing season according to appropriate procedures and no *Peronosclerospora sorghi* or *Sclerospora graminicola* was detected".
**Papaver somniferum**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.06 under *Papaver somniferum*”.

**GENERAL CONDITIONS:**

**Countries:** All

**Entry Conditions:** Basic; PLUS

Importers of *Papaver somniferum* seed must obtain written approval from the Ministry of Health prior to importation. Before applying for approval importers must provide a letter of declaration stating the intended use of the seed to:

Director, General of Health  
Ministry of Health  
P O Box 5013  
Wellington  
Attention: Advisor, Controlled Drug Licensing  
Telephone: 04 496 2018
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Persea”.

GENERAL CONDITIONS:

Countries: USA

Quarantine Pests: Avocado sunblotch viroid; Blackstreak

Entry Conditions: Basic; PLUS

A prior permit to import is required:

PEQ: Level 3
Minimum Period: 1 growing season
**Phaseolus**

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Phaseolus”.

**Entry conditions for Phaseolus seeds for sowing from approved exporting countries**

These requirements are in addition to the Basic requirements set out in Section 2 of the standard.

(i) **Pests of Phaseolus**
Refer to “Pest List for Phaseolus”.

(ii) **Approved exporting countries**
Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom and United States of America.

(iii) **Documentation**
A completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all Phaseolus seeds for sowing exported to New Zealand.

(iv) **Phytosanitary requirements**
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The Phaseolus seeds for sowing have been:
- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests, including the regulated insects on MAF’s “Pest List for Phaseolus” and seeds of regulated weed species.

AND
- sourced from a “Pest free area” or “Pest free place of production”, free from the named regulated bacteria (*Curtobacterium flaccumfaciens* pv. *flaccumfaciens*) and viruses (*Artichoke yellow ringspot virus*, *Bean common mosaic virus* [blackeye cowpea mosaic strain], *Broad bean mottle virus*, *Cowpea severe mosaic virus*, *Pea early-browning virus*, *Peanut mottle virus*, *Peanut stunt virus*, *Southern bean mosaic virus*, *Tomato black ring virus*).

AND
- **EITHER**
  - sourced from a “Pest free area” free from the named regulated fungi (*Cochliobolus miyabeanus*, *Elsinoe phaseoli*, *Phoma exigua* var. *diversispora*).  
  OR
  - treated with one of the fungicide combinations described in MAF’s “Approved Treatments for Phaseolus”.
(v) **Additional declarations to the phytosanitary certificate**

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

"The *Phaseolus* seeds for sowing in this consignment have been:

- sourced from a “Pest free area”, free from ____*(name of the regulated bacteria and viruses)______,
  and/or a “Pest free place of production”, free from ______*(name of the regulated bacteria and viruses)______.

AND

- [if appropriate] sourced from a “Pest free area”, free from ______*(name of the regulated fungi)______.

"
Pest List for *Phaseolus*

**REGULATED PESTS (actionable)**

**Insect**

**Insecta**

**Coleoptera**

**Bostrichidae**

- *Prostephanus truncatus*  
  larger grain borer

**Bruchidae**

- *Acanthoscelides argillaceus*  
  bean weevil
- *Acanthoscelides obvelatus*  
  bruchid beetle
- *Bruchidius atrolineatus*  
  seed beetle
- *Bruchidius incarnatus*  
  seed beetle
- *Bruchus pisorum*  
  pea weevil
- *Callosobruchus analis*  
  cowpea weevil
- *Callosobruchus maculatus*  
  cowpea weevil
- *Callosobruchus phaseoli*  
  cowpea weevil
- *Zabrotes subfasciatus*  
  Mexican bean weevil

**Lepidoptera**

**Pyralidae**

- *Etiella grisea*  
  pod borer
- *Etiella grisea drososcia*  
  pod borer
- *Etiella zinckenella*  
  limabean pod borer

**Tortricidae**

- *Cydia fabivora*  
  pod moth
- *Matsumuraeses phaseoli*  
  Adzuki pod worm

**Fungus**

**Ascomycota**

**Dothideales**

**Elsinoaceae**

- *Elsinoe phaseoli*  
  scab

**Pleosporaceae**

- *Cochliobolus miyabeanus* (anamorph *Bipolaris oryzae*)

**mitosporic fungi (Coelomycetes)**

**Sphaeropsidales**

**Sphaerioidaceae**

- *Phoma exigua var. diversispora*  
  ascochyta leaf spot

**Bacterium**

**Corynebacteriaceae**

- *Curtobacterium flaccumfaciens pv. flaccumfaciens*  
  bacterium wilt

**Virus**

- *Artichoke yellow ringspot virus*
- *Bean common mosaic virus* [blackeye cowpea mosaic strain]
- *Broad bean mottle virus*
<table>
<thead>
<tr>
<th>Virus Type</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cowpea severe mosaic virus</td>
<td>-</td>
</tr>
<tr>
<td>Pea early-browning virus</td>
<td>-</td>
</tr>
<tr>
<td>Peanut mottle virus</td>
<td>-</td>
</tr>
<tr>
<td>Peanut stunt virus</td>
<td>-</td>
</tr>
<tr>
<td>Southern bean mosaic virus</td>
<td>-</td>
</tr>
<tr>
<td>Tomato black ring virus</td>
<td>-</td>
</tr>
</tbody>
</table>
Approved Treatments for *Phaseolus*

**Fungicides**

One of the following treatments is required:

i) Metalaxyl-M at 0.35 g a.i per kg of seed, fludioxonil at 0.1 g a.i per kg of seed and cymoxanil 0.2 g a.i per kg of seed.

ii) Fosetyl aluminium at 1.53 g a.i per kg of seed, thiram at 0.5 g a.i per kg of seed and thiabendazole at 0.37 g a.i per kg of seed.

As required, MAF may evaluate other treatments and if effective, will approve these treatments and add them to this schedule.
Phoenix

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Phoenix”.

1. Entry conditions for *Phoenix* seeds for sowing from approved exporting countries

   (i) *Pests of Phoenix*

   *Coconut cadang-cadang viroid and Fusarium oxysporum f. sp. canariensis*

   **Note:** Seed covered in a fleshy pericarp will not be permitted entry into New Zealand.

   (ii) *Approved exporting countries*

   All countries except Guam, the Philippines and the Solomon Islands.

   (iii) *Documentation*

   **Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all consignments of *Phoenix* seeds for sowing imported into New Zealand.

   (iv) *Phytosanitary requirements*

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

   1. The *Phoenix* seeds for sowing have:
      - been inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.
      AND
      - been produced in an approved country and have not been produced in Guam, the Philippines or the Solomon Islands.

   2. If the consignment contains *Phoenix canariensis*, *Phoenix dactylifera* or *Phoenix reclinata* seeds for sowing, these seeds have:
      - been produced in a “Pest free area”, free from *Fusarium oxysporum* f. sp. Canariensis.

   (v) *Additional declarations to the phytosanitary certificate*

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

   "The *Phoenix* seeds for sowing in this consignment have:
   - been produced in an approved country and have not been produced in Guam, the Philippines or the Solomon Islands.

   If the consignment contains *Phoenix canariensis*, *Phoenix dactylifera* or *Phoenix reclinata* seeds for sowing, the following further additional declaration is also required:

   "The *Phoenix canariensis*, *Phoenix dactylifera* or *Phoenix reclinata* seeds for sowing in this consignment have been produced in a “Pest free area”, free from *Fusarium oxysporum* f. sp. canariensis."
Please refer to the Generic Import Health Standard for Seed for Sowing of *Pinus* spp. from All Countries - 10 July 2002 located at the following website:

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Pisum”.

Entry conditions for Pisum seeds for sowing from approved exporting countries

These requirements are in addition to the Basic requirements set out in Section 2 of the standard.

(i) *Pests of Pisum*
Refer to “Pest List for Pisum”.

(ii) *Approved exporting countries*
Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, Taiwan, United Kingdom and United States of America.

(iii) *Documentation*
A completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all Pisum seeds for sowing exported to New Zealand.

(iv) *Phytosanitary requirements*
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.
The Pisum seeds for sowing have been:
- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests, including the regulated insects on MAF’s “Pest List for Pisum” and seeds of regulated weed species.
AND
- sourced from a “Pest free area” or “Pest free place of production”, free from the named regulated viruses (*Broad bean mottle virus*, *Broad bean stain virus*, *Clover yellow mosaic virus*, *Pea early-browning virus*, *Pea enation mosaic virus*, *Peanut mottle virus*, *Peanut stunt virus*).
AND
  EITHER
  - sourced from a “Pest free area” free from *Cladosporium cladosporioides* f. sp. *pisicola*.
  OR
  - treated with one of the fungicide combinations described in MAF’s “Approved Treatments for Pisum”.

*Pisum*
(v) **Additional declarations to the phytosanitary certificate**

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

"The *Pisum* seeds for sowing in this consignment have:

- sourced from a “Pest free area”, free from ____ (name of the regulated viruses) ____, and/or a “Pest free place of production”, free from ____ (name of the regulated viruses) ____.

AND

- [if appropriate] sourced from a “Pest free area”, free from *Cladosporium cladosporioides* f. sp. *pisicola*.

(vi) **Pea soak testing on arrival in New Zealand**

For lots of pea seed over 2kg, a small sample of pea seeds (approx 100 grams per lot) will be taken and soaked with water on arrival to verify that the seed is free from any regulated pests (e.g. pea weevil larvae).

**Note:** Small samples of pea seed (< 2kg) for research purposes do not require the soak test but still require dry inspection.
Pest List for *Pisum*

REGULATED PESTS (actionable)

**Insect**

**Insecta**

**Coleoptera**

**Bruchidae**
- *Acanthoscelides zeteki* — bruchid beetle
- *Bruchidius atrolineatus* — seed beetle
- *Bruchidius incarnatus* — seed beetle
- *Bruchidius quinqueguttatus* — bruchid beetle
- *Bruchus affinis* — bruchid beetle
- *Bruchus emarginatus* — Mediterranean pulse beetle
- *Bruchus ervi* — bruchid beetle
- *Bruchus lentis* — bruchid beetle
- *Bruchus pisorum* — pea weevil
- *Bruchus rufimanus* — broad bean weevil
- *Bruchus tristis* — bruchid beetle
- *Callosobruchus analis* — cowpea weevil
- *Callosobruchus chinensis* — oriental cowpea weevil
- *Callosobruchus maculatus* — cowpea weevil

**Dermestidae**
- *Trogoderma granarium* — khapra beetle

**Lepidoptera**

**Lycaenidae**
- *Euchrysops cnejus* — blue butterfly

**Noctuidae**
- *Spodoptera praefica* — western yellowstriped armyworm

**Pyralidae**
- *Etiella zinckenella* — limabean pod borer

**Tortricidae**
- *Cydia nigricana* — pea moth

**Fungus**

**mitosporic fungi (Hyphomycetes)**

**Hyphomycetales**

**Dematiaceae**
- *Cladosporium cladosporioides f. sp. pisicola* — cladosporium blight

**Virus**
- *Broad bean mottle virus* — -
- *Broad bean stain virus* — -
- *Clover yellow mosaic virus* — -
- *Pea early-browning virus* — -
- *Pea enation mosaic virus* — -
*Peanut mottle virus* - 
*Peanut stunt virus* -
Approved Treatments for Pisum

**Fungicides**

One of the following treatments is required:

i) Metalaxyl-M at 0.35 g a.i per kg of seed, fludioxonil at 0.1 g a.i per kg of seed and cymoxanil 0.2 g a.i per kg of seed.

ii) Fosetyl aluminium at 1.53 g a.i per kg of seed, thiram at 0.5 g a.i per kg of seed and thiabendazole at 0.37 g a.i per kg of seed.

iii) Metalaxyl-M at 0.35 g a.i per kg of seed, fludioxonil at 0.1 g a.i per kg of seed and cymoxanil 0.2 g a.i per kg of seed.

As required, MAF may evaluate other treatments and if effective, will approve these treatments and add them to this schedule.
**Populus**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Populus*”.

**GENERAL CONDITIONS:**

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

**Quarantine Pests:** *Marssonina* spp.

**Entry Conditions:** Basic; PLUS

**A prior permit to import is required:**

**PEQ:** Level 2 and Level 1

**Minimum Period:** 2 growing seasons as follows:
- in a Level 2 quarantine facility for the first season
- in a Level 1 quarantine facility subsequently

**Isolation:** 50m when planted outside


Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Prunus”.

1. Entry conditions for Prunus seeds for sowing from approved exporting countries

(i) Pests of Prunus
Eurytoma amygdali; Cherry leaf roll virus [strains not in New Zealand]; Cherry rasp leaf virus; Prune dwarf virus [strains not in New Zealand]; Prunus necrotic ringspot virus [strains not in New Zealand]; Plum pox virus; Tomato bushy stunt virus.

(ii) Approved exporting countries
All countries

(iii) Documentation
Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all consignments of Prunus seeds for sowing imported into New Zealand.
Import permit: an import permit must be obtained from the MAF prior to the Prunus seeds arriving at the New Zealand border.

(iv) Phytosanitary requirements
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The Prunus seeds for sowing have been
– inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests, including Eurytoma amygdali.

(v) Additional declarations to the phytosanitary certificate
If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by providing the following additional declarations to the phytosanitary certificate:
"The Prunus seeds for sowing in this consignment have been:
– inspected in accordance with appropriate official procedures and found to be free of Eurytoma amygdali.

(vi) Post-entry quarantine requirements
All Prunus seeds must be imported under permit into post-entry quarantine in a Level 3 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON: Specification for the Registration of a Plant Quarantine or Containment Facility, and Operator. The seed will be grown for a minimum period of 6 months and will be tested or inspected for regulated pests at the expense of the importer.
### Inspection, testing and treatment requirements for *Prunus*

<table>
<thead>
<tr>
<th>ORGANISM TYPES</th>
<th>MAF ACCEPTABLE METHODS (See notes below)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fungi</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Monilinia fructigena</em></td>
<td>Growing season inspection in PEQ for disease symptom expression.</td>
<td></td>
</tr>
<tr>
<td><strong>Virus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Cherry leaf roll virus</em></td>
<td>ELISA (Agdia) or PCR AND herbaceous indicators Cq, Cs.</td>
<td></td>
</tr>
<tr>
<td><em>Cherry rasp leaf virus</em></td>
<td>ELISA or PCR using the method of James <em>et al.</em> (1991) AND herbaceous indicators Cq, Cs.</td>
<td></td>
</tr>
<tr>
<td><em>Plum pox virus</em></td>
<td>Durviz ELISA (Agdia) or PCR using the method of Wetzel <em>et al.</em> (1991) AND herbaceous indicators Nc and Cf.</td>
<td></td>
</tr>
<tr>
<td><em>Prunus necrotic ringspot virus</em></td>
<td>ELISA (Agdia) or PCR using the method of Spiegel <em>et al.</em> (1996) AND herbaceous indicators Cs.</td>
<td></td>
</tr>
<tr>
<td><em>Tomato bushy stunt virus</em></td>
<td>ELISA (Agdia) or PCR AND herbaceous indicators Cq, Nc.</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
1. Indicator hosts: *Chenopodium foetidum* (Cf), *Chenopodium quinoa* (Cq), *Cucumis sativus* (Cs) and *Nicotiana clevelandii* (Nc).
2. Enzyme linked immunosorbent assay (ELISA).
3. Polymerase chain reaction (PCR).
4. With prior notification, MAF will accept other internationally recognised testing methods.
5. For bioassay and ELISA, plants shall be sampled from at least two positions on every stem including a young, fully expanded leaflet at the top of each stem and an older leaflet from a midway position.
6. Indicator plants must be grown under appropriate temperatures.
7. Indicator plants must be shaded for 12-24 hrs prior to inoculation.
8. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks.
9. Inspect plants at least once per week for signs of pest and disease.
10. Inspect inoculated herbaceous indicator plants at least twice per week for symptoms of virus infection.
11. At least two plants of each indicator species unless otherwise stated must be used in
mechanical inoculation tests.

12. Positive and negative controls must be used in ELISA tests.

13. Testing must be carried out on plants while they are in active growth.

14. Positive and negative controls (including a blank water control) must be used in PCR. Ideally positive internal controls and a negative plant control should be used. Internal controls in PCR tests are important to avoid the risk of false negatives.

15. ELISA or PCR for PPV must test negative before herbaceous indicator tests are conducted.

References


Please refer to the Generic Import Health Standard for Seed for Sowing of *Pseudotsuga menziesii* from All Countries - 02 March 2001

Psophocarpus

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under *Psophocarpus*”.

**GENERAL CONDITIONS:**

**Countries:** All

**Quarantine Pests:** *Etiella* spp.; *Maruca testulalis*; *Trogoderma* spp.

**Entry Conditions:** Basic; PLUS

**For Seed in Pods:**

**Phytosanitary Certificate Additional Declaration:**

"The pods were inspected before export and no caterpillars of *Etiella* spp. or *Maruca testulalis* were found in a 600 unit sample".
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Pyrus”.

1. Entry conditions for Pyrus seeds for sowing from approved exporting countries

(i) Pests of Pyrus

Apple scar skin viroid; Monilinia fructigena; Tomato bushy stunt virus; Pear bark measles.

(ii) Approved exporting countries

All countries

(iii) Documentation

Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all consignments of Pyrus seeds for sowing imported into New Zealand.

Import permit: an import permit must be obtained from the MAF prior to the Pyrus seeds arriving at the New Zealand border.

(iv) Phytosanitary requirements

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

The Pyrus seeds for sowing have been:

– inspected in accordance with appropriate official procedures and found to be free of the regulated pests (including regulated weed species) specified by MAF.

(v) Post-entry quarantine requirements

All Pyrus seeds must be imported under permit into post-entry quarantine in a Level 3 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON: Specification for the Registration of a Plant Quarantine or Containment Facility, and Operator. The seed will be grown for a minimum period of 6 months and will be tested or inspected for regulated pests at the expense of the importer.
**Inspection, testing and treatment requirements for Pyrus**

<table>
<thead>
<tr>
<th>ORGANISM TYPES</th>
<th>MAF ACCEPTABLE METHODS (See notes below)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fungi</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monilinia fructigena</td>
<td>Growing season inspection in PEQ for disease symptom expression.</td>
<td></td>
</tr>
<tr>
<td><strong>Viroid</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apple scar skin viroid</td>
<td>PCR using the method of Hadidi et al. (1990).</td>
<td></td>
</tr>
<tr>
<td><strong>Virus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tomato bushy stunt virus</td>
<td>ELISA (Agdia) or PCR AND herbaceous indicators Cq, Nc.</td>
<td></td>
</tr>
<tr>
<td><strong>Unknown etiology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pear bark measles</td>
<td>Growing season inspection in PEQ for disease expression.</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. Indicator hosts: *Chenopodium quinoa* (Cq), and *Nicotiana clevelandi* (Nc).
2. Enzyme linked immunosorbent assay (ELISA).
3. Polymerase chain reaction (PCR).
4. With prior notification, MAF will accept other internationally recognised testing methods.
5. For bioassay and ELISA, plants shall be sampled from at least two positions on every stem including a young, fully expanded leaflet at the top of each stem and an older leaflet from a midway position.
6. Indicator plants must be grown under appropriate temperatures.
7. Indicator plants must be shaded for 12-24 hrs prior to inoculation.
8. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks.
9. Inspect plants at least once per week for signs of pest and disease.
10. Inspect inoculated herbaceous indicator plants at least twice per week for symptoms of virus infection.
11. PCR and ELISA need to be validated using positive controls/reference material prior to use in quarantine testing.
12. At least two plants of each indicator species unless otherwise stated must be used in mechanical inoculation tests.
13. Positive and negative controls must be used in ELISA tests.
14. Testing must be carried out on plants while they are in active growth.
15. Positive and negative controls (including a blank water control) must be used in PCR. Ideally positive internal controls and a negative plant control should be used. Internal controls in PCR tests are important to avoid the risk of false negatives.
Reference
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Quercus”.

GENERAL CONDITIONS:

Countries: Australia, Canada, Germany, India, Israel, Japan, Mexico, Spain, Tunisia, UK, USA

Quarantine Pests: *Ceratocystis fagacearum*; *Cryphonectria parasitica*; Curculionidae

Entry Conditions: Basic; PLUS

1. A prior permit to import is required:

2. OPTION 1:

   PEQ: Level 1
   Minimum Period: 1 growing season
   Isolation: 50 m

Phytosanitary Certificate Additional Declarations:

(a) "*Ceratocystis fagacearum* is not known to occur in ______ (the country or state where the seed was produced) ______".

(b) "The seed has been taken from trees that have been officially inspected during active growth and no disease caused by *Cryphonectria parasitica* was detected".

(c) "The seed has been treated with ______ (insert one of the options below) ______ at 2g a.i. per kg seed."

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

   captain
   thiram

(Continued next page)
"The seed was fumigated with methyl bromide at ___ pressure for ___ hours at ___ g/m³ at a temperature of ___ °C.

**Note:** The pressure/time/rate temperature combination used is to be in accordance with the following scale:

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Rate (g/m³)</th>
<th>Time (hours)</th>
<th>Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 - 21°C</td>
<td>32</td>
<td>12</td>
<td>atmospheric</td>
</tr>
<tr>
<td>21°C or above</td>
<td>16</td>
<td>12</td>
<td>atmospheric</td>
</tr>
<tr>
<td>15 - 21°C</td>
<td>48</td>
<td>1.5</td>
<td>91 kpa vacuum</td>
</tr>
<tr>
<td>21°C or above</td>
<td>48</td>
<td>1.0</td>
<td>91 kpa vacuum</td>
</tr>
</tbody>
</table>

**OPTION 2:**

**PEQ:** Level 3  
**Minimum Period:** 1 growing season

**Phytosanitary Certificate Additional Declaration:**

"The seed has been taken from trees that have been officially inspected during active growth and no diseases caused by *Ceratocystis fagacearum* or *Cryphonectria parasitica* were detected".
**Ribes**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Ribes”.

**Entry conditions for Ribes seeds from approved countries**

These requirements are in addition to the Basic requirements set out in Section 2 of the standard.

(i) *Pests of Ribes*
Refer to the pest list.

(ii) *Approved exporting countries*
All countries

(iii) *Documentation*

**Phytosanitary certificate:** a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all consignments of Ribes seed for sowing imported into New Zealand.

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

(iv) *Phytosanitary requirements*
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The Ribes seeds for sowing have been:
- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests.

(v) *Additional declarations to the phytosanitary certificate*
No additional declarations are required.

(vi) *Post-entry quarantine*

**PEQ:** All Ribes seeds must be imported under permit into post-entry quarantine in a level 3 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON *Specification for the registration of a plant quarantine or containment facility, and operator.*

**Quarantine Period:** The seed will be grown for a minimum period of 6 months and will be inspected and/or tested for regulated pests at the expense of the importer. Six months is an indicative minimum quarantine period and this period may be extended if material is slow growing, pests are detected, or treatments/testing are required.
Ribes

Pest List for Ribes

REGULATED PESTS (actionable)

Viruses

*Raspberry ringspot virus

*Tobacco rattle virus
   (strains not in New Zealand)

*Tomato black ring virus

*For organisms intercepted that are not listed within this pest list refer to the Biosecurity Organisms Register for Imported Commodities to determine the regulatory status.
**Ribes**

Inspection, Testing and Treatment Requirements for *Ribes*

<table>
<thead>
<tr>
<th>ORGANISM TYPES</th>
<th>NZ MAF ACCEPTABLE METHODS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Virus</strong></td>
<td>(See notes below)</td>
</tr>
<tr>
<td>both ‘Currant type’ and ‘Gooseberry type’ <em>Ribes)</em></td>
<td></td>
</tr>
<tr>
<td><em>Raspberry ringspot virus</em></td>
<td>ELISA or PCR and herbal indexing with Ca and Cq OR Cq, Cs and Nc</td>
</tr>
<tr>
<td>‘Currant type’ <em>Ribes only</em></td>
<td></td>
</tr>
<tr>
<td><em>Tobacco rattle virus</em> (strains not in New Zealand)</td>
<td>Herbaceous indexing with Ca and Cq OR Cq, Cs and Nc</td>
</tr>
<tr>
<td><em>Tomato black ring virus</em></td>
<td>ELISA and herbaceous indexing with Ca and Cq OR Cq, Cs and Nc</td>
</tr>
</tbody>
</table>

**Key**  
Ca - *Chenopodium amaranticolor*  
Cs - *Cucumis sativus*  
Cq - *Chenopodium quinoa*  
Nc - *Nicotiana clevelandii*  
ELISA - Enzyme linked immunosorbent assay  
PCR - Polymerase chain reaction

**Notes:**
1. Tests are to be carried out on plants germinated from the imported seeds.

2. The unit for testing is an individual seedling unless evidence is supplied by the exporting NPPO that seeds have been derived from the same mother plant. Bulking of up to 5 seedlings derived from the same mother plant, for ELISA or PCR testing, is acceptable. Samples must be tested individually by herbaceous indexing.

3. Testing must be carried out on plants while they are in active growth.

4. Indicator plants must be grown under appropriate temperatures.

5. Indicator plants must be shaded for 12-24 hrs prior to inoculation.

6. For each *Ribes* plant, at least two fully-expanded leaves must be sampled from different branches of the main stem, one a younger leaf and one an older leaf.

7. Post-inoculated indicator plants must be maintained under appropriate glasshouse conditions for at least 4 weeks.

8. Post-inoculated indicator plants must be inspected at least twice per week for signs of virus infection with observations being recorded on a weekly basis.

9. PCR and ELISA need to be validated using positive controls/reference material prior to use in quarantine testing.
10. Positive, negative, and buffer controls must be used in ELISA tests.

11. Positive controls must be used in PCR.

12. Inspection of the Ribes plants by the operator of the PEQ facility for signs of pest and disease must be at least once per week.

13. Other internationally recognised testing methods may be accepted by MAF with prior notification.

References


ICTVdB: *The Universal Virus Database, version 4.*


MAF Biosecurity New Zealand Post-Entry Quarantine Testing Manual Ribes
Rubus idaeus

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Rubus idaeus”.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Tomato black ring virus; Tomato ringspot virus.

Entry Conditions: Basic; PLUS

A prior permit to import is required:

PEQ: Level 3
Minimum Period: 1 growing season
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Sesamum”.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: *Alternaria sesami; Cercoseptoria sesami; Xanthomonas campestris* pv. *sesami; Trogoderma* spp.

Entry Conditions: Basic; PLUS

Phytosanitary Certificate Requirements:
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.
The *Sesamum* seeds for sowing have been:
- sourced from a “Pest free area” or “Pest free place of production”, free from *Alternaria sesami, Cercoseptoria sesami and Xanthomonas campestris* pv. *sesami*

AND
- treated with Iprodione at 2.5g a.i. per kg of seed.

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

"*Alternaria sesami, Cercoseptoria sesami and Xanthomonas campestris* pv. *sesami* are not known to occur in _____(the country or state where the seed was produced)_____".

OR

"The seed is from a crop that has been inspected during the growing season according to appropriate procedures and no *Alternaria sesami, Cercoseptoria sesami or Xanthomonas campestris* pv. *sesami* was detected".
Solanum tuberosum

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Solanum tuberosum”.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Andean potato latent virus; Potato black ring virus; Potato spindle tuber viroid; Potato virus T; Tobacco ringspot virus

Entry Conditions: Basic; PLUS

A prior permit to import is required:

PEQ: Level 3
Minimum Period: 1 growing season
**Sorghum**

**Note:** These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Sorghum”.

**GENERAL CONDITIONS:**

**Countries:** Australia, USA

**Quarantine Pests:** *Peronosclerospora sorghi; Sclerospora graminicola; Trogoderma spp.; Ustilaginales*

**Entry Conditions:** Basic; PLUS

**Phytosanitary Certificate Requirements:**

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

The *Sorghum* seeds for sowing have been:

- sourced from a “Pest free area” or “Pest free place of production”, free from *Peronosclerospora sorghi and Sclerospora graminicola*

AND

- treated with one of the following fungicide combinations, either

  (i) Carboxin at 0.8g a.i. per kg seed and thiram at 1g a.i. per kg seed.
  (ii) Carboxin at 0.8g a.i. per kg seed and captan at 0.7g a.i. per kg seed.
  (iii) Imazalil at 80mg a.i. per kg seed and triadimenol at 220mg a.i. per kg seed.
  (iv) Imazalil at 80mg a.i. per kg seed and flutriafol at 80mg a.i. per kg seed.

**Phytosanitary Certificate Additional Declarations:**

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

"*Peronosclerospora sorghi and Sclerospora graminicola* are not known to occur in _____

(the country or state where the seed was produced) _____”.

**OR**

"The seed is from a crop that has been inspected during the growing season and no *Peronosclerospora sorghi or Sclerospora graminicola* was detected".
Stenotaphrum

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Stenotaphrum”.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Panicum mosiac virus

Entry Conditions: Basic; PLUS

A prior permit to import is required:

PEQ: Level 3
Minimum Period: 1 growing season
Trigonella foenum-graecum

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Trigonella foenum-graecum”.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Cercosporidium traversiana; Trogoderma spp.

Entry Conditions: Basic; PLUS

Phytosanitary Certificate Requirements:
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.
The Trigonella foenum-graecum seeds for sowing have been:
– sourced from a “Pest free area” or “Pest free place of production”, free from Cercosporidium traversiana
AND
- treated with one of the following fungicide combinations, either
  i) Benomyl at 2.5 g a.i. per kg seed
  (ii) Carbendazim at 2.5 g a.i. per kg seed
  (iii) Thiophanate methyl at 2.5 a.i. per kg seed

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

"Cercosporidium traversiana is not known to occur in _____ (the country or state where the seed was produced) ______".

OR

"The seed is from a crop that has been inspected during the growing season according to appropriate procedures and no Cercosporidium traversiana was detected".
Triticum

Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Triticum”.

Entry conditions for Triticum seeds for sowing from approved exporting countries

These requirements are in addition to the Basic requirements set out in Section 2 of the standard.

(i) Pests of Triticum
Refer to “Pest List for Triticum”.

(ii) Approved exporting countries
Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom and United States of America.

(iii) Documentation
A completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all Triticum seeds for sowing exported to New Zealand.

(iv) Phytosanitary requirements
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.
The Triticum seeds for sowing have been:
- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests, including the regulated insects and mites on MAF’s “Pest List for Triticum” and seeds of regulated weed species.
AND
- sourced from a “Pest free area” or “Pest free place of production”, free from the named regulated bacteria (Rathayibacter tritici, Xanthomonas campestris pv. undulosa) and viruses (High plains virus, Indian peanut clump virus).
AND
- sourced from a “Pest free area” or “Pest free place of production”, free from Anguina tritici, or inspected microscopically for Anguina tritici in accordance with appropriate official procedures.
AND
EITHER
- sourced from a “Pest free area” free from the named regulated fungi (Alternaria triticina, Cephalosporium gramineum, Curvularia verruculosa).
OR
- treated with one of the fungicide combinations described in MAF’s “Approved Treatments for Triticum”;
AND
EITHER
- sourced from a “Pest free area” free from Tilletia controversa and Tilletia indica, OR
- sourced from a “Pest free place of production”, free from *Tilletia controversa* and *Tilletia indica*, **AND treated** with one of the fungicide combinations described in MAF’s “Approved Treatments for *Triticum*”.

OR

- a representative sample of 600 seeds, drawn from this consignment according to the International Seed Testing Association’s methodology, has been tested for *Tilletia controversa* and *Tilletia indica*, **AND treated** with one of the fungicide combinations described in MAF’s “Approved Treatments for *Triticum*”.

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

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

"The *Triticum* seeds for sowing in this consignment have been:

- sourced from a “Pest free area”, free from _____ (name of the above regulated bacteria and viruses) _____, and/or a “Pest free place of production”, free from _____ (name of the above regulated bacteria and viruses) _____.

AND

- sourced from a “Pest free area”, free from *Anguina tritici*, OR “Pest free place of production”, free from *Anguina tritici*, OR inspected microscopically for *Anguina tritici*.

AND

- sourced from a “Pest free area”, free from _____ (name of the above regulated fungi) _____;

AND

EITHER [choose ONE option]

- sourced from a “Pest free area” free from *Tilletia controversa* and *Tilletia indica*, OR

- sourced from a “Pest free place of production”, free from *Tilletia controversa* and *Tilletia indica*, OR

- No spores of *Tilletia controversa* or *Tilletia indica* were found in a representative sample of 600 seeds drawn from this consignment."
Approved Treatments for *Triticum*

**Fungicides**

One of the following treatments is required:

i) Carboxin at 0.8 g a.i. per kg of seed and Thiram at 0.8 g a.i. per kg of seed.

ii) Flutriafol at 0.05 g a.i. per kg of seed and Imazalil at 0.05 g a.i. per kg of seed.

iii) Triadimenol at 0.23 g a.i. per kg of seed, Imazalil 0.075 g per kg of seed and Fuberidazole 0.15g a.i per kg of seed.

iv) Tebuconazole at 0.025 g a.i. per kg of seed and Imazalil at 0.05 g a.i. per kg of seed.

As required, MAF may evaluate other treatments and if effective, will approve these treatments and add them to this schedule.

**Pest List for Triticum**

**REGULATED PESTS (actionable)**

**Insect**

**Insecta**

**Blattodea**

**Blattidae**

*Blatta orientalis*  
oriental cockroach

**Coleoptera**

**Bostrichidae**

*Dinoderus distinctus*  
bostrichid beetle

*Prostephanus truncatus*  
larger grain borer

**Bruchidae**

*Callosobruchus chinensis*  
oriental cowpea weevil

**Curculionidae**

*Caulophilus oryzae*  
broadnosed grain weevil

**Dermestidae**

*Trogoderma glabrum*  
khapra beetle

*Trogoderma granarium*  
khapra beetle

*Trogoderma grassmani*  
trogoderma beetle

*Trogoderma inclusum*  
trogoderma beetle

*Trogoderma ornatum*  
trogoderma beetle

*Trogoderma simplex*  
dermestid beetle

*Trogoderma sternale*  
dermestid beetle

*Trogoderma variabile*  
warehouse beetle

**Languriidae**

*Pharaxonotha kirschii*  
Mexican grain beetle

**Tenebrionidae**

*Cynaeus angustus*  
larger black flour beetle

*Latheticus oryzae*  
longheaded flour beetle
Palorus ratzeburgi  small-eyed flour beetle
Palorus subdepressus  depressed flour beetle
Tribolium audax  American black flour beetle
Tribolium freemani  flour beetle
Uloomoides dermestoides  darkling beetle

Diptera
Cecidomyiidae
Contarinia pisi  pea midge

Lepidoptera
Noctuidae
Faronta albilinea  wheat head armyworm

Pyralidae
Corcyra cephalonica  rice moth
Paralipsa gularis  stored nut moth

Tineidae
Cephitinea colonella  grain moth
Haplotinea insectella  casemaking moth

Psocoptera
Liposcelidae
Troctes minutus  psocid

Mite
Arachnida
Acarina
Acaridae
Caloglyphus krameri
Michaelopus macfarlanei
Eriophyidae
Aceria tulipae (vector)
Aceria tosichella  wheat curl mite

Tarlsonemidae
Tarsinemus granarius

Tuckerellidae
Tuckerella ablutus

unknown Acarina
Paratriophtydeus coineaurius

Nematode
Secernentea
Tylenchida
Anguinidae
Anguina tritici [vector]  seed gall nematode

Fungus
Basidiomycota: Ustomycetes
Ustilaginiales
Tilletiaceae
   *Tilletia controversa* dwarf bunt
   *Tilletia indica* karnal bunt

mitosporic fungi (Hyphomycetes)

Hyphomycetales

Dematiaceae
   *Alternaria triticina* -
   *Curvularia verruculosa* -

Moniliaceae
   *Cephalosporium gramineum* stripe

Corynebacteriaceae
   *Rathayibacter tritici* yellow ear rot

Pseudomonadaceae
   *Xanthomonas campestris pv. undulosa* leaf streak

Virus
   *High plains virus* -
   *Indian peanut clump virus* -
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Ulmus”.

GENERAL CONDITIONS:

Countries: All
Quarantine Pests: Cherry leaf roll virus; Elm mottle virus
Entry Conditions: Basic; PLUS

Phytosanitary Certificate Additional Declaration:

"Cherry leaf roll virus and Elm mottle virus are not known to occur in _____ (the country or state where the seed was produced) _____."

OR

"The trees from which the seed was harvested were officially inspected during the growing season and no Cherry leaf roll virus or Elm mottle virus was detected".
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Vaccinium”.

1. Entry conditions for Vaccinium seeds for sowing from approved exporting countries

(i) Pests of Vaccinium
Refer to “Pest List for Vaccinium”.

(ii) Approved exporting countries
All countries

(iii) Documentation
Phytosanitary certificate: a completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all consignments of Vaccinium seeds for sowing imported into New Zealand.
Import permit: an import permit must be obtained from the MAF prior to the Vaccinium seeds arriving at the New Zealand border.

(iv) Phytosanitary requirements
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The Vaccinium seeds for sowing have been
– inspected in accordance with appropriate official procedures and found to be free of the regulated pests.

(v) Post-entry quarantine requirements
All Vaccinium seeds must be imported under permit into post-entry quarantine in a Level 3 quarantine facility accredited to MAF standard PBC-NZ-TRA-PQCON: Specification for the Registration of a Plant Quarantine or Containment Facility, and Operator. The seed will be grown for a minimum period of 6 months and will be tested or inspected for regulated pests at the expense of the importer.
Vaccinium

Pest List for Vaccinium

REGULATED PESTS (actionable)

Fungus
Ascomycota
  Diaporthales
    Valsaceae
      Diaporthella vaccinii (anamorph Phomopsis vaccinii)  twig blight

Dothideales
  Botryosphaeriaceae
    Botryosphaeria vaccinii (anamorph Phyllosticta elongata)  --

Leotiales
  Sclerotiniaceae
    Monilinia fructigena (anamorph Monilia fructigena)  European brown rot
    Monilinia vaccinii-corymbosi  brown rot

Virus
  family Bromoviridae
    genus Ilarvirus
      Blueberry shock virus  -

  family Comoviridae
    genus Nepovirus
      Blueberry leaf mottle virus  -
      Peach rosette mosaic virus  -
      Tomato ringspot virus [strains not in New Zealand]  -
### Vaccinium

**Inspection, testing and treatment requirements for Vaccinium**

<table>
<thead>
<tr>
<th>ORGANISM TYPES</th>
<th>MAF ACCEPTABLE METHODS (See notes below)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fungi</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Diaporthe vaccinii</em></td>
<td>Growing season inspection in PEQ for disease symptom expression.</td>
<td></td>
</tr>
<tr>
<td><em>Botryosphaeria vaccinii</em></td>
<td>Growing season inspection in PEQ for disease symptom expression.</td>
<td></td>
</tr>
<tr>
<td><em>Monilinia fructigena</em></td>
<td>Growing season inspection in PEQ for disease symptom expression.</td>
<td></td>
</tr>
<tr>
<td><em>Monilinia vaccinii-corymbosi</em></td>
<td>Growing season inspection in PEQ for disease symptom expression.</td>
<td></td>
</tr>
<tr>
<td><strong>Virus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Blueberry shock virus</em></td>
<td>ELISA (Agdia) or PCR AND herbaceous indicators Nb, Nc.</td>
<td></td>
</tr>
<tr>
<td><em>Blueberry leaf mottle virus</em></td>
<td>ELISA (Agdia) or PCR AND herbaceous indicators Cq, Nc.</td>
<td></td>
</tr>
<tr>
<td><em>Peach rosette mosaic virus</em></td>
<td>ELISA (Agdia) or PCR AND herbaceous indicators Ca, Cq.</td>
<td></td>
</tr>
<tr>
<td><em>Tomato ringspot virus</em></td>
<td>ELISA (Agdia) or PCR AND herbaceous indicators Cq, Nc.</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

10. Indicator hosts: *Chenopodium amaranticolor* (Ca), *C. quinoa* (Cq), and *Nicotiana benthamiana* (Na), *N. clevelandi* (Nc).
11. Enzyme linked immunosorbent assay (ELISA).
12. Polymerase chain reaction (PCR).
13. With prior notification, MAF will accept other internationally recognised testing methods.
14. For bioassay and ELISA, plants shall be sampled from at least two positions on every stem including a young, fully expanded leaflet at the top of each stem and an older leaflet from a midway position.
15. Indicator plants must be grown under appropriate temperatures.
16. Indicator plants must be shaded for 12-24 hrs prior to inoculation.
17. Maintain post-inoculated indicator species under appropriate glasshouse conditions for at least 4 weeks.
18. Inspect plants at least once per week for signs of pest and disease.
19. Inspect inoculated herbaceous indicator plants at least twice per week for symptoms of virus infection.
20. PCR and ELISA need to be validated using positive controls/reference material prior to use in quarantine testing.

21. At least two plants of each indicator species unless otherwise stated must be used in mechanical inoculation tests.

22. Positive and negative controls must be used in ELISA tests.

23. Testing must be carried out on plants while they are in active growth. Positive and negative controls (including a blank water control) must be used in PCR. Ideally positive internal controls and a negative plant control should be used. Internal controls in PCR tests are important to avoid the risk of false negatives.
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Vicia”.

**Entry conditions for Vicia seeds for sowing from approved exporting countries**

These requirements are in addition to the Basic requirements set out in Section 2 of the standard.

(i) **Pests of Vicia**
Refer to “Pest List for Vicia”.

(ii) **Approved exporting countries**
Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom and United States of America.

(iii) **Documentation**
A completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all Vicia seeds for sowing exported to New Zealand.

(iv) **Phytosanitary requirements**
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.
The Vicia seeds for sowing have been:
- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests, the regulated insects on MAF’s “Pest List for Vicia” and seeds of regulated weed species.
AND
- sourced from a “Pest free area” or “Pest free place of production”, free from the named regulated viruses (Artichoke yellow ringspot virus, Broad bean mottle virus, Broad bean stain virus, Broad bean true mosaic virus, Clover yellow mosaic virus, Pea early-browning virus, Pea enation mosaic virus, Peanut stunt virus, Red clover vein mosaic virus).

(v) **Additional declarations to the phytosanitary certificate**
If satisfied that the pre-shipment activities have been undertaken, the exporting country NPPO must confirm this by recording the treatments applied in the “Disinfestation and/or Disinfection Treatment” section (if applicable), and by providing the following additional declaration to the phytosanitary certificate:

"The Vicia seeds for sowing in this consignment have been:
- sourced from a “Pest free area”, free from _____ (name of the regulated viruses) _____, and/or a “Pest free place of production”, free from _____ (name of the regulated viruses) _____.
Pest List for *Vicia*

**REGULATED PESTS (actionable)**

**Insect**

**Insecta**

**Coleoptera**

**Bruchidae**

*Bruchidius incarnatus* seed beetle

*Bruchidius quinqueguttatus* bruchid beetle

*Bruchus atomarius* bruchid beetle

*Bruchus dentipes* bruchid beetle

*Bruchus pisorum* pea weevil

*Bruchus rufimanus* broad bean weevil

*Callosobruchus chinensis* oriental cowpea weevil

*Callosobruchus maculatus* cowpea weevil

*Callosobruchus phaseoli* cowpea weevil

**Dermestidae**

*Trogoderma granarium* khapra beetle

**Tenebrionidae**

*Tribolium destructor* dark flour beetle

**Diptera**

**Cecidomyiidae**

*Contarinia pisi* pea midge

**Lepidoptera**

**Lycaenidae**

*Virachola livia* pomegranate butterfly

**Virus**

*Artichoke yellow ringspot virus* -

*Broad bean mottle virus* -

*Broad bean stain virus* -

*Broad bean true mosaic virus* -

*Clover yellow mosaic virus* -

*Pea early-browning virus* -

*Pea enation mosaic virus* -

*Peanut stunt virus* -

*Red clover vein mosaic virus* -
Approved Treatments for *Vicia*

**Fungicides**
One of the following treatments is required:

i) Metalaxyl-M at 0.35 g a.i per kg of seed, fludioxonil at 0.1 g a.i per kg of seed and cymoxanil 0.2 g a.i per kg of seed.

ii) Fosetyl aluminium at 1.53 g a.i per kg of seed, thiram at 0.5 g a.i per kg of seed and thiabendazole at 0.37 g a.i per kg of seed.

As required, MAF may evaluate other treatments and if effective, will approve these treatments and add them to this schedule.
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Vigna”.

GENERAL CONDITIONS:

Countries: All

Quarantine Pests: Curtobacterium flaccumfaciens pv. faccumfaciens; Xanthomonas campestris pv. vignalola; Earias vitella; Maruca testulalis; Trogoderma spp.

Entry Conditions: Basic; PLUS

Phytosanitary Certificate Additional Declarations:

(a) "Curtobacterium flaccumfaciens pv. faccumfaciens and Xanthomonas campestris pv. vignalola are not known to occur in ______ (the country or state where the seed was produced) ______".

OR

"The seed is from a crop that has been inspected during the growing season according to appropriate procedures and no Curtobacterium flaccumfaciens pv. faccumfaciens or Xanthomonas campestris pv. vignalola was detected".

(b) For seed in pods:

"The pods were inspected before export and no caterpillars of Earias vitella or Maruca testulalis were found in a 600 unit sample".
Note: These entry conditions only apply to species in the Plants Biosecurity Index listed under Import Specifications for Seed as “see 155.02.05 under Zea”.

Entry conditions for Zea seeds for sowing from approved exporting countries

These requirements are in addition to the Basic requirements set out in Section 2 of the standard.

(i) *Pests of Zea*
Refer to “Pest List for Zea”.

(ii) *Approved exporting countries*
Australia, Austria, Canada, Chile, Finland, France, Germany, Greece, Hungary, Japan, the Netherlands, Norway, South Africa, Sweden, Switzerland, the United Kingdom and United States of America

(iii) *Documentation*
- **Phytosanitary certificate:** A completed phytosanitary certificate issued by the NPPO of the exporting country must accompany all Zea seeds for sowing exported to New Zealand.
- **Genetically modified seed test certificate:** MAF requires that all consignments of dent corn/field corn/maize (Zea mays var. indentata) and sweet corn (Zea mays var. saccharata) that are imported into New Zealand are tested for adventitious presence of unapproved GM seeds. **Note:** For positive identification of imported consignments that do not require a GM seed test certificate, the full scientific name of the Zea species and variety (including variety or sub-species name) must be specified on the phytosanitary certificate, for e.g. Zea mays var. everta (pop corn). Importers of consignments of Zea mays that are not identified appropriately will be offered the options of testing for the presence of unapproved genetically modified (GM) seeds, re-shipment or destruction.

(iv) *Phytosanitary requirements*
Before a phytosanitary certificate is issued, the NPPO of the exporting country must be satisfied that the following activities required by MAF have been undertaken.

The Zea mays seeds for sowing have been:
- inspected in accordance with appropriate official procedures and found to be free of any visually detectable regulated pests, including the regulated insects, mites and weed seeds on MAF’s “Pest List for Zea mays”.

AND
- sourced from a “Pest free area” or “Pest free place of production”, free from the named regulated bacteria (Acidovorax avenae subsp. avenae, Clavibacter michiganensis subsp. Nebraskensis, Pantoaea stewartii subsp. stewartii) and viruses (High plains virus, Maize dwarf mosaic virus, Maize mottle chlorotic stunt virus).

OR
- a representative sample, officially drawn from this consignment according to ISTA or AOSA methodology, has been tested for the presence of the named regulated bacteria (Acidovorax avenae subsp. avenae, Clavibacter michiganensis subsp. nebraskensis, Pantoaea stewartii subsp. stewartii) and viruses (High plains virus, Maize dwarf mosaic virus, Maize chlorotic mottle virus). The testing and treatment requirements are specified following this section.
AND
- sourced from a “Pest free area” free from the named regulated fungi (*Botryosphaeria zeae*, *Cochliobolus pallescens*, *Cochliobolus tuberculatus*, *Claviceps gigantea*, *Gloeocercospora sorghi*, *Ustilago maydis*, *Peronosclerospora heteropogoni*, *Peronosclerospora maydis*, *Peronosclerospora philippinensis*, *Peronosclerospora sacchari*, *Peronosclerospora sorghi*, *Phaeocytostroma ambiguum*, *Sclerophthora rayssiae var. zeae*, *Rhizopus maydis*, *Stenocarpella macrospora* and *Cephalosporium maydis*).

OR
- treated with one of the fungicide combinations described in MAF’s “Approved Treatments for *Zea mays*”;

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

"The *Zea mays* seeds for sowing in this consignment have been:
- sourced from a “Pest free area”, free from _____ (name of the regulated bacteria and viruses) _____, and/or a “Pest free place of production”, free from _____ (name of the regulated bacteria and viruses) _____ and/or _____ (name of the regulated bacteria and viruses) _____ was not detected in a representative sample of seeds officially drawn from this consignment.

AND
- [If appropriate] sourced from a “Pest free area”, free from _____ (name of the regulated fungi) _____;

(vi) Sampling and testing *Zea mays* seed consignments for adventitious presence of unapproved genetically modified seeds

MAF requires that all consignments of dent corn/field corn/maize (*Zea mays* var. *indentata*) and sweet corn (*Zea mays* var. *saccharata*) that are imported into New Zealand are representatively sampled, tested, and found to be free of unapproved GM seeds. Any consignment that is found to contain unapproved GM seeds will not be permitted to enter New Zealand and will be re-shipped or destroyed. Complete guidelines for sampling and testing for the presence of GM seeds are specified in the *Protocol for Testing Seed Imports for the Presence of Genetically Modified Seed*. The protocol includes three further modified options for importers of small volumes of seed (defined as less than 5 kg for *Zea mays*) for cultivar trials and multiplication.

Testing may be conducted by facilities approved by MAF under the requirements specified in the standard “Approval of Facilities for Genetically Modified Organism Testing”. A copy of the completed test certificate (from a MAF-approved facility) must accompany the consignment imported into New Zealand. MAF will examine the test certificate on arrival to confirm that they reconcile with the actual consignment. Importers must ensure that MAF has access to all pertinent testing records held by MAF-approved testing facilities for audit purposes.

If consignments arrive at the New Zealand border without having been tested for the presence of unapproved GM seeds, MAF will offer the importer the options of re-shipping or destroying the consignment, or having the consignment sampled and tested as above under the importer’s
expense. Only consignments found not to contain GM seeds will receive biosecurity clearance. The protocol and a list of MAF-approved facilities for testing for the presence of GM material in *Zea mays* are located at the following address on the MAF website - [http://www.biosecurity.govt.nz/regs/imports/plants/gmo](http://www.biosecurity.govt.nz/regs/imports/plants/gmo)

**Approved Testing and Treatment Requirements for Zea mays**

**Testing**

*Pantoea stewartii subsp. stewartii*
A negative result from testing a representative sample of 400 seeds using the immunosorbent assay test described by Lamka *et al.* (1991) may be used to show that the consignment is free of *Pantoea stewartii* subsp. *stewartii*.

*Clavibacter michiganensis subsp. nebraskensis*
A negative result from testing a representative sample of 400 seeds using the sCNS Culture Plate Method (Shepherd, 1999; [www.seedhealth.org](http://www.seedhealth.org)) may be used to show that the consignment is free of *Clavibacter michiganensis* subsp. *nebraskensis*.

*Acidovorax avenae subsp. avenae*
A negative result from testing a representative sample of 400 seeds using the methodology of Dange *et al.* (1978) may be used to show that the consignment is free of *Acidovorax avenae* subsp. *avenae*.

*High plains virus and Maize dwarf mosaic virus*
A negative result from testing a representative sample of seeds using greenhouse grow-out tests and ELISA testing as described by Forster *et al.* (2001) and Crop Plant Compendium 2003 may be used to show that the consignment is free of *High plains virus* and *Maize dwarf mosaic virus*.

*Maize chlorotic mottle virus*
Due to the low levels of seed transmission MAF will consider testing based upon request and will calculate the sample size required based upon the size of the consignment and at 95% confidence levels.

N.B – MAF will consider equivalent testing methods to the above upon request.

**Treatments**

**Fungicides**
The active ingredients in one of the following treatments are required:
(i) Carboxin at 0.8 g a.i. per kg seed & thiram at 0.8 g a.i. per kg seed.
(ii) Carboxin at 0.8 g a.i. per kg seed & captan at 0.7 g a.i. per kg seed.
(iii) Fludioxonil at 0.025 g a.i. per kg seed & metalaxyl at 0.03 g a.i. per kg seed.
(iv) Imazalil at 80 mg a.i. per kg seed & triadimenol at 220 mg a.i. per kg seed.
(v) Imazalil at 80 mg a.i. per kg seed & flutriafol at 80 mg a.i. per kg seed.
(vi) Difenoconazole at 0.12 g a.i per kg seed & mefenoxam at 0.01 g a.i per kg seed.
(vii) Fludioxonil at 0.025 g a.i. per kg seed & mefenoxam at 0.01 g a.i. per kg seed.
As required, MAF may evaluate other treatments and if effective, will approve these treatments and add them to this schedule.

**Note.** Where the treatment can not be applied offshore, the seed consignment may be treated on arrival at a registered transitional facility (New Zealand Ministry of Agriculture and Forestry *Standard for General Transitional Facilities for Uncleared Goods*).

**References**


## Pest List for Zea (Seed for Sowing)

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Organism type</th>
<th>Common name</th>
<th>Quarantine status</th>
<th>Measures to prevent entry</th>
<th>Actions on interception</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acidovorax avenae subsp. avenae</td>
<td>bacterium</td>
<td>bacterial blight</td>
<td>Regulated</td>
<td>6 or 7 or 8</td>
<td>3</td>
</tr>
<tr>
<td>Clavibacter michiganensis subsp. nebraskensis</td>
<td>Bacterium</td>
<td>Goss' bacterial wilt</td>
<td>Regulated</td>
<td>6 or 7 or 8</td>
<td>3</td>
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<tr>
<td>Pantoea stewartii</td>
<td>Bacterium</td>
<td>Stewart's bacterial wilt</td>
<td>Regulated</td>
<td>6 or 7 or 8</td>
<td>3</td>
</tr>
<tr>
<td>Botryosphaeria zeae</td>
<td>Fungus</td>
<td>grey ear rot</td>
<td>Regulated</td>
<td>5 or 7</td>
<td>3</td>
</tr>
<tr>
<td>Cephalosporium maydis</td>
<td>Fungus</td>
<td>ergot</td>
<td>Regulated</td>
<td>5 or 7</td>
<td>3</td>
</tr>
<tr>
<td>Claviceps gigantea</td>
<td>Fungus</td>
<td>maize leaf spot</td>
<td>Regulated</td>
<td>5 or 7</td>
<td>3</td>
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<tr>
<td>Cochliobolus pallescens</td>
<td>Fungus</td>
<td>leaf spot</td>
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<td>3</td>
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<tr>
<td>Cochliobolus tuberculatus</td>
<td>Fungus</td>
<td>zonate leaf spot</td>
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<tr>
<td>Gloeocercospora sorghi</td>
<td>Fungus</td>
<td>Java downy mildew</td>
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<td>Peronosclerospora maydis</td>
<td>Fungus</td>
<td>Philippine downy mildew</td>
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<td>3</td>
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<td>Peronosclerospora philippinensis</td>
<td>Fungus</td>
<td>sorghum downy mildew</td>
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<td>5 or 7</td>
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<tr>
<td>Phaeocytostroma ambiguum</td>
<td>Fungus</td>
<td>dry rot</td>
<td>Regulated</td>
<td>5 or 7</td>
<td>3</td>
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<tr>
<td>Rhizopus maydis</td>
<td>Fungus</td>
<td>boil smut</td>
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<td>Sclerophthora rayssiae var. zeae</td>
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<td>black fungus beetle</td>
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<tr>
<td>Stenocarpella macrospora</td>
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<td>black carpet beetle</td>
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<tr>
<td>Ustilago maydis</td>
<td>Fungus</td>
<td>dried fruit beetle</td>
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MAF Biosecurity New Zealand Import Health Standard 22 September 2010  Page 156
155.02.05: Importation of Seed for Sowing
<table>
<thead>
<tr>
<th>Insect Name</th>
<th>Common Name</th>
<th>Status</th>
<th>Code</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Carpophilus lugubris</em></td>
<td>Insect dusky sap beetle</td>
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<tr>
<td><em>Cathartus quadricollis</em></td>
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<tr>
<td><em>Caulophilus oryzae</em></td>
<td>Insect broadnosed grain weevil</td>
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<tr>
<td><em>Corynocephalophorus culex</em></td>
<td>Insect rice moth</td>
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<td>3</td>
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<tr>
<td><em>Cryptophlebia leucotreta</em></td>
<td>Insect false codling moth</td>
<td>Regulated</td>
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<td>3</td>
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<tr>
<td><em>Cynaes angustus</em></td>
<td>Insect larger black flour beetle</td>
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<td>3</td>
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<tr>
<td><em>Dinoderus distinctus</em></td>
<td>Insect bostrichid beetle</td>
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<td>3</td>
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<tr>
<td><em>Dinoderus minutus</em></td>
<td>Insect bamboo powderpost beetle</td>
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<tr>
<td><em>Doloessa viridis</em></td>
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<td><em>Euxesta stigmatias</em></td>
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<td><em>Gibbium psylloides</em></td>
<td>Insect shiny spider beetle</td>
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<tr>
<td><em>Glischrochilus quadrisignatus</em></td>
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<td><em>Gnatocerus maxillosus</em></td>
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<td><em>Latheticus oryzae</em></td>
<td>Insect longheaded flour beetle</td>
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<tr>
<td><em>Lepinotus reticulatus</em></td>
<td>Insect booklouse</td>
<td>Regulated</td>
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<td>3</td>
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<tr>
<td><em>Leptoglossus zonatus</em></td>
<td>Insect coreid bug</td>
<td>Regulated</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><em>Liposcelis bostrychophilus</em></td>
<td>Insect booklouse</td>
<td>Regulated</td>
<td>2</td>
<td>3</td>
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<tr>
<td><em>Liposcelis entomophilus</em></td>
<td>Insect grain psocid</td>
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<tr>
<td><em>Liposcelis paetus</em></td>
<td>Insect booklouse</td>
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<td>3</td>
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<tr>
<td><em>Mussidia nigrivenella</em></td>
<td>Insect pyralid moth</td>
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</tr>
<tr>
<td><em>Pagiocerus frontalis</em></td>
<td>Insect bark borer</td>
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<td>3</td>
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<tr>
<td><em>Palorus ratzeburgi</em></td>
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<td>2</td>
<td>3</td>
</tr>
<tr>
<td><em>Palorus subdepressus</em></td>
<td>Insect depressed flour beetle</td>
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<td>2</td>
<td>3</td>
</tr>
<tr>
<td><em>Paralipsa gularis</em></td>
<td>Insect stored nut moth</td>
<td>Regulated</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><em>Pharaxonotha kirschii</em></td>
<td>Insect Mexican grain beetle</td>
<td>Regulated</td>
<td>2</td>
<td>3</td>
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<tr>
<td><em>Prostephanus truncatus</em></td>
<td>Insect larger grain borer</td>
<td>Regulated</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><em>Pyroderces rileyi</em></td>
<td>Insect pink scavenger caterpillar</td>
<td>Regulated</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><em>Sesamia calamistis</em></td>
<td>Insect pink stalk borer</td>
<td>Regulated</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Sesamia nonagrioides</strong></td>
<td>Insect</td>
<td>pink borer</td>
<td>Regulated</td>
<td>2</td>
</tr>
<tr>
<td>--------------------------</td>
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<td>-----------</td>
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</tr>
<tr>
<td><strong>Teretriosoma nigrescens</strong></td>
<td>Insect</td>
<td>-</td>
<td>Regulated</td>
<td>2</td>
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<tr>
<td><strong>Tribolium freemani</strong></td>
<td>Insect</td>
<td>flour beetle</td>
<td>Regulated</td>
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</tr>
<tr>
<td><strong>Trogoderma glabrum</strong></td>
<td>Insect</td>
<td>khapra beetle</td>
<td>Regulated</td>
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</tr>
<tr>
<td><strong>Trogoderma granarium</strong></td>
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<td>khapra beetle</td>
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<tr>
<td><strong>Trogoderma inclusum</strong></td>
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<tr>
<td><strong>Trogoderma variabile</strong></td>
<td>Insect</td>
<td>warehouse beetle</td>
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<tr>
<td><strong>Acaropsellina sollers</strong></td>
<td>Mite</td>
<td>-</td>
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<tr>
<td><strong>High plains virus</strong></td>
<td>Virus</td>
<td>-</td>
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<td>6 or 7 or 8</td>
</tr>
<tr>
<td><strong>Maize chlorotic mottle virus</strong></td>
<td>Virus</td>
<td>-</td>
<td>Regulated</td>
<td>6 or 7 or 8</td>
</tr>
<tr>
<td><strong>Maize dwarf mosaic virus</strong></td>
<td>Virus</td>
<td>MDMV</td>
<td>Regulated</td>
<td>6 or 7 or 8</td>
</tr>
<tr>
<td><strong>Striga asiatica</strong></td>
<td>Weed</td>
<td>witch-weed</td>
<td>Regulated</td>
<td>2</td>
</tr>
<tr>
<td><strong>Striga hermonthica</strong></td>
<td>Weed</td>
<td>witch-weed</td>
<td>Regulated</td>
<td>2</td>
</tr>
</tbody>
</table>

**Measures to prevent entry and establishment**

1. No measures.
2. Seed and associated packaging inspected and found to be free from visually detectable regulated pests.
3. Consignments are free from extraneous material, e.g., soil, plant residue that may carry regulated pests.
4. Undergone effective pre-export treatment for regulated pests.
5. Undergone specified pre-export treatment for regulated pests.
6. Undergone specified pre-export testing for regulated pests.
7. Sourced from a pest free area.
8. Sourced from a pest free place of production.

**Actions on interception**

1. No action.
2. Removal of extraneous material, e.g., soil, plant residue that may carry regulated pests.
3. Treat (if appropriate), reship or destroy.
4. Reship or destroy and suspend pathway.
5. No action if pest not viable.