

**Import Health Standard**  
**Commodity Sub-class: Fresh Fruit/Vegetables**  
**Mango, *Mangifera indica***  
**from Australia**

**ISSUED**

**Issued pursuant to Section 22 of the Biosecurity Act 1993**  
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### ***Endorsement***

Import health standards for plants and plant products imported into New Zealand are a requirement under the Biosecurity Act 1993 and are prepared by the Plants section of the Ministry of Agriculture and Forestry Biosecurity Authority.

This standard was endorsed by the Chief Technical Officer, Plants Biosecurity, MAF Biosecurity Authority on 23 April 2009.

Richard Ivess  
Chief Technical Officer, Plants Biosecurity  
(acting under delegated authority)

### ***Review and amendment***

MAF Biosecurity New Zealand import health standards are subject to periodic review and amendment.

New Zealand import health standards covering the importation of plants and plant products are updated and republished as necessary with the most recent version published on the MAF web site.

### ***Distribution***

Import health standards relating to plants and plant products are distributed by the Plants section of the Ministry of Agriculture and Forestry Biosecurity Authority. They are made available for public access on the New Zealand Ministry of Agriculture and Forestry web site: <http://www.biosecurity.govt.nz/regs/imports/plants/fruit-veg>

# INTRODUCTION

## SCOPE

This import health standard describes the requirements to be met to enable biosecurity clearance to be given for fresh mango fruit (*Mangifera indica*) imported into New Zealand from Australia.

## REFERENCES

- Requirements for the establishment of pest free areas* 1996. ISPM Publication No. 4, FAO, Rome.
- Biosecurity Act 1993
- Hazardous Substances and New Organisms Act 1996.
- Glossary of phytosanitary terms* 2002. ISPM Publication No. 5, FAO, Rome.
- Risk analysis for quarantine pests including analysis of environmental risks* 2003. ISPM Publication No. 11 (Rev. 1), FAO, Rome.
- Guidelines for the use of irradiation as a phytosanitary measure* 2003. ISPM Publication No. 18, FAO, Rome.
- New Revised Text of the International Plant Protection Convention*, November 1997. FAO, Rome.
- MAF Plants Biosecurity Pest Risk Assessment Standard* (26 September 2001).
- MAF Plants Biosecurity Standard 152.02: Importation and Clearance of Fresh Fruit and Vegetables into New Zealand* (July 2002).
- Import Risk Analysis Mangoes (Mangifera indica) exported from Australia to New Zealand using irradiation as a phytosanitary treatment.*

## DEFINITIONS ABBREVIATIONS AND ACRONYMS

Bilateral quarantine arrangement	An inter-agency technical arrangement between the New Zealand Ministry of Agriculture and Forestry and the counterpart National Plant Protection Organisation which documents New Zealand's requirements for the control of fruit fly species of economic significance (i.e. those fruit fly species categorised as pests) that are associated with fruit fly host material imported into New Zealand.
Biosecurity clearance	A clearance under section 26 of the New Zealand Biosecurity Act 1993 for the entry of goods into New Zealand.
Certificate	An official document, which attests to the phytosanitary status of any consignment affected by phytosanitary regulations [FAO, 1990].

Commodity	A type of plant, plant product, or other article being moved for trade or other purpose [FAO, 1990; ICPM Amendments, April 2001].
Consignment	A quantity of plants, plant products and/or other articles being moved from one country to another and covered, when required, by a single phytosanitary certificate (a consignment may be composed of one or more commodities or lots) [FAO, 1990; ICPM Amendments, April 2001].
Contaminating pest	A pest that is carried by a commodity and, in the case of plants and plant products, does not infest those plants or plant products [CEPM, 1996; revised CEPM, 1999] (Note: Has also been known as a Hitch-hiker pest).
High impact pest	High impact pests are regulated pests that if introduced into New Zealand would have a major effect on the production (including access to overseas markets) of plants and plant products and/or the environment.
Import health standard	A document issued under section 22 of the Biosecurity Act 1993 that specifies “... <i>the requirements to be met for the effective management of risks associated with the importation of risk goods before those goods can be imported, moved from a biosecurity control area or a transitional facility, or given a biosecurity clearance</i> ”.
Infestation of a consignment	Presence in a commodity of a living pest of the plant or plant product concerned. Infestation includes infection [CEPM, 1997; revised CEPM 1999].
Inspection	Official visual examination of plants, plant products or other regulated articles to determine if pests are present and/or to confirm compliance with phytosanitary regulations [FAO, 1990; revised FAO, 1995; formerly Inspect].
International Plant Protection Convention	International Plant Protection Convention, as deposited with FAO in Rome in 1951 and as subsequently amended [FAO, 1990].
IPPC	Abbreviation for the International Plant Protection Convention.
International Standard for Phytosanitary Measures	An international standard adopted by the Conference of FAO, the Interim Commission on Phytosanitary Measures or the Commission on Phytosanitary Measures established under the IPPC [CEPM, 1996; revised CEPM, 1999].

ISPM	Abbreviation for International Standard on Phytosanitary Measures.
Lot	The number of units of a single commodity identifiable by its homogeneity of composition, origin, etc., forming part of a consignment. [FAO, 1990].
MAF	Ministry of Agriculture and Forestry. Acronym for the Ministry of Agriculture and Forestry which is the New Zealand national plant protection organisation.
National Plant Protection Organisation	Official service established by Government to discharge the functions specified by the IPPC. [FAO, 1990; formerly Plant Protection Organization (National)]
NPPO	Abbreviation for National Plant Protection Organisation.
Official	Established, authorized or performed by a National Plant Protection Organization [FAO, 1990].
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 production site	A defined portion of a 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 and that is managed as a separate unit in the same way as a pest free place of production [ISPM Pub. No. 10, 1999]
Phytosanitary certificate	A certificate patterned after the model certificates of the IPPC [FAO 1990].
Phytosanitary certification	Use of phytosanitary procedures leading to the issue of a phytosanitary certificate [FAO, 1990].

Phytosanitary measure	Any legislation, regulation or official procedure having the purpose to prevent the introduction and/or spread of pests, or to limit the economic impact of regulated non-quarantine pests [FAO, 1995; revised IPPC, 1997; ISC, 2001]
Quarantine pest	A pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and (is) being officially controlled [FAO, 1990; revised FAO, 1995; IPPC 1997].
Regulated pest	A quarantine pest or a regulated non-quarantine pest [IPPC, 1997] A pest of potential economic importance to New Zealand and not yet present there, or present but either not widely distributed and being officially controlled, or a regulated non-quarantine pest, or having the potential to vector another regulated pest into New Zealand.
Treatment	Officially authorized procedure for the killing or removal of pests or rendering pests infertile or for devitalisation [FAO, 1990, revised FAO, 1995; ISPM No. 15, 2002; ISPM No. 18, 2003].
Viable	Capable of maintaining life, or able to live in a particular environment and able to procreate.

## **OUTLINE OF REQUIREMENTS**

This import health standard outlines the requirements to be met prior to shipment, in-transit and on arrival in New Zealand for fresh mango fruit imported from Australia.

This standard is replicated at the following Internet address:

<http://www.biosecurity.govt.nz/regs/imports/plants/fruit-veg>

## **NEW ZEALAND LEGISLATIVE REQUIREMENTS AND INTERNATIONAL OBLIGATIONS**

All New Zealand import health standards are based upon risk analyses, which may assess either a commodity or a pest/pathway combination. New Zealand's legislative requirements and international obligations are taken into account when conducting risk analyses and applying the findings in the development of import health standards. The principal document for all New Zealand import health standards relating to plants and plant products is the Biosecurity Act (1993), whilst the international obligations derive principally from the guidelines on risk analysis developed under the auspices of the Interim Commission on Phytosanitary Measures operating within the framework of the International Plant Protection Convention, and the World Trade Organisation Agreement on the Application of Sanitary and Phytosanitary Measures.

# **IMPORT HEALTH STANDARD: FRESH FRUIT/VEGETABLES – MANGO (*Mangifera indica*) FROM AUSTRALIA.**

## **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:

Director, Plants Biosecurity  
Ministry of Agriculture and Forestry  
PO Box 2526  
Wellington  
NEW ZEALAND

Fax: 64-4-498 9888

E-mail: [PlantImports@maf.govt.nz](mailto:PlantImports@maf.govt.nz)

<http://www.maf.govt.nz/>

## **2 General conditions for the importation of all plants and plant products**

Plants and plant products are not permitted entry into New Zealand, unless an import health standard has been issued in accordance with Section 22 of the Biosecurity Act 1993. Should plants or plant products, for which no import health standard exist, be intercepted by New Zealand MAF, the importer will be offered the option of reshipment or destruction of the consignment (at their expense).

The NPPO of the exporting country is requested to inform New Zealand MAF of any change of address.

The NPPO of the exporting country is required to inform New Zealand MAF of any newly recorded pests which may infest/infect any commodity approved for export to New Zealand.

Pursuant to the Hazardous Substances and New Organisms Act 1996, proposals for the deliberate introduction of new organisms (including genetically modified organisms) as defined by the Act should be referred to the Environment Risk Management Authority, PO Box 131, Wellington or e mail: [info@ermanz.govt.nz](mailto:info@ermanz.govt.nz)

[Note: In order to meet the Environmental Risk Management Authority's requirements the scientific name (i.e. genus and species) of the commodity must be included in the phytosanitary certificate.]

### **3 Explanation of pest categories**

New Zealand MAF categorises pests associated with plants and plant products into regulated and non-regulated pests. Measures to prevent the establishment of regulated pests in New Zealand are developed in accordance with the appropriate FAO ISPMs and other relevant international standards.

Regulated pests are those pests for which actions would be undertaken if they were intercepted/detected. As well as quarantine pests, these include new organisms as defined by the Hazardous Substances and New Organisms Act 1996, pests that may pose a risk to human or animal health or to the environment, vectors of associated quarantine pests, and virulent strains (not present in New Zealand) of non-regulated pests and contaminants. Non-regulated pests are those pests for which actions would not be undertaken if they were intercepted/detected.

Pests (including weeds) associated with each commodity will appear on a separate pest list which will be attached to each import health standard as an Appendix.

### **4 Application of measures**

A number of different measures may be applied to pests based on the outcome of pest risk analyses. Required measures may include:

- Surveillance for pest freedom
- Testing prior to export for regulated pests which cannot be readily detected by inspection (e.g. viruses on propagating material)
- Specific pre-shipment pest control activities to be undertaken by the supply country's contracting party
- The application of a pre-shipment treatment
- Inspection of the export consignment
- Treatment on arrival in New Zealand

### **5 General conditions for fresh fruit/vegetables**

Commodity Sub-Class: Fresh Fruit/Vegetables relates to fresh fruit and vegetables for consumption.

Only clean, inert/synthetic material may be used for the protection, packaging and shipping materials of fresh fruit/vegetables.

All host material (fruit/vegetables) of fruit fly species (Diptera: Tephritidae) of economic significance shall only be imported under the terms of a bilateral quarantine arrangement (e.g. agreement, work plan) between the New Zealand MAF Biosecurity Authority's Director, Plants Biosecurity and the head of the supply country's NPPO.

Consignments shall be free from extraneous plant material (e.g., leaves, stems, flowers), trash and soil etc.

## **6 Specific conditions for mango (Commodity Sub-Class: Fresh Fruit/Vegetables) from Australia.**

### **6.1 PRE-SHIPMENT REQUIREMENTS**

#### **6.1.1 Inspection of the consignment**

New Zealand MAF requires that the Australia NPPO sample and visually inspect the consignment according to official procedures for all the regulated pests specified by New Zealand MAF. A phytosanitary certificate should not be issued if live regulated pest(s) or “unlisted” organism(s) are detected, unless the consignment is effectively treated.

#### **6.1.2 Testing of the consignment**

Testing of the consignment prior to export to New Zealand for regulated pests which are not visually detectable (viz. fungi and bacteria) is not generally required for fresh mango fruit from Australia.

#### **6.1.3 Treatment**

New Zealand MAF requires a mandatory pre-export treatment for high impact pests, e.g., economically important fruit fly species. New Zealand MAF currently approves irradiation as a treatment for all arthropod pests listed on the Australian mango pest list. The application of the irradiation treatment must be carried out in accordance with the International Standards for Phytosanitary Measures publication No. 18: *Guidelines for the use of irradiation as a phytosanitary measure*.

- Fruit flies irradiated with a minimum dose rate of 150 Gy
- Other arthropods irradiated with a minimum dose rate of 250 Gy

#### 6.1.4 Documentation

**Bilateral quarantine arrangement/Workplan:** Required for fruit flies.

Mangoes may only be imported into New Zealand from Australia under the terms of the Bilateral Quarantine Arrangement.

**Phytosanitary certificate:** Required.

**Import permit/Authorisation to import:** Exempt under Gazette Notice: No. AG12, 13 July 1995.

#### 6.1.5 Phytosanitary certification

A completed phytosanitary certificate issued by the Australia NPPO must accompany all mango consignments exported to New Zealand.

Before a phytosanitary certificate is issued, the Australia NPPO must be satisfied that the following activities required by New Zealand MAF have been undertaken.

The mangoes have:

- (i) been visually inspected in accordance with appropriate official procedures and found to be free from any regulated plant pathogens; AND
- (ii) undergone an agreed treatment that is effective against associated fruit fly species of economic significance in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS; AND
- (iii) Undergone the agreed treatment for regulated arthropod pests.

Note: The treatment dose rate shall be specified in the treatment section of the phytosanitary certificate.

#### 6.1.6 Additional declarations to the phytosanitary certificate

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

"The mangoes in this consignment have:

- been inspected and treated according to appropriate official procedures and are considered to be free from regulated pests specified by NZ MAF, and conform with New Zealand's current import requirements;

**NOTE:** This additional declaration is not required if the phytosanitary certificate issued by the Australian NPPO is in accordance with the model phytosanitary certificate annexed to the revised (1997) text of the FAO IPPC.

- been treated in accordance with Appendix 12 of the Bilateral Quarantine Arrangement between NZ MAF and AQIS.”

## **6.2 TRANSIT REQUIREMENTS**

The mangoes must be packed and shipped in a manner to prevent infestation and/or contamination by regulated pests.

Where a consignment is split or has its packaging changed while in another country (or countries) *en route* to New Zealand, a "Re-export Certificate" is required. Where a consignment is held under bond as a result of the need to change conveyances and is kept in the original shipping container, a "Re-export Certificate" is not required.

## **6.3 INSPECTION ON ARRIVAL IN NEW ZEALAND**

New Zealand MAF will check the accompanying documentation on arrival to confirm that it is correct and reconciles with the actual consignment.

New Zealand MAF requires, with 95% confidence, that not more than 0.5% of the units in a consignment are infested with visually detectable, viable, regulated pests and trash. To achieve this, New Zealand MAF will sample and inspect 600 units with an acceptance level of zero infested units (or equivalent), from the (homogeneous) lot.

### **Note:**

Because the required response of regulated arthropod pests that have undergone the irradiation treatment is prevention of adult emergence or adult sterility (not mortality) a possibility exists that live (but non-viable) regulated arthropods may be present with a consignment. Refer to section 6.4 for actions undertaken on the interception/detection of pests.

## **6.4 BIOSECURITY/QUARANTINE DIRECTIVE**

The commodity may be directed to a MAF approved facility for further treatment if required.

## **6.5 TESTING FOR REGULATED PESTS**

New Zealand MAF may, on the specific request of the Director, Plants Biosecurity, test the consignment for regulated pests.

## **6.6 ACTIONS UNDERTAKEN ON THE INTERCEPTION/DETECTION OF PESTS/CONTAMINANTS**

In accordance with ISPM 18 *Guidelines for the use of irradiation as a phytosanitary measure* (section 8.3) MAF Biosecurity New Zealand does not consider the detection of arthropods at import inspection to indicate treatment failure unless there is other evidence to show that the integrity of the treatment system is inadequate.

If live arthropods are detected the following actions will be undertaken:

- arthropods listed on the regulated mango pest list (appendix 1)
  - no action but MAF Biosecurity New Zealand reserves the right for analyses to be conducted on the surviving pest to verify treatment efficacy.
- arthropods not listed on the regulated mango pest list but determined to be regulated
  - no action if the irradiation treatment is deemed to be effective on these pests.
  - action if there is insufficient data on efficacy or the treatment is not known to be effective.
- Non-regulated arthropods
  - no action

If regulated pests, extraneous plant material or trash are intercepted/detected with the commodity, or associated packaging, the following actions will be undertaken as appropriate (depending on the pest identified):

- Re-sorting (specific conditions apply) of the consignment
- Reshipment of the consignment
- Destruction of the consignment
- Treatment for those pests where an efficacious treatment is available
- The suspension of trade on the detection of high impact pests for which specific pre-arrival phytosanitary measures are required. Suspension of trade will continue until the cause of the non-compliance has been identified and corrective actions have been implemented to the satisfaction of MAF Biosecurity New Zealand

If an organism is intercepted/detected that is not on the pest list (appended to this document), the consignment will be held (or equivalent) until an assessment is undertaken to determine the organism's regulatory status and appropriate measures developed if required. Consignments that are contaminated with extraneous plant material and/or trash in the 600 unit sample will result in the consignment being held until an assessment has been made in comparison with the risk of importing the part(s) of the plant species concerned.

## **6.7 BIOSECURITY CLEARANCE**

If viable regulated pests are not detected, or are successfully treated following interception/detection, biosecurity clearance will be given.

## **6.8 AUDIT OF OFFSHORE TREATMENT FACILITIES**

NZ MAF reserves the right to audit all processes that are undertaken by a treatment facility. Audits will be conducted on a regular basis.

## **6.9 FEEDBACK ON NON-COMPLIANCE**

The Australia NPPO will be informed by New Zealand MAF's Director, Plants Biosecurity of the interception (and treatment) of any regulated pests, "unlisted" pests, or non-compliance with measures specified in this import health standard.

## **7 Contingencies Following Biosecurity Clearance**

Should a regulated pest be detected subsequent to biosecurity clearance, New Zealand MAF may implement a management programme (official control programme) in accordance with Part V of the Biosecurity Act 1993 and Part 5 of the Biosecurity Amendment Act 1997.

## Appendix 1 Pest List Commodity Sub-class: Fresh Fruit/Vegetables Mango, *Mangifera indica* from Australia

Scientific name	Organism type	Common name	Quarantine status	Measures to prevent introduction	Actions on interception
<i>Asterina punctiformis</i>	fungus	-	Regulated	1a	2
<i>Chaetothyria tenuissima</i>	fungus	stem sooty blotch	Regulated	1a & 1b	1 & or 2
<i>Cytosphaera mangiferae</i>	fungus	stem-end rot	Regulated	1a & 1b	1 & or 2
<i>Elsinoe mangiferae</i> (anamorph <i>Sphaceloma mangiferae</i> )	fungus	mango scab	Regulated	1a & 1b	1 & or 2
<i>Fusicoccum mangiferae</i>	fungus	-	Regulated	1a	2
<i>Natrassia mangiferae</i>	fungus	stem-end rot	Regulated	1a & 1b	1 & or 2
<i>Pestalotiopsis mangiferae</i>	fungus	grey leaf spot of mango	Regulated	1a & 1b	1 & or 2
<i>Pestalotiopsis mangifolia</i>	fungus	storage rot	Regulated	1a & 1b	1 & or 2
<i>Pestalotiopsis theae</i>	fungus	mango blight	Regulated	1a & 1b	1 & or 2
<i>Pestalotiopsis virgatula</i>	fungus	mango leaf spot	Regulated	1a & 1b	1 & or 2
<i>Phomopsis mangiferae</i>	fungus	stem end rot	Regulated	1a & 1b	1 & or 2
<i>Pythium mangifera</i> (anamorph <i>Oidium mangiferae</i> )	fungus	mango powdery mildew	Regulated	1a & 1b	1 & or 2
<i>Schizoparme straminea</i> (anamorph <i>Coniella castaneicola</i> )	fungus	schizoparme fruit rot	Regulated	1a & 1b	1 & or 2
<i>Amblypelta lutescens</i>	insect	banana spotting bug	Regulated	4	2 or 4
<i>Amblypelta nitida</i>	insect	fruit spotting bug	Regulated	4	2 or 4
<i>Aonidiella orientalis</i>	insect	oriental yellow scale	Regulated	4	2 or 4
<i>Aspidiotus destructor</i>	insect	coconut scale	Regulated	4	2 or 4
<i>Aulacaspis tubercularis</i>	insect	common mango scale	Regulated	4	2 or 4
<i>Bactrocera aquilonis</i>	insect	Northern territory fruit fly	Regulated	3	3 or 4
<i>Bactrocera cucumis</i>	insect	cucumber fruit fly	Regulated	3	3 or 4
<i>Bactrocera frauenfeldi</i>	insect	fruit fly	Regulated	3	3 or 4
<i>Bactrocera jarvisi</i>	insect	Jarvis' fruit fly	Regulated	3	3 or 4
<i>Bactrocera kraussi</i>	insect	fruit fly	Regulated	3	3 or 4
<i>Bactrocera murrayi</i>	insect	fruit fly	Regulated	3	2 or 4
<i>Bactrocera neohumeralis</i>	insect	lesser Queensland fruit fly	Regulated	3	3 or 4
<i>Bactrocera opilliae</i>	insect	false oriental fruit fly	Regulated	3	2 or 4
<i>Bactrocera tryoni</i>	insect	Queensland fruit fly	Regulated	3	3 or 4
<i>Campylomma liebknechti</i>	insect	apple dimpling bug	Regulated	4	2 or 4
<i>Ceratitidis capitata</i>	insect	Mediterranean fruit fly	Regulated	3	3 or 4
<i>Ceroplastes rubens</i>	insect	red wax scale	Regulated	4	2 or 4
<i>Chionophasma fimbriata</i>	insect		Regulated	4	2 or 4
<i>Chlumetia euthysticha</i>	insect	small mango tipborer	Regulated	4	2 or 4
<i>Chrysomphalus aonidium</i>	insect	Florida red scale	Regulated	4	2 or 4
<i>Chrysomphalus dictyospermi</i>	insect	dictyospermum scale	Regulated	4	2 or 4
<i>Coccus viridis</i>	insect	green scale	Regulated	4	2 or 4
<i>Colgaroides acuminata</i>	insect	mango planthopper	Regulated	4	2 or 4
<i>Conogethes punctiferalis</i>	insect	yellow peach moth	Regulated	4	2 or 4
<i>Cryptoblabes adoceta</i>	insect	false blossom moth	Regulated	4	2 or 4
<i>Cryptoptila immersana</i>	insect	ivy leafroller	Regulated	4	2 or 4
<i>Deanolis albizonalis</i>	insect	mango fruit borer	Regulated	4	2b

Scientific name	Organism type	Common name	Quarantine status	Measures to prevent introduction	Actions on interception
<i>Dirioxa pornia</i>	insect	island fruit fly	Regulated	4	2 or 4
<i>Dudua aprobola</i>	insect	leaf curling moth	Regulated	4	2 or 4
<i>Eucyclodes pieroides</i>	insect	bizarre looper	Regulated	4	2 or 4
<i>Eudocima fullonia</i>	insect	fruit-piercing moth	Regulated	4	2 or 4
<i>Eudocima materna</i>	insect	fruit-piercing moth	Regulated	4	2 or 4
<i>Eudocima salamina</i>	insect	fruit-piercing moth	Regulated	4	2 or 4
<i>Eudocima tyrannus</i>	insect	fruit-piercing moth	Regulated	4	2 or 4
<i>Frankliniella schultzei</i>	insect	flower thrips	Regulated	4	2 or 4
<i>Helopeltis clavifer</i>	insect	-	Regulated	4	2 or 4
<i>Icerya aegyptiaca</i>	insect	Egyptian fluted scale	Regulated	4	2 or 4
<i>Idioscopus clypealis</i>	insect	mango hopper	Regulated	4	2 or 4
<i>Idioscopus nitidulus</i>	insect	mango hopper	Regulated	4	2 or 4
<i>Ischnaspis longirostris</i>	insect	black thread scale	Regulated	4	2 or 4
<i>Isotenes miserana</i>	insect	orange fruitborer	Regulated	4	2 or 4
<i>Lobesia sp.</i>	insect	European grape berry moth	Regulated	4	2 or 4
<i>Monolepta australis</i>	insect	red-shouldered leaf beetle	Regulated	4	2 or 4
<i>Monolepta divisa</i>	insect	small monolepta beetle	Regulated	4	2 or 4
<i>Nipaecoccus vastator</i>	insect	karoo thorn mealybug	Regulated	4	2 or 4
<i>Ophiusa tirhaca</i>	insect	-	Regulated	4	2 or 4
<i>Penicillaria jocosatrix</i>	insect	mango tipborer	Regulated	4	2 or 4
<i>Phenacaspis dilatata</i>	insect	mango scale	Regulated	4	2 or 4
<i>Planococcus citri</i>	insect	Citrus mealybug	Regulated	4	2 or 4
<i>Pseudaulacaspis cockerelli</i>	insect	Cockerell's scale	Regulated	4	2 or 4
<i>Rastrococcus sp.</i>	insect	-	Regulated	4	2 or 4
<i>Rhyparida limbatipennis</i>	insect	-	Regulated	4	2 or 4
<i>Saissetia miranda</i>	insect	Mexican black scale	Regulated	4	2 or 4
<i>Selenothrips rubrocinctus</i>	insect	redbanded thrips	Regulated	4	2 or 4
<i>Sternochetus mangiferae</i>	insect	mango seed weevil	Regulated	4	2 or 4
<i>Xanthomonas campestris</i> <i>pv. mangiferae-indicae</i>	bacterium	bacterial black spot	Non regulated	.	NA
<i>Alternaria alternata</i>	fungus	black stalk rot	Non regulated	.	NA
<i>Botryosphaeria dothidea</i> (anamorph <i>Fusicoccum aesculi</i> )	fungus	canker	Non regulated	.	NA
<i>Botryosphaeria parva</i> (anamorph <i>Fusicoccum parvum</i> )	fungus	canker	Non regulated	.	NA
<i>Botryosphaeria rhodina</i> (anamorph <i>Lasiodiplodia theobromae</i> )	fungus	gummosis	Non regulated	.	NA
<i>Botryosphaeria ribis</i> (anamorph <i>Dothiorella ribis</i> )	fungus	canker	Non regulated	.	NA
<i>Botryotinia fuckeliana</i> (anamorph <i>Botrytis cinerea</i> )	fungus	grey mould	Non regulated	.	NA
<i>Cladosporium cladosporioides</i>	fungus	cladosporium leaf spot	Non regulated	.	NA
<i>Cochliobolus hawaiiensis</i>	fungus	leaf spot, seed rot	Non regulated	.	NA
<i>Colletotrichum acutatum</i>	fungus	anthracnose	Non regulated	.	NA
<i>Colletotrichum coccodes</i>	fungus	anthracnose	Non regulated	.	NA

Scientific name	Organism type	Common name	Quarantine status	Measures to prevent introduction	Actions on interception
<i>Dipodascus geotrichum</i> (anamorph <i>Geotrichum candidum</i> )	fungus	sour rot	Non regulated	.	NA
<i>Dothiorella aromatica</i>	fungus	stem-end rot	Non-regulated	.	NA
<i>Epicoccum purpurascens</i>	fungus	black mould	Non-regulated	.	NA
<i>Erysiphe cichoracearum</i> (anamorph <i>Oidium asteris-puniceae</i> )	fungus	powdery mildew	Non-regulated	.	NA
<i>Fusicoccum luteum</i>	fungus	bunch rot	Non-regulated	.	NA
<i>Glomerella cingulata</i> (anamorph <i>Colletotrichum gloeosporioides</i> )	fungus	anthracnose	Non-regulated	.	NA
<i>Glomerella lagenaria</i> (anamorph <i>Colletotrichum orbiculare</i> )	fungus	-	Non-regulated	.	NA
<i>Pestalotiopsis funerea</i>	fungus	leaf spot	Non-regulated	.	NA
<i>Pestalotiopsis versicolor</i>	fungus	pestalotiopsis rot	Non-regulated	.	NA
<i>Phytophthora nicotianae</i>	fungus	buckeye rot	Non-regulated	.	NA
<i>Pithomyces chartarum</i>	fungus	facial eczema fungus	Non-regulated	.	NA
<i>Pleospora allii</i> (anamorph <i>Stemphylium vesicarium</i> )	fungus	black mould	Non-regulated	.	NA
<i>Rhizopus stolonifer</i>	fungus	rhizopus soft rot	Non-regulated	.	NA
<i>Thanatephorus cucumeris</i> (anamorph <i>Rhizoctonia solani</i> )	fungus	rhizoctonia rot	Non-regulated	.	NA
<i>Aonidiella aurantii</i>	insect	California red scale	Non-regulated	.	NA
<i>Ceroplastes destructor</i>	insect	white wax scale	Non-regulated	.	NA
<i>Epiphyas postvittana</i>	insect	light brown apple moth	Non-regulated	.	NA
<i>Helicoverpa armigera</i>	insect	tomato fruitworm	Non-regulated	.	NA
<i>Heliethrips haemorrhoidalis</i>	insect	greenhouse thrips	Non-regulated	.	NA
<i>Hemiberlesia lataniae</i>	insect	latania scale	Non-regulated	.	NA
<i>Hemiberlesia rapax</i>	insect	greedy scale	Non-regulated	.	NA
<i>Icerya purchasi</i>	insect	cottony cushion scale	Non-regulated	.	NA
<i>Parasaissetia nigra</i>	insect	nigra scale	Non-regulated	.	NA
<i>Pseudococcus longispinus</i>	insect	longtailed mealybug	Non-regulated	.	NA
<i>Saissetia coffeae</i>	insect	helmet scale	Non-Regulated	.	NA
<i>Toxoptera aurantii</i>	insect	black citrus aphid	Non-regulated	.	NA
<i>Toxoptera citricida</i>	insect	brown citrus aphid	Non-regulated	.	NA
<i>Polyphagotarsonemus latus</i>	mite	broad mite	Non-regulated	.	NA
<i>Tetranychus urticae</i>	mite	twospotted spider mite	Non-regulated	.	NA

### **Measures to prevent entry & establishment**

- . No measures as pest non regulated
- 1a Visual inspection of produce and associated packaging
- 1b Consignment must be free from extraneous plant material - pests are associated with other plant parts (e.g., leaves, stems, flowers)
- 2a Undergone appropriate pest control activities
- 2b Pest free area (based on official detection survey)
- 3 Agreed offshore fruit fly treatment and bilateral quarantine agreement required
- 4 Approved offshore treatment

### **Actions on interception**

- NA No actions as pest is non regulated
- 0 No action due to low risk pathway
- 1 Removal of trash - pests are associated with other plant parts (e.g., leaves, stems, flowers)
- 2 Treat, reship or destroy
- 3 Reship or destroy. Suspend pathway
- 4 No action if irradiation has been certified to be used as a pre-export measure