

**Import Health Standard**  
**Commodity sub-class: Fresh fruit/vegetables**

**Mango, *Mangifera indica*,  
from India**

**ISSUED**

**Issuance: xx xxxx 2011**

## Issuance

This import health standard for fresh mango fruit from India has been issued pursuant to section 22 of the Biosecurity Act (1993).

---

Signature of Group Manager, Plant Imports & Export Group  
Acting pursuant to delegated Director-General authority

Date: DD Month YYYY

DRAFT

# IMPORT HEALTH STANDARD: FRESH FRUIT/VEGETABLES

## *Mangifera indica* from India

### Contents

Part A.	Background .....	4
Part B.	General conditions for fresh fruit/vegetables for consumption.....	4
Part C.	Specific conditions for mango from India .....	5
Part D.	Regulated risk organisms list for fresh mango fruit from India.....	8

**DRAFT**

## Part A. Background

### Scope

This import health standard describes the requirements to be met to enable biosecurity clearance to be given for fresh mango fruit (*Mangifera indica* L.) for human consumption imported into New Zealand from India. The commodity description “mango” for human consumption is defined as commercially-produced and desapped mango fruits with skin, flesh and seed, with a small portion of stem attached but not including leaves.

### Outcome

The agreed pre-shipment or in-transit measures for high profile risk organisms have been undertaken and the mangoes are free of regulated organisms.

### Performance measure

The high profile risk organisms as in *Part C* require specific risk mitigation measures. There is a zero tolerance for the presence of these high profile risk organisms on the commodity.

The Maximum Allowable Prevalence for visually detectable regulated organisms on fresh fruit/vegetables is as follows: At a 95% confidence level, not more than 0.5% of the units in the consignment are infested (this equates to an acceptance level of zero units infested by regulated organisms in a sample size of 600 units).

### Equivalence

Under section 22 of the Biosecurity Act 1993, MAFBNZ can amend the relevant import health standard (IHS) by adding an approved equivalent measure; once that measure is proven to maintain at least the same level of protection assured by the measures in this IHS. See the associated guidance document on how to apply for equivalence.

## Part B. General conditions for fresh fruit/vegetables for consumption

The import health standard 152.02 (IHS152.02: Importation and Clearance of Fresh Fruit and Vegetables into New Zealand) contains the phytosanitary requirements that must be met for all fresh fruit and vegetable commodities that are allowed to be imported into New Zealand. The IHS 152.02 outlines transit requirements, inspections on arrival in New Zealand and actions undertaken upon organism interceptions.

The import health standard 152.02 can be found at the MAF Biosecurity New Zealand website (<http://www.biosecurity.govt.nz/files/ih/152-02.pdf>).

## Part C. Specific conditions for mango from India

### Testing of the consignment

Testing of the consignment prior to export to New Zealand for regulated organisms which are not visually detectable (fungi and bacteria) is not required for fresh mangoes from India.

### Phytosanitary measures

All mango fruit for export to New Zealand must be sourced from orchards that produce commercial mangoes under standard cultivation, pest-control, harvesting and packing activities. During harvest, infested, infected or damaged fruit must be discarded prior to treatment.

MAF Biosecurity New Zealand requires a mandatory pre-export treatment of mangoes for high risk pests, including economically important fruit fly species. MAFBNZ currently approves vapour heat treatment at  $\geq 48^{\circ}\text{C}$  for  $\geq 20$  minutes or irradiation at a minimum absorbed dose of 400 Gy as a treatment for regulated arthropod pests associated with mango from India.

The application of vapour heat treatment or irradiation must be in accordance with the Official Assurance Programme agreed between PPQS and MAFBNZ. In addition, 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*.

### Inspection of the consignment

MAF Biosecurity New Zealand requires that India's NPPO sample and visually inspects the consignment according to official procedures for all the regulated pests specified by MAF Biosecurity New Zealand and ensure that it conforms with New Zealand's current import requirements. A phytosanitary certificate should not be issued if live regulated pest(s) are detected, unless the consignment is effectively treated, that is, irradiation treatment at 400 Gy.

If pests are found which are not listed in the import health standard, India's NPPO must establish their regulatory status. This information is available in MAF's "Biosecurity Organisms Register for Imported Commodities" (BORIC) <http://www.biosecurity.govt.nz/pests/registers/boric>. If the organism is not present on this register then India's NPPO must contact MAF Biosecurity New Zealand to establish its regulatory status.

## Documentation

A completed phytosanitary certificate issued by India's NPPO must accompany all mango consignments exported to New Zealand. The phytosanitary certificate must be in English and original.

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

The mangoes have:

- (i) been inspected in accordance with appropriate official procedures and found free from regulated organisms.

AND

- (ii) undergone treatment that is effective against regulated arthropod pests in accordance with terms of the Official Assurance Programme agreed between MAFBNZ and the Directorate of Plant Protection, Quarantine and Storage, Ministry of Agriculture (PPQS) of India.

## Additional declarations to the phytosanitary certificate

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

- A. For mangoes that have undergone treatment by irradiation at 400 Gy the additional declarations required are:

The Mangoes in this consignment have:

- (i) been visually inspected in accordance with appropriate official procedures and found free from regulated plant pathogens.

AND

- (ii) been produced in accordance with terms of the Official Assurance Programme agreed between MAF Biosecurity New Zealand and the Directorate of Plant Protection, Quarantine and Storage, Ministry of Agriculture (PPQS) of India.

**NOTE:** Full details of the irradiation treatment, including dosage, must be included in the "Disinfestation and/or Disinfection Treatment" area of the phytosanitary certificate or as an endorsed attachment to the phytosanitary certificate.

B. For mangoes that have undergone vapour heat treatment the additional declarations required are:

The Mangoes in this consignment have:

- (i) been visually inspected in accordance with appropriate official procedures and found free from regulated organisms.

AND

- (iii) been produced in accordance with terms of the Official Assurance Programme agreed between MAF Biosecurity New Zealand and the Directorate of Plant Protection, Quarantine and Storage, Ministry of Agriculture (PPQS) of India.

**NOTE:** Full details of the vapour heat treatment, including temperature and duration, must be included in the "Disinfestation and/or Disinfection Treatment" area of the phytosanitary certificate or as an endorsed attachment to the phytosanitary certificate.

DRAFT

## Part D. Regulated risk organisms list for fresh mango fruit from India

Scientific Name	Organism Type	Common Name	Action on Interception
<i>Aspergillus stellifer</i>	Fungi		2
<i>Cytosphaera mangiferae</i>	Fungi	stem-end rot	2
<i>Diaporthe rudis</i> (anamorph: <i>Phomopsis rudis</i> )	Fungi	bud blight	2
<i>Dothiorella mangiferae</i>	Fungi		2
<i>Gilbertella persicaria</i>	Fungi	fruit rot	2
<i>Penicillium fellutanum</i>	Fungi		2
<i>Pestalotiopsis glandicola</i>	Fungi		2
<i>Pestalotiopsis mangiferae</i>	Fungi	branch dieback	2
<i>Phyllosticta mortoni</i>	Fungi		2
<i>Aleurothrixus floccosus</i>	Insect	woolly whitefly	2a
<i>Aonidiella citrina</i>	Insect	Californian red scale	2a
<i>Aphis gossypii</i>	Insect	cotton aphid	2a
<i>Bactrocera caryeae</i>	Insect	fruit fly	3
<i>Bactrocera correcta</i>	Insect	guava fruit fly	3
<i>Bactrocera cucurbitae</i>	Insect	melon fly	3
<i>Bactrocera diversa</i>	Insect	fruit fly	3
<i>Bactrocera dorsalis</i>	Insect	oriental fruit fly	3
<i>Bactrocera tau</i>	Insect	fruit fly	3
<i>Bactrocera zonata</i>	Insect	peach fruit fly	3
<i>Ceroplastes rubens</i>	Insect	Japanese waxen worm	2a
<i>Chrysomphalus aonidium</i>	Insect	Florida red scale	2a
<i>Chrysomphalus dictyospermi</i>	Insect	Spanish red scale	2a
<i>Coccus viridis</i>	Insect	green coffee scale	2a
<i>Lepidosaphes gloverii</i>	Insect	Glover scale	2a
<i>Parlatoria oleae</i>	Insect	olive scale	2a
<i>Parlatoria pergandii</i>	Insect	chaff scale	2a
<i>Pseudaonidia trilobitiformis</i>	Insect	cashew scale	2a
<i>Pseudaulacaspis cockerelli</i>	Insect	Cockerell's scale	2a
<i>Pseudaulacaspis pentagona</i>	Insect	white peach scale	2a

## Actions on interception

- 0 No action due to low risk pathway
- 1 Removal of trash – organisms are associated with other plant parts and/or soil
- 2 Treat, resort, reship or destroy
- 2a Treat, reship or destroy. Suspend pathway
- 3 Reship or destroy. Suspend pathway

NOTE: The suspension of the pathway could be at the production area, packhouse, province or country level depending on the significance of the risk organism and the interception.

DRAFT