



1. INTRODUCTION

1.1 PURPOSE & SCOPE

**OFFICIAL ASSURANCE PROGRAMME
FOR THE EXPORT OF**

**MANGO
(*Mangifera indica*)**

**FROM
INDIA TO NEW ZEALAND**

BETWEEN

**THE MINISTRY OF AGRICULTURE
INDIA**

AND

**THE MINISTRY FOR PRIMARY INDUSTRIES
NEW ZEALAND**

Signed in *New Delhi* on the *17th* day of *July*, 2012

Tim Knox
Director Market Assurance
Standards Branch
Ministry for Primary Industries
NEW ZEALAND

Shri Utpal Kumar Singh
Joint Secretary
Department of Agriculture and Cooperation (DAC)
Ministry of Agriculture
INDIA

1. INTRODUCTION

1.1 PURPOSE & SCOPE

The purpose of this Official Assurance Programme (OAP) is to ensure that harmful species of fruit fly and other regulated [quarantine] pests do not enter and establish in New Zealand as a result of the importation of fresh mango (*Mangifera indica*) fruit from India to New Zealand.

Fresh mango fruit exported from India to New Zealand will comply with the relevant plant quarantine laws, import health standards and regulations of New Zealand. Consignments of mangoes will receive a phytosanitary certificate from India's Directorate of Plant Protection, Quarantine and Storage (PPQS), Department of Agriculture & Cooperation (DAC), as the designated NPPO only when they are considered to be free from the quarantine pests of concern to New Zealand (listed in Part D of the Import Health Standard for Mango fruit for Consumption from India).

The procedures described in this OAP apply to all consignments of mango for consumption exported to New Zealand from India.

This OAP may be reviewed on request by either party.

1.2 REFERENCES

- APEDA (2009) Procedure for grant of recognition certificate for horticulture produce pack houses.
http://www.apeda.gov.in/apedawebsite/HACCP/PACKHOUSE_RECOGNITION_SCHEME_11_10_2008.pdf
- Agricultural and Processed Food Products Export Development Authority (APEDA) Standard Operating Procedures - Packinghouse Facilities for Export of Indian Mangoes to New Zealand
- APEDA Guidelines for export of mangoes to New Zealand
- PPQS (2005) Guidelines for Certification of Vapour Heat Treatment Facilities for Fresh Fruits & Vegetables, NSPM-20.
<http://www.plantquarantineindia.org/pdf/files/NSPM-20.VHT.pdf>
- MAF "Import Health Standard for the Importation and Clearance of Fresh Fruit and Vegetables into New Zealand" [current]
<http://www.biosecurity.govt.nz/files/ihs/152-02.pdf>
- MAF "Import Health Standard - Commodity Sub-class: Fresh Fruit/Vegetables Mango, *Mangifera indica*, from India"

2. REGISTRATION OF EXPORT ORCHARDS, PACK HOUSES, TREATMENT & STORAGE FACILITIES

All commercial pack houses, treatment and storage facilities involved in the export of mangoes from India to New Zealand will be registered with DAC and/or authorised representative (i.e. APEDA) prior to the commencement of export. Orchards will register through a cooperative agreement with a registered pack house. Registration records will be made available for inspection by MPI on request. The register will include the following information about the pack house, treatment and storage facility:

- i. Location
- ii. Manager/owner or operator
- iii. Operation type(s) (orchard, pack house, treatment [and specific treatment], storage)
- iv. Unique identifier (to be used on packages and the phytosanitary certificate)

This registration process will be used for the purpose of trace-back in the event of a non-compliance or interception of high-risk quarantine pests such as live fruit fly.

3. PRODUCTION, PACKING, TREATMENT & STORAGE OF FRUIT FOR EXPORT TO NEW ZEALAND

3.1 Orchards

All commercial orchards involved in the export of mangoes from India to New Zealand will:

- i. enter into a cooperative agreement with a registered pack house and obtain a unique production unit code number at the beginning of the fruiting season;
- ii. produce fruit under standard cultivation, pest management (to ensure low pest levels), and harvesting methods;
- iii. maintain records of all orchard operations;
- iv. maintain Good Agricultural Practices established by APEDA;
- v. harvest healthy un-infested soil-free fruit only into clean lined crates marked with:
 - a. orchard registration number;
 - b. fruit variety;
 - c. date of harvesting; and
- vi. transport fruit to registered pack houses in clean trucks while ensuring fruit from orchards registered with the programme is not mixed with fruit from unregistered orchards.

3.2 Pack houses

All pack houses involved in the export of mangoes from India to New Zealand will:

- i. be registered with and approved by DAC and/or authorised representative (i.e. APEDA);
 - ii. enter into a cooperative agreement with grower/orchard and supply list of orchards
-

- and codes to DAC;
- iii. maintain records of post-harvest processing and verify fruit traceability;
- iv. maintain clean equipment and facilities;
- v. regularly maintain and calibrate equipment involved in post-harvest processing and storage (e.g. temperature probes for water baths)
- vi. operate documented effective post-harvest disinfestation/disinfection procedures that include:
 - a. Washing and brushing of fruit;
 - b. Fungal disinfection of fruit;
 - c. Drying.
- vii. remove damaged and diseased fruit by standard export grading procedures;
- viii. dispose of rejected fruit and other waste in a manner to prevent contamination of export grade fruit;
- ix. pack fruit into clean insect-proof packages following vapour heat treatment;
- x. clearly label packages with:
 - a. production unit code number;
 - b. pack house registration number;
 - c. packing date; and
 - d. lot number.
- xi. store fruit in a manner to prevent infestation/infection or contamination prior to and following post-harvest processing, including transport to and from treatment facility.

3.3 Treatment Facilities

All treatment facilities involved in the export of mangoes from India to New Zealand will:

- i. be approved by MPI (*see* Appendix 1);
- ii. be registered with DAC;
- iii. be approved and certified by DAC and/or authorised representative (i.e. APEDA);
- iv. maintain a clean facility;
- v. maintain records of treatments and fruit traceability;
- vi. maintain a system to demonstrate that the facility is only accepting mango fruit from registered pack houses;
- vii. maintain package labelling
- viii. maintain security of treated packaged fruit to prevent reinfestation, including during post-treatment transport to pack house(s);
- ix. conform to the treatment specifications detailed in *Section 4 Specific Pest Management Activities*.

3.3 Storage Facilities

All storage facilities (where they differ from pack houses or treatment facilities) involved in the export of mangoes from India to New Zealand will:

- i. be registered with and approved by DAC and/or authorised representative (i.e. APEDA);
- ii. maintain a clean facility;
- iii. maintain records with respect to fruit traceability;
- iv. maintain security of packaged, treated and phytosanitary inspected fruit to prevent reinfestation or contamination;

- v. have a system in place to maintain separation of mangoes for New Zealand from mangoes for other markets.

4.0 SPECIFIC PEST MANAGEMENT ACTIVITIES

4.1 Treatment for Arthropods

The VHT sensors will be calibrated by a DAC-approved officer and temperature sensors and thermometers will be checked regularly for accuracy in accordance with DAC's system manual/standard.

The mangoes will be vapour heat treated (VHT) in India at a DAC-registered and DAC and MPI-approved facility. Fruit pulp temperature sensors will be placed in the largest size fruit in each load and chamber temperature raised until the fruit core reaches at least 48°C for all sensors. This temperature is then to be maintained for at least 20 minutes in accordance with the DAC system manual/standard.

Copies of data logs/treatment records will be forwarded to MPI as an attachment to the phytosanitary certificate.

5.0 INSPECTION & PHYTOSANITARY CERTIFICATION

5.1 PHYTOSANITARY INSPECTION BY INDIA'S DEPARTMENT OF AGRICULTURE & COOPERATION

Officials of DAC will sample and visually inspect fruit consignments (and packaging) for signs of pests and diseases prior to phytosanitary certification. Where a regulated (quarantine) pest is detected, appropriate pest mitigation (pre-export treatment) action agreed between DAC and MPI will be conducted, or the fruit will not be exported to New Zealand.

DAC will determine the minimum sample size for inspection as specified in Table 1 below for each orchard lot.

Table 1: Sample Size Determination

Lot ¹ Size (Units ²)	Sample Size (Units)
Up to 419	100% of the Lot
420-599	420
600-999	450
1000-1499	550
1500 or more	600

¹ Lot = The number of units of a single commodity (i.e. species), identifiable by such things as its homogeneity of composition and origin which forms part of a consignment.

² Unit = An individual piece of produce.

DAC will maintain inspection records that include:

- i. inspection date;
- ii. orchard, pack house, treatment and storage facility registration numbers;
- iii. size of each lot;
- iv. sample sizes taken;
- v. pests found and actions taken;
- vi. pre-inspection treatment type.

These records will be made available for inspection by MPI on request.

If pests are found which are not specified in Part D of the Import Health Standard, Commodity sub-class: fresh fruit/vegetables, Mango, *Mangifera indica*, from India, DAC will establish their regulatory status using MPI's Biosecurity Organisms Register for Imported Commodities: <http://www.biosecurity.govt.nz/pests/registers/boric>.

5.2 PHYTOSANITARY CERTIFICATION BY THE GOVERNMENT OF INDIA

An official of DAC will issue a phytosanitary certificate in accordance with ISPM 7 (Export Certification Systems) which must accompany every consignment and have the additional declarations specified in the MPI "Import Health Standard (IHS) for the Importation and Clearance of Fresh Fruit and Vegetables into New Zealand" (<http://www.biosecurity.govt.nz/files/ih/152-02.pdf>).

The phytosanitary certificate will include:

- i. the seal and container numbers (sea freight);
- ii. the treatment type, temperature and duration (e.g. vapour heat treatment, 48°C for 20 minutes); and
- iii. additional declarations (as specified in the IHS).

A copy of the corresponding data log/treatment record for the consignment will be forwarded to MPI as an attachment to the phytosanitary certificate.

5.3 SEA FREIGHT CONSIGNMENTS

An official of DAC or authorised representative will inspect containers to ensure freedom from pests and any vents are covered to preclude the entry of pests before loading mangoes for export to New Zealand.

Loading will take place under conditions that prevents infestation of pests and under the supervision of an officer authorised by DAC.

A numbered tamper proof seal will be placed on the door of the loaded container door by an officer authorised by DAC. The seal number will be noted on the phytosanitary certificate.

5.4 AIR FREIGHT CONSIGNMENTS

A DAC officer will ensure that consignments are securely packaged and sealed at origin and identifiable on the phytosanitary certificate. If the consignment(s) is transiting another country en route to New Zealand they must also meet the requirements outlined in section 2.6.1 of the Import Health Standard for the Importation and Clearance of Fresh Fruit and Vegetables into New Zealand <http://www.biosecurity.govt.nz/files/ih/152-02.pdf>.

5.5 PHYTOSANITARY INSPECTION BY MPI ON ARRIVAL

A MPI inspector will check the seal of the containers on arrival in New Zealand to ensure the integrity of the consignment has been maintained in terms of possible post-certification infestation and/or product substitution.

If satisfied that the required treatment specifications have been achieved, MPI may, if required, then sample and inspect the consignment.

In the event that New Zealand's phytosanitary requirements have not been met, actions will be taken in accordance with section 7 Non-Conformance Contingencies, MPI "Import Health Standard for the Importation and Clearance of Fresh Fruit and Vegetables into New Zealand"

6. AUDIT

An official of India's DAC or authorised representative will conduct a random audit of each orchard, pack house, treatment and storage facility registered under this OAP at least annually during harvest and export season. Additional audits may be conducted where non-compliance with this OAP are detected.

MPI may conduct an audit of the components of this OAP within eighteen months of commencement of trade. Subsequent audits may be conducted every three years or as required where non-compliance(s) is found.

All audits will be arranged in consultation with DAC and will be in accordance with international guidelines and standards.

The Ministry for Primary Industries (MPI) reserves the right to suspend the importation of mango fruit from India in the event that:

- (a) New Zealand's phytosanitary requirements relating to pests of quarantine concern are breached, or
- (b) India's pest status changes due to the introduction of a pest or pests of quarantine concern to New Zealand.

The suspension of the pathway could be at the treatment facility, pack house, production area, province or country level depending on the significance of the pest and the interception. The suspension of the pathway will continue until the cause of the non-compliance has been identified and corrective actions have been implemented to the satisfaction of MPI.

2. AP STATE agro industries Corporation, Tirupathi District
 Status: Provisionally MPI-approved

Name	Andhra Pradesh State Agro Industries Development Corp. 2005-07
Location	Tirupathi District
Capacity	5 MT per batch for YHT and 24 MT per shift for packing and grading only

Uttar Pradesh State, India

3. UP Mandi Parwahat, Saharanpur District
 Status: MPI-approved following audit of 25 June 2012

Name	UP Mandi Parwahat 2005-07
Location	Saharanpur District
Capacity	5 MT per batch for YHT

Maharashtra State, India

4. Maharashtra - MSAMS VASHI
 Status: Provisionally MPI-approved

Name	MSAMS - VASHI
Location	Vashi, New Mumbai
Capacity	5 MT per batch for YHT

APPENDIX 1: MPI-approved and provisionally approved vapour heat treatment facilities as at 1 July 2012.

Andhra Pradesh State, India

1. AP STATE agro industries Corporation, Nuzvid District
Status: Provisionally MPI-approved

Name	Andhra Pradesh State Agro Industries Development Corpn. 2006-07
Location	Nuzvid district
Capacity	5 MT per batch for VHT and 24 MT per shift for packing and grading line

2. AP STATE agro industries Corporation, Tirupati District
Status: Provisionally MPI-approved

Name	Andhra Pradesh State Agro Industries Development Corpn. 2006-07
Location	Tirupathi District
Capacity	5 MT per batch for VHT and 24 MT per shift for packing and grading line

Uttar Pradesh State, India

3. UP Mandi Parishad -Saharanpur District
Status: MPI-approved following audit of 21 June 2012

Name	UP Mandi Parishad 2006-07
Location	Saharanpur district
Capacity	5 MT per batch for VHT

Maharashtra State, India

4. Maharashtra - MSAMB VASHI
Status: Provisionally MPI-approved

Name	MSAMB- 2005-06
Location	Vashi, Navi Mumbai
Capacity	5 MT per batch for VHT

