

NSPM 10

**Guidelines for Export Inspection & Certification of
Fresh Mango (*Mangifera indica*) Fruits to P. R. China**



**Ministry of Agriculture
Department of Agriculture & Cooperation
Directorate of Plant Protection Quarantine & Storage
N.H.IV., Faridabad,
Haryana-121001**

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Contents

Endorsement	3
Review & Amendment	4
Control & Distribution of standard	4
Introduction	5
Scope	5
References	5
Definitions & Terms	5
Outline of Requirements	6
Guidelines/Procedures of Export Inspection & Certification	7
1.0. General Requirements	7
1.1. Authority to whom to apply	7
1.2. Registration of Application for Phytosanitary Certification	7
1.3. Assigning PQ Officer for Inspection	7
2.0. Specific Requirements	7
2.1. Pre-survey of orchards	7
2.2. Joint-survey of orchards	8
2.3. Recognition of packhouse facilities	8
2.4. Responsibilities of recognized packhouse facilities	8
2.5. Hot-water/ fungicidal treatment of mangoes	9
2.6. Inspection & Sampling of Consignment	9
2.7. Inspection of packaging material	9
2.8. Affixing Quarantine label to the pellet	9
2.9. Storage of consignment	10
2.10. Sealing of cargo containers	10
2.11. Issuance of Phytosanitary certificate	10
2.12. Reporting of Information	10
Appendices:	
Appendix-I: Survey Report (Format)	11
Appendix-II: PSC (Format)	12
Appendix-III: Important provisions of Phytosanitary Protocol	13

Endorsement

This standard on '**Guidelines for Export Certification of Fresh Fruits of Mango (*Mangifera indica*) to China**' prepared by the **Directorate of Plant Protection, Quarantine & Storage (Dte of PPQ&S), Faridabad-121001** as a national standard for undertaking export inspection and phytosanitary certification of fresh fruits of mango to China.. This standard provides suitable guidance to facilitate proper inspection and certification of mango fruits meant for export to China in line with the provisions of Phytosanitary Protocol signed between China and India

1. This standard duly approved & endorsed for adoption by _____
(P.S. Chandurkar)
Plant Protection Adviser
Dte of PPQS., Faridabad.
2. This standard issued and controlled by _____
(O.R. Reddy)
Jt. Director (PQ)
Dte of PPQS, Faridabad.

Review & Amendment

This national standard may be subject to review and amendment in line with the Phytosanitary Protocol signed between China and India after period of one year and is come into operation for export of all consignments of mangoes to China and valid as long as the phytosanitary protocol signed between both the countries held valid. The next review date for this standard is January 2005 or any other date as may be agreed upon by the Plant Protection Adviser in consultation with Joint Director (PQ) and the standard shall be updated and revised as necessary in line with the agreed Phytosanitary Protocol. The standard holders shall ensure that the current edition of this standard being used.

Control & Distribution of the standard

The master copy of this standard shall be held with Joint Director (PQ), Dte of Plant Protection Quarantine & Storage, Faridabad and controlled copy shall be distributed to all the Regional Plant Quarantine Stations under reference to PPA. Any enquiries regarding this standard shall be made to the Joint Director (PQ), Dte of PPQS, Faridabad-121001.

Controlled Copy Holder	Copy No.
Plant Protection Adviser, Dte of PPQ&S, N.H.IV., Faridabad-121001	1
PQ Division, Dte of PPQ&S, N.H.IV., Faridabad	2
Dy Director (PP/Ent), In-charge of NPQStation, Rangapuri, New Delhi-110037	3
Dy Director (Ent.), In-charge of RPQS, Amritsar	4
Dy. Director (Ent./PP), In-charge of RPQS, Kolkata	5
Dy. Director (Ent/PP), In-charge of RPQS, Chennai	6
Dy Director (PP/Ent.), In-charge of RPQS, Mumbai	7

Introduction

Scope:

This standard provides guidance for proper inspection & phytosanitary certification of fresh fruits of mango meant for export to China through various regional plant quarantine stations to ensure that the provisions of phytosanitary protocol signed between China and India are strictly complied with so that pest free mangoes are exported to China. Further this standard renders guidance for proper communication of report of phytosanitary certification activities connected therewith. Any difficulties in meeting the requirements of the standard to be brought to the immediate notice of Joint Director (PQ) for rendering necessary guidance.

References:

- 1) The International Plant Protection Convention (Revised Text, 1997), FAO, Rome.
- 2) Agreement on Application of Sanitary & Phytosanitary Measures, WTO, Geneva, Italy
- 3) Protocol of Phytosanitary Requirements for Exporting Mangoes from India to China signed on 23rd June, 2003.
- 4) PQ15: Export Inspection & Phytosanitary certification Manual (1999)., Dte of PPQS., Faridabad

Definitions & Terms:

Approved Authority : The officer-in- charge of National/Regional/Plant Quarantine stations or any other officer specifically approved by the Plant Protection Adviser for the purpose of undertaking export inspection and certification of mangoes for China and implementation of the provisions of Phytosanitary Protocol

Additional Declaration : A statement that is required by an importing country to be entered on a phytosanitary certificate and which provides specific additional information pertinent to the phytosanitary condition of consignment.

AQSIQ : General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China

IMOA : Ministry of Agriculture of the Republic of India

Inspecting Officer : A technical officer of the PQ service of Dte of Plant Protection, Quarantine and Storage not below the grade of TO-III deputed for inspection of consignment, packhouse facilities etc

IPPC : International Plant Protection Convention established under the Food & Agriculture Organization of the United Nations

Phytosanitary Certificate : Certificate patterned after the model certificates of the IPPC

Phytosanitary Protocol : The protocol of phytosanitary requirements for export of mangoes from India to China between the Ministry of Agriculture of the Republic of India and the General Administration of Quality Supervision, inspection and Quarantine of the People's Republic of China

Quarantine pests : Pest of potential economic importance to the area endangered and not yet present there, or present but not widely distributed and being officially controlled

Agency : An agency approved by the Ministry of Agriculture of the Republic of India for registering the packhouses and storage facilities viz., APEDA

APEDA : Agriculture Products Export Development Authority

Out line of Requirement

Proper inspection & phytosanitary certification of consignment of mango fruits meant for export to China is of paramount importance to enable the safe entry of Indian mangoes to China in promoting bilateral trade between both the countries and further strengthening international cooperation in implementation of phytosanitary measures. Such inspection of consignment and issuance of phytosanitary certificate shall be carried out in line with appropriate definitions, standards and guidelines established under the International Plant Protection Convention (IPPC) and in compliance with the provisions of protocol of phytosanitary requirements for exporting mangoes from India to China, which is duly signed by the both countries on 23rd July 2003.

Guidelines/procedures for Export Inspection & Certification

1.0. General Requirements

1.1. Authority to whom to apply

The exporter shall submit application in prescribed format for export inspection and phytosanitary certification to the Dy Director (PP/Ent), officer-in-charge, Regional Plant Quarantine Station, Chennai/Mumbai/ and NPQS, New Delhi or any appropriate authority specifically approved by the Plant Protection Adviser for export inspection and certification of mangoes for China.

1.2. Registration of Application for Phytosanitary Certification

The application for phytosanitary certification of export of mangoes to China shall be made in respect of each shipment to the above stated authority sufficiently in advance by the registered package house. The application shall be accompanied with registration certificate issued to the package house by the APEDA an agency authorized by IMO. The application shall also bear a copy of contract agreement/purchase order, invoice sufficiently in advance to the above authorities and get the export applications registered after necessary verification of application and the enclosed documents and paying the prescribed fees.

1.3. Assigning PQ officer for inspection

The officer-in-charge shall depute one PQ officer along with technical staff to the packhouse for inspection and sampling of the mangoes received at the packhouse in respect of each shipment of containerized cargo. The exporter shall bear the TA/DA of the PQ officer and technical staff deputed for inspection work at packhouse as per the admissible rules of Central Government. However, the air cargo consignment of export mangoes shall be presented for inspection at cold storage facility at the international airport of Chennai, Mumbai or New Delhi as the case may be at least 4-6 hours in advance. The inspecting PQ officer shall ensure that the mangoes for export to China shall be from a registered pack house duly recognized by APEDA and that the consignment of mangoes exported are as per the conditions specified in Para 2.7 and the palletised and quarantine labelled as per the conditions specified in Para 2.8 and the pallets shall be stored at cold storage facility at airport until loaded into air craft as per conditions specified in Para 2.9 of the Phytosanitary Protocol signed between China and India.

2.0. Specific Requirements

2.1. Pre-survey of Orchards

Prior to the export season, the APEDA shall undertake a pre-survey of mango orchards in areas identified for export and such surveys shall be carried out to coincide with the flower initiation stage and as per the international standards/guidelines on pest surveillance. The objective of pre-survey is to find out the occurrence of pests, intensity and distribution and to

ensure package of practices to control the incidence of pests. The relevant annual reports of survey in the prescribed format (Appendix- I) shall be provided to IMO A in advance for forwarding to AQSIQ. During the pre-survey the APEDA shall ensure that there is no occurrence of quarantine pests in the orchards in areas identified for export and any occurrence of QP in the orchards in the identified areas of export shall be reported to IMO A for further immediate necessary action.

2.2. Joint-survey of orchards

Further officers of Dte of PPQS and APEDA shall associate with field inspections of mangoes for export to China during mango growing and harvest season carried out jointly with the inspectors of AQSIQ for a period of 15 days to ensure that there is no finding of quarantine pests as listed in Para 3.7 of the Phytosanitary Protocol and to review the phytosanitary conditions of the orchards, packhouse and storage facilities so as to confirm meeting with requirements of Phytosanitary protocol. Such joint inspections shall be coordinated by APEDA. The relevant report of joint inspection shall be provided to IMO A for further action.

2.3. Recognition of packhouse facilities

The packhouses and storage facilities involved in export of mangoes to China shall be duly recognized by APEDA, an agency authorized by IMO A and shall meet the requirements as per the guidelines/standards for grant of recognition of packhouses and storage facilities developed by APEDA. The inspecting PQ officer shall ensure during the inspection of export mangoes to China at the recognized packhouses that such facilities are clean and hygienically maintained and the mango fruits shall be strictly manually sorted, desapped, cleaned, washed, hot-water treated and dried. The rotten defects shall invariably be removed from the packaging area to a distant area and immediately be disposed. The inspecting PQ officer shall verify the records related to receipt of mangoes for processing at packhouses and as well as post-harvest treatment.

2.4. Responsibilities of Recognized Packhouses

The recognized packhouses involved in export of mangoes to China shall be responsible for:

- Proper upkeep of packing and storage facilities so that they are clean and hygienically maintained
- Cooperate and extend necessary facilities to the inspecting officer for access to the facility and conduct inspection of consignment
- Proper maintenance of records related to receipt of fruits from various orchards and present for inspection, when required. Also log books related to temperature recording of treatment/storage facilities.
- Proper and timely removal of rejected consignment/rotten defectives from the packaging area to a distant area and immediately disposal to avoid cross infestation
- Abide by the instruction given by the inspecting officer to meet the requirements of phytosanitary protocol and implementation of quarantine regulations.

2.5. Hot-water/fungicidal treatment of mangoes

The inspecting PQ officer shall verify the hot-water treatment facilities and conduct audit checks of hot-water treatment of mangoes to ensure that the mangoes are given hot-water treatment at 48 degrees Celsius for one hour and the treatment shall be endorsed on the phytosanitary certificate after verification of treatment certificate provided by APEDA. Further the mangoes shall be given a fungicidal treatment at 500 ppm of Benomyl or prochloroz or thiabendazole or any other fungicide as acknowledged by AQSIQ to exterminate *Capnodium ramosum*.

2.6. Inspection & Sampling of consignment

The inspecting PQ officer shall draw samples of mango fruits for inspection according to the following sampling regime.

Total No. of Packages in the shipment	No of packages to be sampled
< than 10	100% of packages
11-100	10% of packages subject to a minimum of five packages
101-1000	2% or a minimum of ten packages
>1000	1% or a minimum of 20 packages

The entire fruits of sampled package shall be visually inspected for general hygiene and phytosanitary condition of consignment to ensure it is free from insect/mite infestation; mollusks; fungal infection residue of plant material such as leaves, stems, roots etc; soil contamination; blemishes and rotten defects. The inspecting PQ officer shall make thorough inspection to ensure the fruits are free from any signs of infestation/infection by quarantine pests specified in Para 2.11 in line with the Phytosanitary Protocol. If any of quarantine pest is found the entire consignment shall be rejected for certification and further operations at the packhouse shall be suspended under intimation to PPA Directorate of Plant Protection, Quarantine & Storage, N.H-IV., Faridabad-121001 for forwardal to AQSIQ. The inspecting PQ officer shall submit a detailed inspection report at the end of each shipment to the PPA Dte of PPQS, Faridabad.

2.7. Inspection of packaging material

The inspecting PQ officer shall ensure that graded mangoes are packed in clean and unused or unsoiled packaging material and that each carton shall be appropriately labeled indicating the mango variety/species, the place of production, packaging and storage facilities.

2.8. Affixing Quarantine label to the pallet

The inspecting officer shall ensure that the pallets used are of good quality and if wooden pallets are used they should be appropriately treated and marked as per ISPM-15. The PQ officer shall affix a quarantine label on each of the pallet, which is printed and supplied by APEDA and confirmed by AQSIQ.

2.9. Storage of consignment

The packages of mango fruits are pre-cooled at 13±1 C with 90±2 % RH for 8 hours and there after shall be transferred to the cold storage maintained at 12-13 C with 85-90% RH and the pallets are stored until they are loaded into the refrigerated container

2.10. Container loading & Sealing

The inspecting PQ officer shall supervise the loading of consignment into a refrigerated container and affix the seal after the completion of loading so as to ensure it is not broken till the arrival of consignment at Chinese port. The PQ officer shall ensure that the container is sound, clean and hygienic and free from extraneous matter before loading of the cargo and that the requisite temperature and humidity shall be maintained and a recorder is put along with each container to record the temperature and humidity at regular intervals for monitoring temperature conditions.

2.11. Issuance of Phytosanitary Certificate:

An official Phytosanitary Certificate (PSC) shall be issued by the appropriate authority as specified in Para 3.1, in the format prescribed under IPPC (as reproduced in Appendix-III). The PSC shall be issued in duplicate, provided that the export mangoes meet the requirements of phytosanitary protocol. If disapproved of export, he shall issue a rejection order giving grounds of rejection and ensure that under no circumstances the rejected cargo shipped and immediately be removed. The issuing officer shall incorporate the following additional declarations in the PSC viz., '(a) the mangoes inspected and found free from quarantine pests as specified in Annexure to Phytosanitary Protocol viz., (1) *Aonidiella comperei*; (2) *Bactrocera correcta*; (3) *Bactrocera zonata*; (4) *Deanolis albizonalis*; (5) *Eriosomyia indica*; (6) *Parlatoria crypta*, (7) *Sternochetus frigidus*; (8) *Sternochetus mangiferae*; and (9) *Capnodium ramosum*; and (b) the mangoes covered by this phytosanitary certificate comply with the requirements established in the Phytosanitary Protocol on mangoes entry into China, which was duly signed between India and China on June 23, 2003'. One copy of PSC shall be placed in sealed cover and affixed to the side of the last pallet loaded into the container before door sealing of the refrigerated container. The PSC shall specify the port of entry viz., Beijing, Dalian, Tianjin, Qingdao, Shanghai & Nanjing, as the case may be.

2.12. Reporting of Information:

The inspecting PQ officer at the end of each shipment shall immediately submit a detailed inspection report along with the copy of relevant PSC issued to the Dte of PPQS for information and also information regarding any rejection of cargo for export to China providing the grounds of rejection and the action taken by the exporter.

Appendix-I

Survey Report (Format)

Title of the Report

Contents

Executive Summary

Introduction

- Back ground
- Objectives
- Scope

Composition of Survey Team

Area surveyed

Period of Survey

Stage of the Crop

Methodology of Survey

Pest/ Diseases observed

- Name of the orchard/location
- Scientific/Common Name of pest observed
- Plant parts affected
- Pest intensity
- Economic significance

Pre-harvest control measures undertaken

Appendix-II

 सत्यमेव जयते	Government of India MINISTRY OF AGRICULTURE Department of Agriculture & Cooperation Directorate of Plant Protection Quarantine & Storage PHYTOSANITARY CERTIFICATE		PSC No
			E Reg No. Date:
1. From: Plant Protection Organisation of INDIA		2.To: Plant Protection Organisation(s) of <u>P.R. China</u>	
Description of Consignment			
3. Name and address of exporter		4. Declared name and address of consignee	
5. Declared means of conveyance		6. Place of origin	7. Declared point of entry
8. Distinguishing marks		9. Number and description of packages	
10. Name of produce/ Botanical name of plants		11. Quantity declared	
This is to certify that the plants or plant products described above have been inspected according to appropriate procedures and are considered to be free from quarantine pests and practically free from the injurious pests and that they are considered to conform to the current phytosanitary regulations at the importing country			
Disinfestation and/ or Disinfection Treatment			
12. Date _____ 14. Duration: _____ 15. Treatment _____ 17. Additional information: _____		13. Temperature: _____ 15. Chemical (active ingredient) _____ 16. Concentration _____	
18. Additional declarations: (a) The mangoes inspected and found free from quarantine pests as specified in Annexure to Phytosanitary Protocol viz., (1) <i>Aonidiella comperei</i> ; (2) <i>Bactrocera correcta</i> ; (3) <i>Bactrocera zonata</i> ; (4) <i>Deanolis albizonalis</i> ; (5) <i>Eriosomyia indica</i> ; (6) <i>Parlatoria crypta</i> , (7) <i>Sternochetus frigidus</i> ; (8) <i>Sternochetus mangiferae</i> ; and (9) <i>Capnodium ramosum</i> ; (b) The mangoes covered by this phytosanitary certificate comply with the requirements established in the Phytosanitary Protocol on mangoes entry into China, which was duly signed between India and China on June 23, 2003.			
19. Place of issue: _____ 20. Date of issue : _____ 21. Code No : _____		Stamp of Organization	Name: _____ (Signature & Stamp of authorized officer)

N.B: No financial liability with respect to this certificate shall attach to the Dte of Plant Protection, Quarantine & Storage or to any of its officers or representatives.

Important Provisions of Phytosanitary Protocol for Export of Mangoes to China, which was signed between India and China on 23rd June 2003

- The Indian Mangoes for entry into China shall comply with the Chinese Plant Quarantine Laws and Regulations (Article 1)
- An official Phytosanitary Certificate must be issued for mangoes to pass quarantine inspection in compliance with the Chinese Plant Quarantine requirements as per the IPPC. The following additional declaration must be shown on PSC viz., “ The mangoes covered by this phytosanitary certificate comply with the requirements established in the Phytosanitary Protocol on Mangoes for entry into China, which was signed between India and China on June 23, 2003” (Article 2).
- The mangoes should be free of quarantine pests listed in the Annex viz., (1) *Aonidiella comperei*; (2) *Bactrocera correcta*; (3) *Bactrocera zonata*; (4) *Deanolis albizonalis*; (5) *Eriosomyia indica*; (6) *Parlatoria crypta*, (7) *Sternochetus frigidus*; (8) *Sternochetus mangiferae*; and (9) *Capnodium ramosum* (Article 3).
- The packinghouses and storage facilities involved in the export of mangoes to China must be registered by an agency authorized by IMO A, assessed and recognized by AQSIQ (Article 4).
- IMO A shall carry out supervision and field inspection of the mangoes for export to China during mango growing and harvest season and such inspections jointly conducted by India and China (Article 5)
- Mangoes for entry to China must be treated with appropriate fungicide approved by the Chinese side to exterminate *Capnodium ramosum* (Article 6)
- The mangoes shall be given a hot-water treatment at 48 C for one hour (Article 7).
- The mangoes shall be visually free from insects, mites, mollusks, residue of plant roots, stems, leaves, soil and rotten defects (Article 8).
- Packing materials of mangoes shall be clean and unused and each carton shall have the obvious Chinese words ‘for the People’s Republic of India’ as well as markings to indicate mango’s variety and species, place of production, packing house and storage facility and the pallet shall be affixed with quarantine label and containers shall bear the seal of agency authorized by (Article 9).
- Ports of entry: Beijing, Dalian, Tianjin, Qingdao, Shanghai and Nanjing (Article 10)