



Food and Agriculture
Organization of the
United Nations



International
Plant Protection
Convention

2024
IPPC
REGIONAL
WORKSHOP

Draft Annex to ISPM 46: International movement of fresh *Mangifera indica* fruit (2021-011)

IPPC second consultation 1 July to 30 September 2024



Food and Agriculture
Organization of the
United Nations



International
Plant Protection
Convention

2024
IPPC
REGIONAL
WORKSHOP

Background

- 🥭 Mango fruit as an Annex to ISPM 46 was proposed as a topic in 2021 and the specification [73] was approved in 2022.
- 🥭 The draft Annex was developed by the Technical Panel for Commodity Standards (TPCS) in January 2023 and consulted from 1 July – 30 September 2023.
- 🥭 630 comments were received on the Annex during first consultation.
- 🥭 All comments were considered, and the Annex was revised for second consultation from 1 July – 30 September 2024.



Photo by J. Wilson, NZ



Food and Agriculture
Organization of the
United Nations



International
Plant Protection
Convention

Comments

2024
IPPC
REGIONAL
WORKSHOP

The main comments made during first consultation were to:

- make the 'Scope' specific to the commodity
- reinforce key statements
- reference pest-host association
- emphasize phytosanitary treatments (PTs) adopted by the CPM
- add or remove specific pests and measures



Photo by J. Wilson, NZ



Food and Agriculture
Organization of the
United Nations



International
Plant Protection
Convention

2024
IPPC
REGIONAL
WORKSHOP

Revised wording 'Scope'

This commodity standard provides guidance for national plant protection organizations (NPPOs) on pests associated with fresh *Mangifera indica* (mango) (Sapindales: Anacardiaceae) fruit and options for phytosanitary measures for the international movement of mango fruit.



Key statements reinforced

- ‘When applying phytosanitary measures, NPPOs should consider the parameters that are critical for the successful application of the measures.’
- ‘The NPPOs of importing countries should determine the level of risk reduction required to manage the general pest risk posed by regulated pests and evaluate whether options provided in this commodity standard meet this level before instituting these options as phytosanitary measures.’
- ‘National plant protection organizations should also consider whether applying a measure to manage the pest risk posed by a specific pest may manage the pest risk posed by other pests.’



Food and Agriculture
Organization of the
United Nations



International
Plant Protection
Convention

2024
IPPC
REGIONAL
WORKSHOP

Referencing pest-host association

References were not included for pest-host association because:

- the main purpose of commodity standards is to provide information on measures;
- the only pests included in the annex are those requiring a specific measure as determined by the NPPO PRA process;
- it is not a task under the remit of the TPCS to re-evaluate the conclusions of contracting party PRAs.



Food and Agriculture
Organization of the
United Nations



International
Plant Protection
Convention

2024
IPPC
REGIONAL
WORKSHOP

Referencing pest-host association (cont'd)

New text added:

“The list of pests does not consider factors that may influence pest infestation of fruit in the country of origin (e.g. fruit cultivar or variety, geographical and ecological factors, general agricultural practices and production procedures).”



Photo by J. Wilson, NZ



Emphasizing PTs adopted by the CPM

- PTs adopted as annexes to ISPM 28 now appear in **BOLD**
- Additional text added:

‘Options for phytosanitary measures included in this commodity standard meet the criteria in the core text of ISPM 46 (*Commodity-specific standards for phytosanitary measures*). Phytosanitary treatments (PTs) that have been adopted by the CPM as annexes to ISPM 28 (Phytosanitary treatments for regulated pests) are shown in bold in Table 3 to Table 8.’



Photo by J. Wilson, NZ



Food and Agriculture
Organization of the
United Nations



International
Plant Protection
Convention

2024
IPPC
REGIONAL
WORKSHOP

Pests requested for inclusion

Pests added:

Fruit fly - *Bactrocera umbrosa*

Bacterium - *Xanthomonas citri* pv. *mangiferaeindicae*

Pest not added:

Whitefly - *Aleurocanthus woglumi*

Reason: insufficient information about options for phytosanitary measures



Pests requested for removal

Pests requested for removal

Pest Group	Number(s)
Fruit Flies	4
Mealybugs	11
Moths	3
Thrips	3
True bugs	1

Reasons requested for removal of pests:

- Mangoes are not a host
- Insufficient information about host status of mango
- Mangoes in trade are not a pathway for introduction

Pests were not removed because:

- All pests met the criteria for inclusion in the standard as per ISPM 46
- References were found supporting host association
- Listing a pest does not constitute technical justification for regulation



Measures requested for removal

Measure		Reason requested for removal
MB 1	Methyl bromide fumigation	<ul style="list-style-type: none"> The fumigant reduces fruit quality The fumigant is ineffective against the target pest
IRDN 6	PT 19 (Irradiation treatment for <i>Dysmicoccus neobrevipes</i> , <i>Planococcus lilacinus</i> and <i>Planococcus minor</i>)	<ul style="list-style-type: none"> The treatment is stronger than needed to manage the pest

Measures were not removed because:

- Methyl bromide fumigation is currently accepted in trade.
- Removing methyl bromide may disadvantage developing countries if this is the only option available for managing the target pest
- PT 19 meets the criteria for inclusion as per ISPM 46 i.e. an adopted treatment and relevant to the pest



Measures added

Code	Measure
HWIT 5	Fruit pulp temperature of 46°C for 10 mins for various fruit flies
IRDN 2	Minimum absorbed dose of 72 or 85 Gy for <i>Z. tau</i> (PT 42)
IRND 7	Minimum absorbed dose of 231 Gy for <i>P. jackbeardsleyi</i> (PT 45)
VHT 2	Fruit pulp temperature of 46°C for 20 mins for various fruit flies
VHT 8	Fruit pulp temperature of 47.2°C for 20 mins for various fruit flies
SA 2	for fruit flies (ISPM 35)



Food and Agriculture
Organization of the
United Nations



International
Plant Protection
Convention

2024
IPPC
REGIONAL
WORKSHOP

Implementation issues raised

1. The potential for the pest list to be misused to require unjustified measures to manage some pests.
2. Tables of measures do not provide all the necessary parameters for application.
3. Availability of pest risk analysis resources.



Food and Agriculture
Organization of the
United Nations



International
Plant Protection
Convention

2024 IPPC REGIONAL WORKSHOP

Thank you

IPPC Secretariat

Food and Agriculture Organization
of the United Nations (FAO)

ippc@fao.org | www.ippc.int