

Operational Work Plan Addendum for Irradiation Treatment of Articles from Vietnam into the Continental United States

1. ARTICLES (GROWN AND PACKED IN VIETNAM) INCLUDED IN THE PROGRAM:

Fresh mango fruit (*Mangifera indica*)

2. QUARANTINE PEST(S) AND REQUIRED MITIGATION MEASURES:

Table 1:

Quarantine Pest(s)	Mitigation Measure
<i>Bactrocera carambolae</i> Drew & Hancock (DIPTERA:Tephritidae) <i>Bactrocera correcta</i> (Bezzi) (DIPTERA:Tephritidae) <i>Bactrocera curcurbitae</i> Coquillet (DIPTERA:Tephritidae) <i>Bactrocera dorsalis</i> Hendel (DIPTERA:Tephritidae) <i>Bactrocera tau</i> Walker (DIPTERA:Tephritidae) <i>Bactrocera zonata</i> (Saunders) (DIPTERA:Tephritidae)	Irradiation treatment of minimum absorbed dose of 400 Gy (T-105-a-3 per PPQ Treatment Manual)
<i>Conogethes punctiferalis</i> (Guenee) (LEPIDOPTERA: Pyralidae) <i>Deanolis albizonalis</i> (Hampson) (LEPIDOPTERA: Pyralidae) <i>Helicoverpa armigera</i> (Hubner) (LEPIDOPTERA: Pyralidae)	
<i>Maconellicoccus hirsutus</i> (Green) (HEMIPTERA: Pseudococcidae) <i>Nipaecoccus viridus</i> (Newstead) (HEMIPTERA: Pseudococcidae) <i>Planococcus lilacinus</i> Cock (HEMIPTERA: Pseudococcidae) <i>Pseudococcus cryptus</i> Hempel (HEMIPTERA: Pseudococcidae) <i>Rastrococcus invadens</i> Williams (HEMIPTERA: Pseudococcidae)	
<i>Scirtothrips dorsalis</i> Hood (THYSANOPTERA: Thripidae) <i>Sternochetus frigidus</i> (Fabricus)	

(COLEOPTERA: Curculionidae)	
Quarantine Pest(s)	Mitigation Measure
<p><i>Macrophoma mangiferae</i></p> <p><i>Xanthomonas campestris</i> pv. <i>mangiferaeindicae</i></p>	<p>Export inspection and certification that shipments are free of this pest, AND subject to at least one of the mitigation options listed below:</p> <p><u>Option 1</u>: The fruit must be treated with a broad spectrum post-harvest fungicidal dip;</p> <p>OR</p> <p><u>Option 2</u>: The fruit must originate from an orchard that was inspected prior to the beginning of harvest and the orchard was found free of the fungi of quarantine concern;</p> <p>OR</p> <p><u>Option 3</u>: The fruit must originate from an orchard that was treated with a broad spectrum fungicide during the growing season, inspected and found free of the fungi of quarantine concern prior to harvest.</p>

In order to mitigate the risk associated with target quarantine pests as listed above, the product must be irradiated with a minimum absorbed dose of 400 Gy (T-105-a-3 per PPQ Treatment Manual) to be applied in accordance with 7 CFR 305.9 at an APHIS certified treatment facility in Vietnam.

In addition to irradiation treatment, mangoes (*Mangifera indica*) from Vietnam may be exported to the United States under the following conditions:

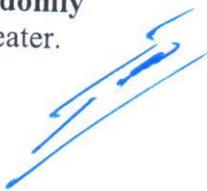
- The fruit must be commercially produced and be part of a commercial consignment as defined in 7 CFR Section 319.56-2;
- Each consignment must be inspected and accompanied by a Phytosanitary Certificate (PC) issued by the NPPO of Vietnam;
- The PC must include Additional Declarations (AD) stating:

"The fruit in this consignment was inspected prior to shipment and found free of *Macrophoma mangiferae* and *Xanthomonus campestris* pv. *Mangiferaeindicae*."

- Each consignment may be subject to port of entry verification of documents.

3. EXPORT INSPECTION

3.1 The department must:

- Perform a pre-treatment inspection of the fruit utilizing the sampling and inspection protocol described below, or document and describe an equivalent process to ensure specified levels of detection;
 - If requested by the exporter, provide pest identification services for plant pests detected during pre-treatment inspectional activity so that further decisions can be made regarding any lot in question;
 - Document and record all sampling and inspection activities and provide records to APHIS at the end of the shipping season or upon request;
 - Prior to treatment, a sample must be drawn and inspected to ensure that the articles are free from non-target pests and have a low infestation levels of target pests of concern. Sampling and inspection protocols should provide the following levels of detection and confidence:
 - 95% confidence of detecting a 2% or greater pest population for external pests;
 - 95% confidence of detecting a 10% or greater pest population for internal feeders;
 - Utilize the following sampling protocol:
 - Sample **150 fruits** randomly from throughout the lot
 - Visually inspect each fruit in the sample drawn;
 - To inspect for internal pests, **set aside and cut both flesh and seed of all suspect fruit OR cut a minimum of 30 fruit randomly selected from throughout the sample, whichever is greater.**
- 

3.2 Actions to take based on inspection findings of quarantine pests in Vietnam:

Target/Non-Target	Pest	Number Found	Action
Target Quarantine Pest	Tephritidae	1 or more	Reject lot
	Internal Lepidoptera	1	Certify lot
		2 or more	Reject lot
	Other Internal Pests (not Tephritidae or Lepidoptera)	1 or more	Certify lot and notify Area Director
	Target External Pest	1	Certify lot
2 or more		Certify lot and notify Area Director	
Non-Target Quarantine Pests	Non-Target Quarantine Pest (ex. adults and pupae of Lepidoptera, or snails,	1 or more	Reject lot
Non-Target Quarantine Pathogens	Quarantine Pathogens	1 or more	Reject lot

DIRECTOR GENERAL



Hoàng Trung