

# IRRADIATION ADDENDUM

October 2014

(Previous addendums superseded)

## Attached to and made part of Operational Work Plan for the Exportation of Articles Irradiated in Vietnam to the Continental United States

### 1. ARTICLES INCLUDED IN THE PROGRAM

#### 1.1 The articles to be exported to the US:

Dragon Fruit (Pitahaya) (*Hylocereus* spp. and relatives) grown in Vietnam  
Rambutan (*Nephelium lappaceum*) grown in Vietnam  
Litchi (*Litchi chinensis*) grown in Vietnam  
Longan (*Dimocarpus longan*) grown in Vietnam

#### 1.2 Pests of quarantine significance expected to follow the pathway:

Dragon Fruit (Pitahaya) (*Hylocereus* spp. and relatives)  
Diptera: Tephritidae *Bactrocera correcta* (Bezzi)  
Diptera: Tephritidae *Bactrocera cucurbitae* Coquillett  
Diptera: Tephritidae *Bactrocera dorsalis* (Hendel)  
Hemiptera: Pseudococcidae *Dysmicoccus neobrevipes* (Beardsley)  
Hemiptera: Pseudococcidae *Planococcus lilacinus* (Cockerell)  
Hemiptera: Pseudococcidae *Planococcus minor* (Maskell)

Rambutan (*Nephelium lappaceum*)  
Diptera: Tephritidae *Bactrocera dorsalis* (Hendel)  
Hemiptera: Pseudococcidae *Pseudococcus aurantiacus* (Williams)  
Hemiptera: Pseudococcidae *Pseudococcus cryptus* (Hempel)  
Hemiptera: Pseudococcidae *Dysmicoccus neobrevipes* (Beardsley)  
Hemiptera: Pseudococcidae *Exallomachus hispidus* (Morrison)  
Hemiptera: Pseudococcidae *Maconellicoccus hirsutus* (Green)  
Hemiptera: Pseudococcidae *Nipaecoccus viridis* (Newstead)  
Hemiptera: Pseudococcidae *Paracoccus interceptus* (Lit)  
Hemiptera: Pseudococcidae *Planococcus lilacinus* (Cockerell)  
Hemiptera: Pseudococcidae *Planococcus litchi* (Cox)  
Hemiptera: Pseudococcidae *Planococcus minor* (Maskell)  
Hemiptera: Pseudococcidae *Rastrococcus tropiciasiaticus* (Williams)

Hemiptera: Coccidae *Ceroplastes rubens* (Maskell)  
 Hemiptera: Coccidae *Coccus viridis* (Green)  
 Lepidoptera Pyralidae *Conogethes punctiferalis* (Guenée)  
 Lepidoptera Gracillariidae *Conopomorpha cramerella* (Snellen)  
 Lepidoptera Tortricidae *Cryptophlebia ombrodelta* (Lower)

Longan (*Dimocarpus longan*)

The PRA completed by CPHST identified 17 quarantine pests that could follow the pathway of longan fruit from Vietnam (USDA, 2011)

Quarantine pests identified as likely to follow the pathway of fresh longan fruit imported from Vietnam into the continental United States

Arthropods	
Acari: Eriophyidae	<i>Aceria litchii</i> (Keifer)
Diptera: Tephritidae	<i>Bactrocera dorsalis</i> (Hendel)
Hemiptera: Coccidae	<i>Ceroplastes rubens</i> Maskell
	<i>Coccus viridis</i> (Green)
	<i>Drepanococcus chiton</i> (Green)
Hemiptera: Pseudococcidae	<i>Dysmicoccus neobrevipes</i> Beardsley
	<i>Exallomochlus hispidus</i> (Morrison)
	<i>Maconellicoccus hirsutus</i> (Green)
	<i>Nipaecoccus viridis</i> (Newstead)
	<i>Paracoccus interceptus</i> Lit
	<i>Planococcus lilacinus</i> (Cockerell)
	<i>Planococcus litchi</i> Cox
	<i>Planococcus minor</i> (Maskell)
	<i>Pseudococcus cryptus</i> Hempel
Lepidoptera: Gelechiidae	<i>Conopomorpha sinensis</i> Bradley
Lepidoptera: Pyralidae	<i>Conogethes punctiferalis</i> (Guenée)
Lepidoptera: Tortricidae	<i>Cryptophlebia ombrodelta</i> (Lower)

Litchi (*Litchi chinensis*)

The PRA completed by CPHST identified 16 quarantine pests that could potentially follow the pathway of litchi fruit from Vietnam (USDA, 2011). These include 14 insect pests, one mite and one fungus as follows:

Quarantine pests likely to follow the pathway of fresh litchi fruit imported from Vietnam into the continental United States.

Arthropods	
Acari: Eriophyidae	<i>Aceria litchii</i> (Keifer)
Diptera: Tephritidae	<i>Bactrocera cucurbitae</i> (Coquillett)
	<i>Bactrocera dorsalis</i> (Hendel)
Hemiptera: Coccidae	<i>Ceroplastes rubens</i> Maskell
	<i>Coccus viridis</i> (Green)
Hemiptera: Pseudococcidae	<i>Dysmicoccus neobrevipes</i> Beardsley
	<i>Nipaecoccus viridis</i> (Newstead)
	<i>Paracoccus interceptus</i> Lit
	<i>Planococcus lilacinus</i> (Cockerell)
	<i>Planococcus litchi</i> Cox
	<i>Planococcus minor</i> (Maskell)
	<i>Pseudococcus cryptus</i> Hempel
Lepidoptera: Gelechiidae	<i>Conopomorpha sinensis</i> Bradley
Lepidoptera: Pyralidae	<i>Conogethes punctiferalis</i> (Guenée)
Lepidoptera: Tortricidae	<i>Cryptophlebia ombrodelta</i> (Lower)
Fungi	
Oomycetes: Pythiales	<i>Phytophthora litchii</i> (C.C. Chen ex W.H. Ko, H.S. Chang, H.J. Su, C.C. Chen & L.S. Leu) Voglmayr, Göker, Riethm. & Oberw

#### 1.2.1 Pests to be mitigated by irradiation dose of 400 Gy (Target Quarantine Pests):

Per APHIS rules, all insect pests as listed above would be neutralized by a minimum absorbed dose of 400 Gy. The objective of the 400 Gy is sterility of the target pest or inability of the pest to develop to adult. Mortality of the pest is not required.

#### 1.2.2 Other quarantine pests not likely mitigated by the irradiation (400 Gy) treatment (Non-target Quarantine Pests):

Risks from adults and pupae of Lepidoptera; *Aceria litchi*, and *Phytophthora litchi* may not be mitigated and require shipment freedom upon inspection by APHIS inspectors during pre-clearance activities.

## 2. SAMPLING RATES Inspections conducted pre-treatment/pre-shipment

Select 100 fruit from at least 5 boxes throughout the lot. Inspect thoroughly for the presence of target and non-target quarantine pests. Cut and inspect all suspect fruit for internal feeders.

3. ACTION TO BE TAKEN IF LIVE PESTS ARE INTERCEPTED

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

Non-target Quarantine Pests are quarantine pests that may not be mitigated by irradiation.

4. Other Commodity Specific Requirements

4.1 Growing conditions.

4.1.1 Litchi fruit must be grown in orchards registered with and monitored by the national plant protection organization (NPPO) of Vietnam to ensure that the fruit are free of disease caused by *Phytophthora litchii*.

4.2 Labeling.

4.2.1 Cartons containing litchi or longan must be stamped "Not for importation into or distribution in FL."

4.3 Phytosanitary certificates.

4.3.1 Each consignment of litchi fruit must be accompanied by a phytosanitary certificate issued by the NPPO of Vietnam attesting that the conditions of 7CFR319.56-70 have been met and that the consignment was inspected in Vietnam and found free of *Phytophthora litchii*.

**Addendum Approval**

Procedures herein established are subject to revision as situations warrant; however, they will remain in effect indefinitely until revised.



Mr. Dallas D. Berringer, Area Director  
USDA APHIS



Dr. Hoang Trung, Deputy Director General  
PPD-MARD

Date: 17 Oct 2014

Date: 17 Oct 2014