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**USDA APHIS PPQ Phytosanitary
Irradiation Programs:**

Where are we now?

Agenda

- General Phytosanitary Irradiation (PI) Concepts
- PPQ PI Program Types
- Import Regulatory Summary



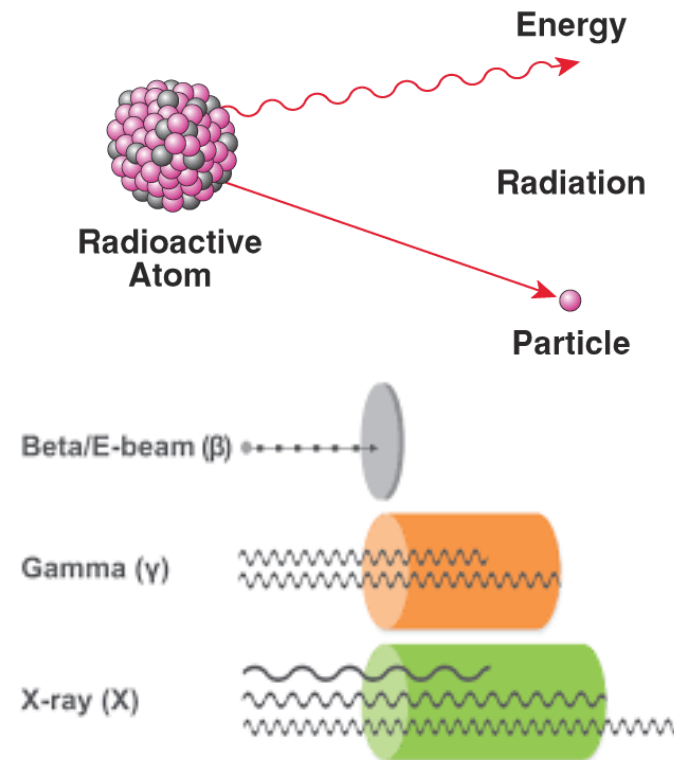
Phytosanitary Irradiation

There are three approved source for phytosanitary irradiation treatments:

Gamma: $^{60}\text{Cobalt}$ or $^{137}\text{Cesium}$ emits photons during decay

E-beam: High energy electrons propelled from an electron gun

X-ray: High energy electrons are converted to X-rays (photons)



Phytosanitary Irradiation

APHIS treatments require an absorbed doses between 150-400 Gy

FDA limits fresh fruit and vegetable treatments to 1000 Gy

Irradiated food products must bear the radura or similar irradiation labelling



Phytosanitary Irradiation

Treatment response outcomes:

- Mortality
- Sterilization
- Inactivity or Devitalization
- Inability to Emerge/Fly



Irradiation Program Types



Preclearance and Offshore

Irradiation of U.S. Imports in Country of Origin

Upon Arrival (Port of Entry)

Irradiation of U.S. Imports in United States

Domestic Quarantine

Irradiation for Domestic Movement out of Federal Quarantines

Exports

Irradiation of U.S. Exports

Preclearance Program

Participating Countries

- India
- Vietnam
- Mexico*
- South Africa*
- Thailand



Offshore Program

Participating Countries

- Australia



Domestic Movement



Hawaii Pride & Pa'ina Hawaii

Abiu, atemoya, banana, Capsicum spp., carambola, citrus, Cucurbita spp., dragon fruit, eggplant, jackfruit, litchi, longan, mangosteen, melon, moringa pods, papaya, pineapple, rambutan, sapodilla, sweet potato, tomato, yellow dragon fruit, breadfruit, cowpea, curry leaf, guava, yellow dragon fruit, cut flowers, leis

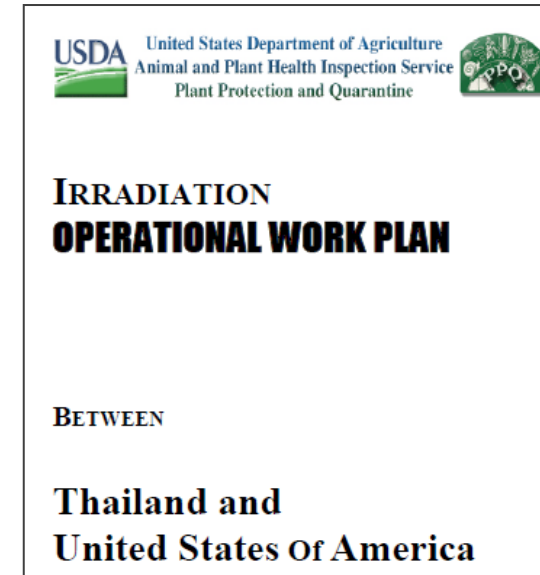


Gateway America

2015 Oriental Fruit Fly Quarantine in Florida

Import Regulatory Summary

- Market Access
- Framework Equivalency Work Plan
- Trust Fund*
- Operational Work Plan
- Commodity-Specific Addendum



Market Access

- I. Commodity Import Request Process
 - Exporting NPPO contacts PPQ
 - Exporting NPPO provides information in 7CFR319.5(d)

- II. Risk Analysis/Mitigation Process
 - Determines pests associated with commodity
 - Determines mitigations required to mitigate risks

- III. Regulatory Administrative Process
 - Rulemaking Process or
 - Notice-based process

Import Regulatory Summary



- Facility Plan Approval
- Facility Certification
- Importer Compliance Agreement*
- Importer Permit
- Packaging Approval
- Process Configuration Approval

Unique Features of Irradiation



- Mortality is not intended treatment outcome
- Pest Proof Packaging (PPP)
- Treatment schedules are commodity independent
- Trade facilitating technology
- Commodity tracking available via IRADS
- Maintain cold chain during treatment



Thanks.

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