



Trade of US Irradiated Fresh Produce

**Regional Meeting on the Commercial Use
of Phytosanitary Irradiation by Electron
Beams or X-Rays**

October 13, 2015

Maggie Smither USDA-APHIS-PPQ



- **International Export**
- **Facilitating US Exports**
- **Challenges**
- **Outreach**
- **Conclusions & Future Ideas**

What does it take to export produce, using PI?

- Depends on the NPPO phytosanitary import requirements for the commodity
- If the NPPO import requirements for the product exist and meeting the import conditions in origin is achievable.. APHIS-PPQ Programs will facilitate the export of the commodity.
- If the NPPO import requirements for the product are not established, or cannot be achieved... APHIS-PPQ Trade may engage trade negotiations with the NPPO.
 - Hopefully the negotiation results in import requirements which satisfy both countries.

Facilitating US Exports

- PPQ Export Program
 - Provides phytosanitary certification of commodity
 - Follows ISPM Guidance for international trade
- Phytosanitary certification is provided as a service to U.S. applicants based on the phytosanitary requirements of foreign countries. After assessing the phytosanitary condition of the commodities intended for export, an Authorized Certification Official may issue a phytosanitary certificate which attests that the commodity satisfies phytosanitary import requirements of a foreign country.

Facilitating US Exports

- US Exports are not strictly regulated at US ports of exit; Phytosanitary Certification is a choice.
- Although... if the foreign phytosanitary import requirements are not met for the commodity consignment, it likely will be rejected by the destination country, for non-compliance.
- Most countries regulate import of commodities and verify requirements are compliant prior to arrival or at the port of entry.

PPQ Export Program

- Under authority of CFR 7;353, *US Code of Federal Regulations*
- Export policy and guidance are established at the federal level by APHIS-PPQ
- Federal export policy may be adopted by state government through legal agreements
- Phytosanitary certification is conducted by federal, state and county (CA) personnel by Accredited Certification Officials (ACO)

PPQ Export Program



Phytosanitary Certification

- Based on NPPO phytosanitary import requirements
- Used to attest to commodity phytosanitary condition
 - How?
- Commodity condition is assessed, supporting documentation is verified...could include:
 - Phytosanitary inspection, growing season inspection, laboratory analysis, treatments
- If all NPPO requirements are met, a phytosanitary certificate (PC) is issued to the exporter

Phytosanitary Certification (continued)

- PCs are issued using web based Phytosanitary Certification & Issuance Tracking (PCIT)
 - Electronic application, issuance, tracking, fee collection, reporting; platform for Phytosanitary Export Database (PExD)
- 650,000 PCs were issued in FY 2015 using PCIT

PCIT Reporting

- For FY 2015, about 150,000 PCs were associated with mandatory phytosanitary treatments
- The bulk of phytosanitary treatments were:
 - Phosphine fumigation on grain
 - Heat treatment & Kiln Drying on lumber
 - Pesticide/other chemical application (spray, dip, drench etc.) for pest control on propagative material
- Majority of commodity exported does not require mandatory phytosanitary treatment

What if a NPPO requires mandatory phytosanitary treatment of a commodity?

- The commodity must be treated according to est. NPPO requirements... unless additional options are available

Application of treatment must follow domestic laws

- An alternative option may be production site or area pest freedom declaration on the PC
- Additional treatment options may increase feasibility of export.. could include PI

Challenges

- *Why isn't PI more popular?*
- Technology may be unknown or unfamiliar
 - Comfortable with experience using other treatments, such as fumigation or cold treatment
- Treatment facility logistics
 - Locate near POE & production areas
- Perceived cost



Why isn't PI more popular? (continued)

- Regulatory approval
 - Domestic & could include NPPO
- Packaging requirements
 - May need to change normal packing procedure, boxes or other packing materials
 - Labeling
- Perception of acceptance



Why PI is gaining acceptance!



- Consumer and importer demand
 - Preferences and availability
- Import requirement mitigation options
 - Treatments effect produce differently (could be the price or the quality)
 - Depending on the circumstances certain treatments may be preferred
- Logistics
 - Transit time & availability of treatment facilities

Outreach

- There are reasons to share information about PI for fresh produce
 - Alternative treatment for Methyl bromide fumigation in some instances..
 - Producers, exporters and trade groups may not be aware that PI can be utilized for international trade
 - It is a good idea to prepare for alternative treatment options.. What if fumigant is unavailable?

Outreach (continued)

- USDA may provide monetary funding through grants in cases where export challenges or trade barriers exist
 - Could be for scientific research
 - Could be for literature research and education outreach
- USDA provides expertise to commodity groups
 - Commodity marketing strategy
 - Consultation on foreign import requirements
 - Participation in produce forums

Conclusions about Phytosanitary Irradiation

- PI is a good tool for US Exporters
 - Useful if NPPO requires mandatory treatment
 - Useful as an alternative to other treatments such as methyl bromide or phosphine fumigation
 - Useful possible alternative option to NPPO production site and area pest freedom requirements

International Export

- **Export of GA & SC fresh peaches to Mexico**
 - The ***first export*** utilizing phytosanitary irradiation as a mitigation; an alternative to mandatory methyl bromide fumigation in origin



Export of GA & SC fresh peaches to Mexico

- *Why and how did it happen?*
 - Peach growers in the Southeast U.S. were interested in an effective mitigation for export of peaches to Mexico for several years.
 - USDA worked with the peach growers, irradiation industry, and Chapman University to conduct quality and feasibility studies.



Export of GA & SC fresh peaches to Mexico

- Peach quality was minimally impacted after irradiation at 1000 Gy.
- For the 2015 agreement, the minimum absorbed dose of 250 Gy is required.



Export of GA & SC fresh peaches to Mexico

- *Trade negotiations were required to establish access*
- **Operational Work Plan for Exportation of Irradiated Articles to Mexico from the United States**
 - Describes program requirements
 - Responsible parties
 - Corrective actions



- **Commodity-specific addendum**
 - Commodity specific
 - Target pests
 - Non-target pests
 - Irradiation dose (minimum absorbed dose required to neutralize pest)
 - Mitigation measures (includes insect-proof packaging)
 - Additional measures (not covered in the OWP)
 - Sampling and inspection rates
 - Action for pest detection at origin





Future Ideas

- The effect of PI on many fruits has been researched. Positive quality studies provide confidence that fruit quality is maintained with PI, more studies on different fruits are needed... what fruits?
- Increase options for pest mitigation on import requirements. NPPOs could utilize treatment choices outlined in ISPM, including PI, when determining import requirements.
- Education to consumers, statistical confirmation of consumer acceptance of irradiated food

Fresh fruit exports (for the past year)

- To Chile
 - Apple, pear, grape, orange, lemon, nectarine, peach, grapefruit, tangelo, kiwi, plum, mandarin
 - 445 PCs
- To Peru
 - Apple, pear, orange, lemon, grapefruit, tangelo, kiwi, plum, mandarin, strawberry
 - 650 PCs
- To Ecuador
 - Apple, pear, grape, orange, nectarine, peach, kiwi, plum
 - 450 PCs



Fresh fruit exports (continued)

- To Costa Rica
 - Apple, pear, grape, nectarine, peach, kiwi, plum, persimmon, apricot, cranberry, strawberry, blueberry, raspberry, watermelon, cherry, honeydew, cantaloupe, pumpkin
 - 1650 PCs
- To Argentina
 - No fruit exported in the past year.. *Why?*
- To Cuba
 - Grapes; a few PCs





Questions?



Thank You!

Margaret.R.Smith@APHIS.USDA.GOV