



United States Department of Agriculture

Seed Pest Risk Management



Current Situation & Perspectives on International Seed Movement

20 May. 2021

U.S. Seed Import Regulations



- Most seed for planting imported into the U.S. with a phytosanitary certificate and port of entry inspection

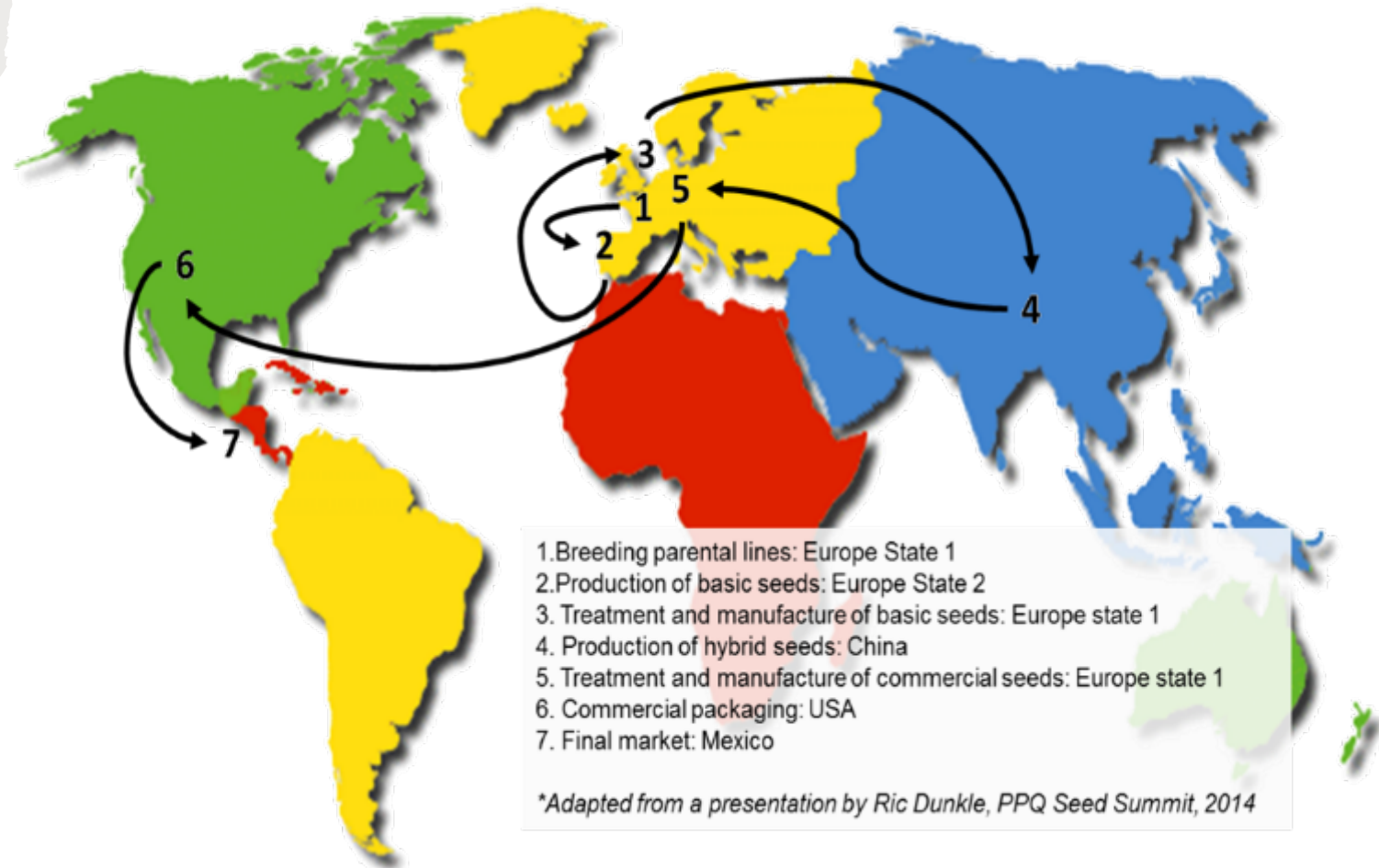
CGMMV



- Prompted ASTA-USDA collaboration to safeguard California seed and U.S. commercial production
- Seed testing determined to be the only effective way to predict CGMMV presence in seed
- Desire to use U.S.-based labs for seed testing

Challenges in Regulating Seed

- Increasingly global nature of seed industry
- Trend to increasing demand for documents and declarations that specific pests are absent in imported seed
- Increasing volume and complexity of international seed movement



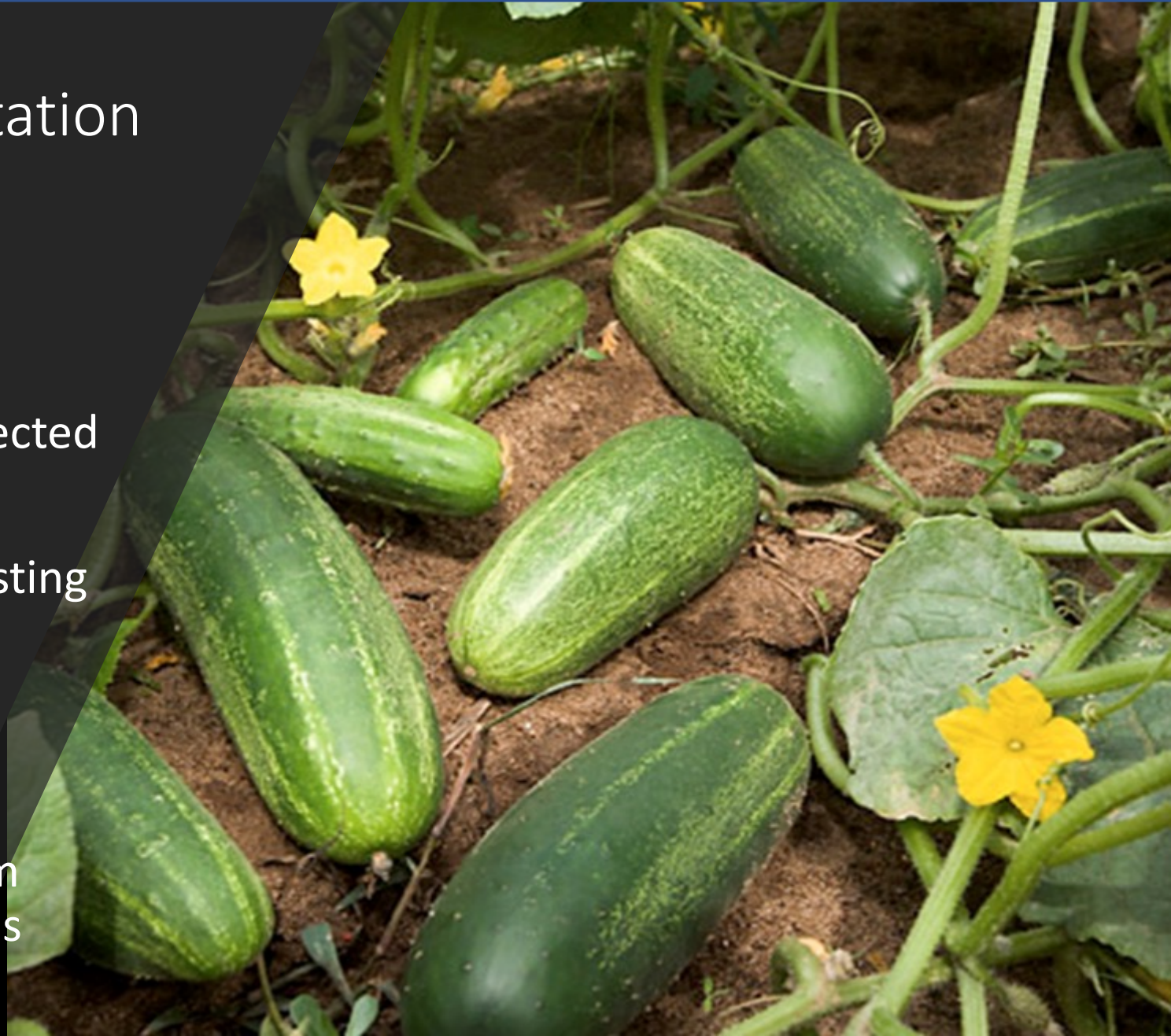
National Seed Health Accreditation Pilot Program (NSHAPP)

- Voluntary program implemented in 2016
- Modeled after National Seed Health System
- Compliance agreement to hold imported seed lots of cucumber, melon and watermelon until sampled, tested and found free from CGMMV
- Companies use NSHS-accredited testing labs
- Must have documented track and trace system
- Untested seed lots segregated



National Seed Health Accreditation Pilot Program (NSHAPP)

- Administered by Iowa State University
- >45K lots tested; 220 positive lots detected and destroyed
- Allows industry to leverage existing testing labs
- Reduces the likelihood of spread from contaminated seed
- Companies able to implement program without affecting seed supply timelines





K.-S. Ling



K.-S. Ling

Just when we
thought it was
safe...

- Tomato seed samples from China, India, Peru, and Thailand collected by CBP at three west coast ports in 2018/2019; seed held at importer facility until tested by APHIS
- 770 shipments sampled; pospiviroids detected in 167 shipments (27 percent)
- ToBRFV outbreak worldwide, especially Mexico
- Resulted in publication of Import Federal Orders

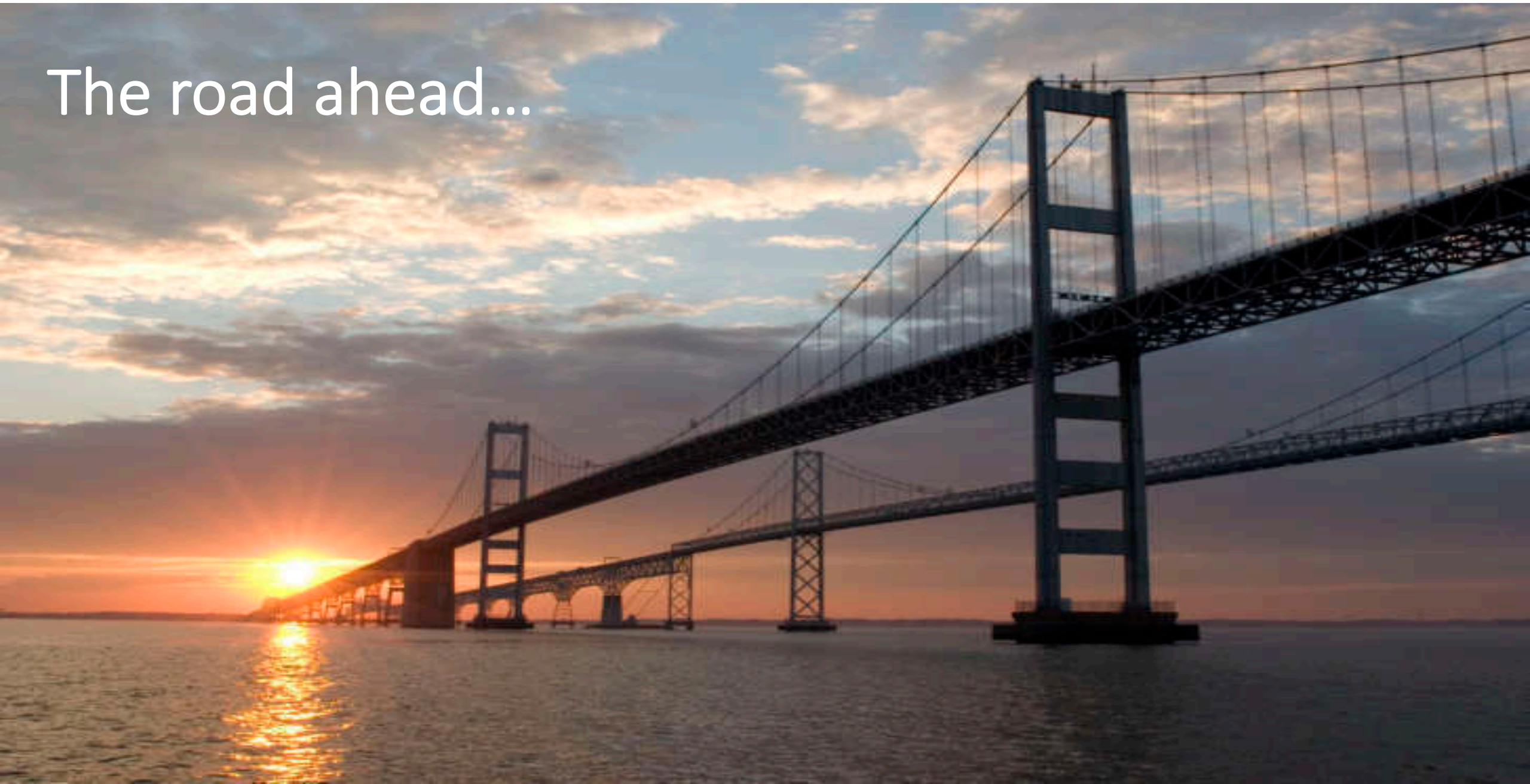




POE Enhanced Inspection

- In July 2020, PPQ began enhanced inspection of seed imports by testing to verify the required additional declaration for freedom from pospiviroids and ToBRFV in tomato and pepper seeds
- Selected shipments are sampled and held at POE until testing by APHIS is completed
- As of January 21, 2021, CBP has taken 41 samples, from ten importers and five countries at the same three west coast ports as during the 2018-2019 pilot
- Seven of the 41 shipments sampled were found positive for quarantine pathogens

The road ahead...





ReFreSH

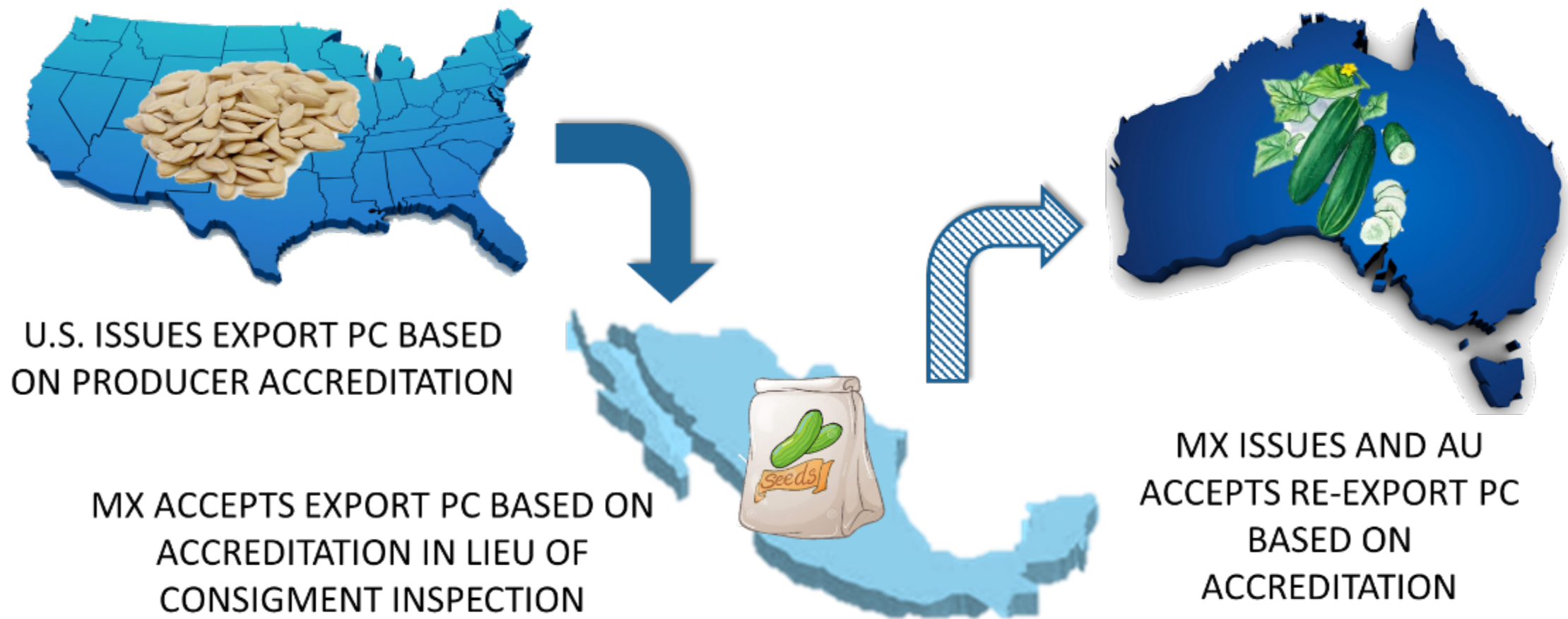
- PPQ's long-term strategy to manage seed risk
- Systems approach leveraging industry best practices
- Accreditation alternative to consignment-by-consignment inspection
- Model for a globally harmonized system

What ReFreSH would look like

- Entity applies to participate in ReFreSH and if approved is registered
- Regular audits of ReFreSH entities
- POE inspection of documents and ReFreSH certification; exempt from AD requirements; seed released to entity
- Random testing of seed at POE to verify compliance



How It Could Work

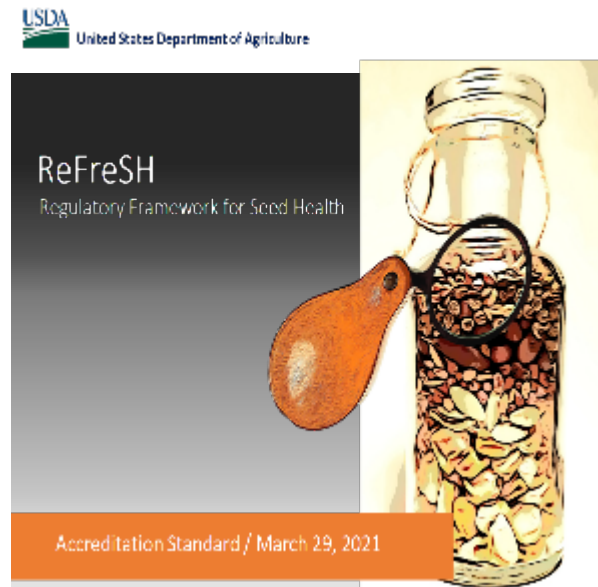


ReFreSH Documents

Concept Paper



Accreditation Standard



ReFreSH Manual



ReFreSH Concept Paper

Introduction and background

- Seed as a pathway
- The global nature of the seed trade
- Regulating seed

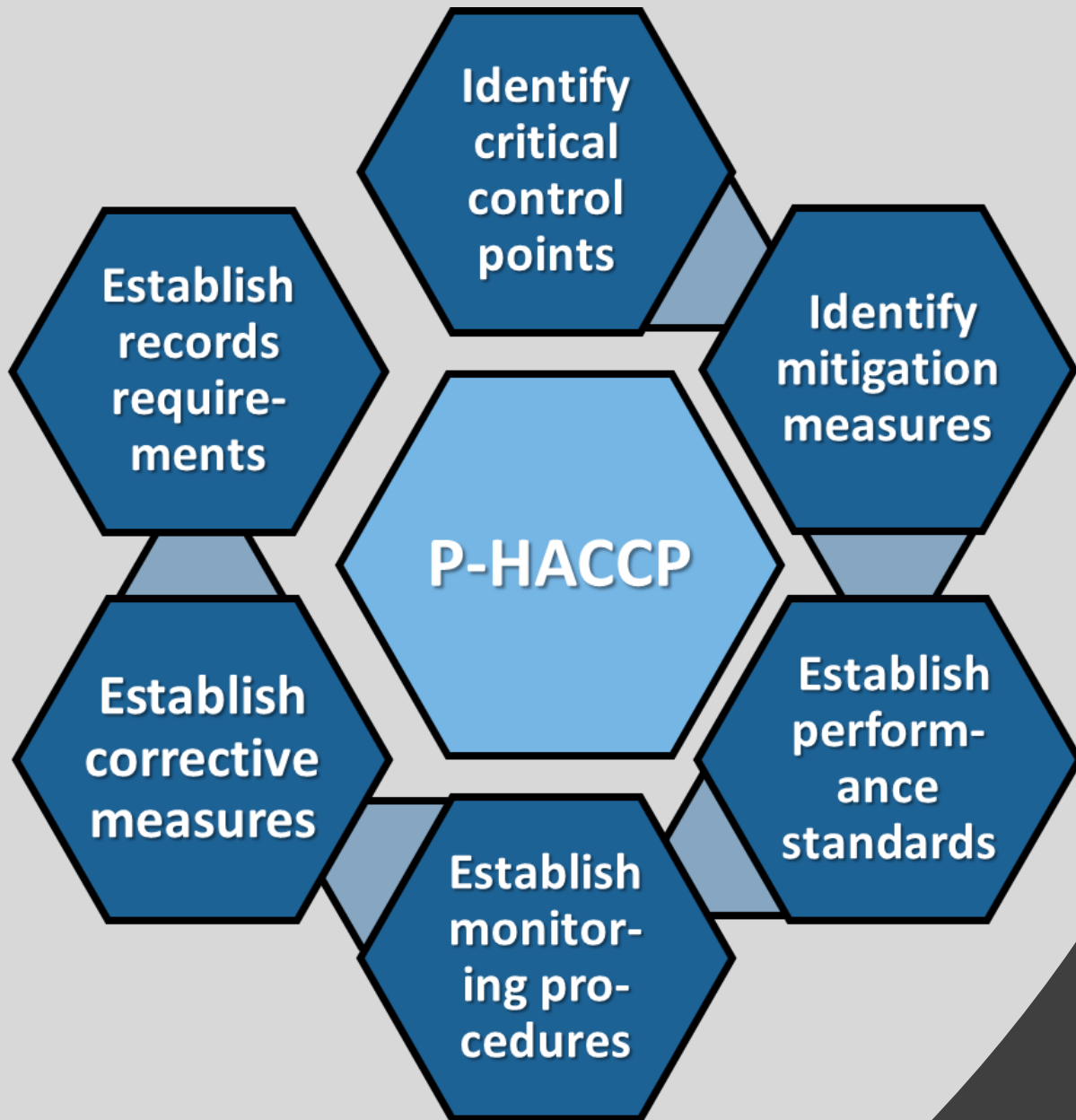
Designing ReFreSH

- HACCP / Critical control points

ReFreSH Systems Approach

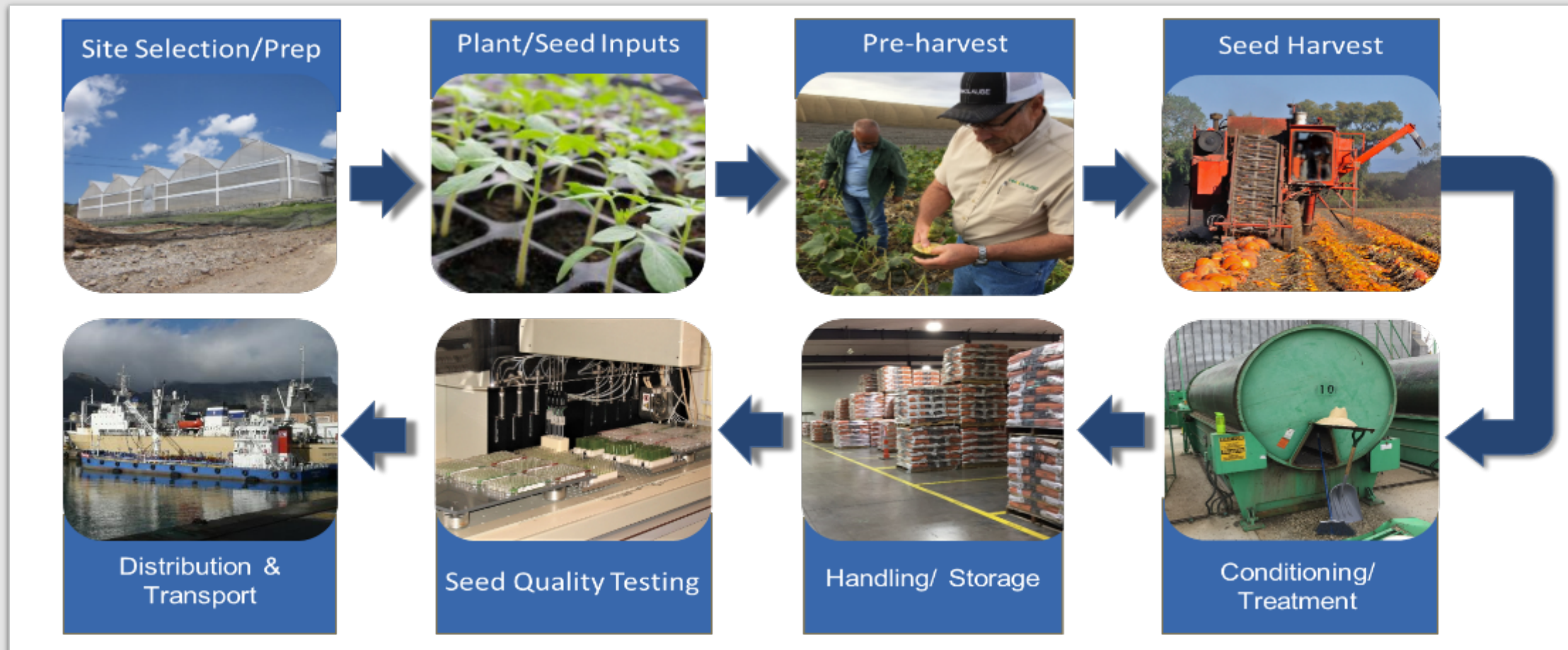
- Outlines relationship between CCP / Production practices / Regulatory activities

Available online: https://www.betterseed.org/wp-content/uploads/ReFreSH-Concept-Paper-Draft_-2019.pdf



Designing ReFreSH

ReFreSH Critical Control Points



ReFreSH Accreditation Standard: Scope



Describes essential elements
of ReFreSH

Outlines the responsibilities
of all participants in the
ReFreSH Program

ReFreSH Accreditation Standard: Contents



Application and Enrollment in ReFreSH



Participating Entity Responsibilities



Authorizing NPPO Responsibilities



Non-conformance and Corrective Measures

ReFreSH Manual Scope



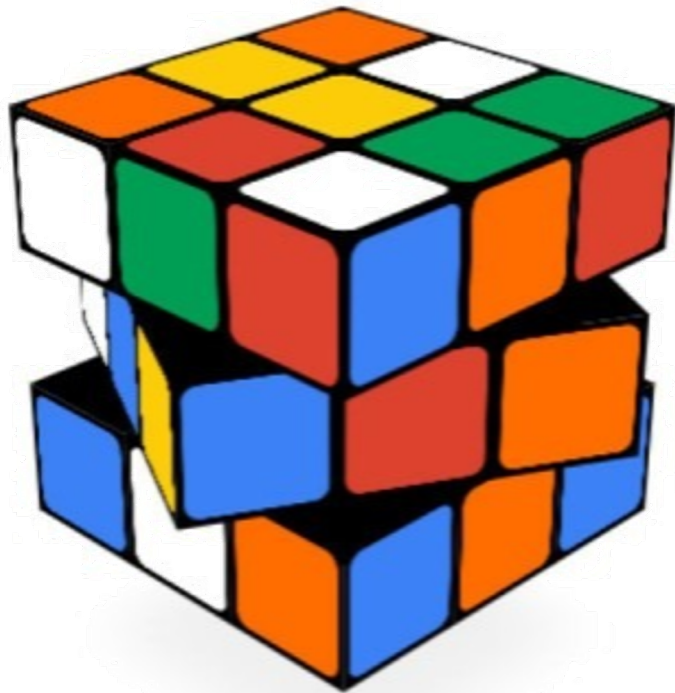
- Describes processes/ procedures to meet ReFreSH standard and manage pest risk
- May be a self-standing document or incorporate existing equivalent documentation

ReFreSH Manual

- Staff / Facility
- Seed Health Management Plan
- Internal Audits & System Improvement
- Records / Documents
- Change Management
- Reporting and Compliance
- Risk Evaluation/Hazard Analysis



ReFreSH : Questions/Issues



Questions/Issues

- Easy to envision on a bilateral basis; how will it work with multiple NPPOs and re-exports?
- Resources
 - Application reviews? Audits? Fees?
- For smaller entities, help with Quality Management Systems and documentation?

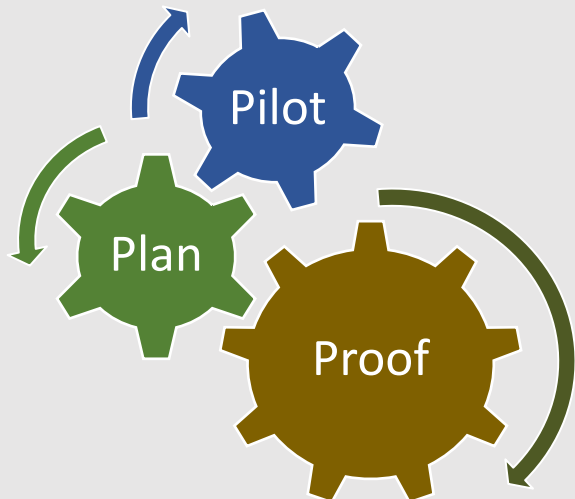


Challenges

- Global nature of seed trade
- Multilateral acceptance

Multilateral Acceptance

- Key to successful global harmonization of systems approaches
- Two paths:
 - ISPM 38 Annex
 - Pilots

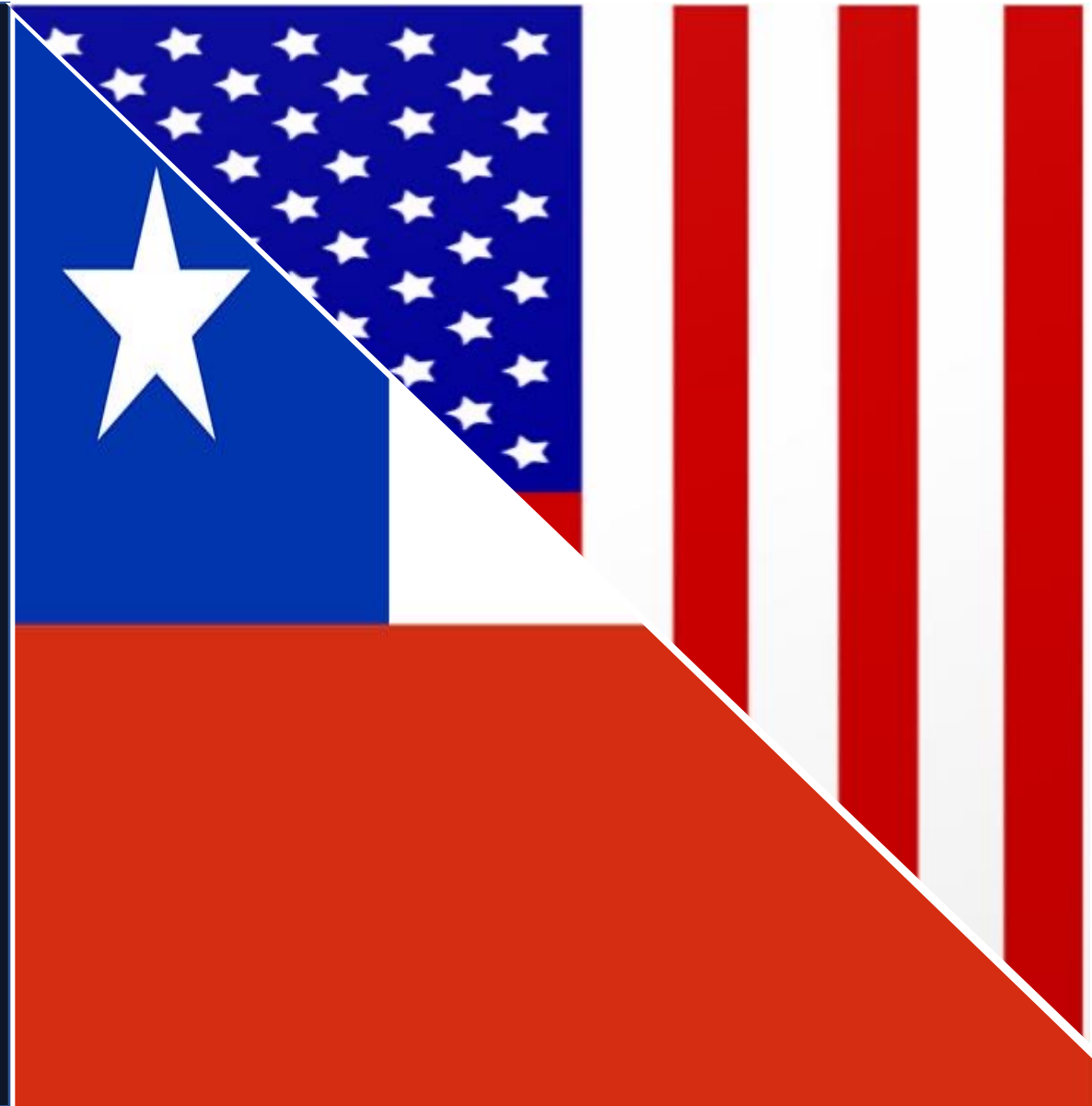


Systems Approach Pilots

- Brazil small lots of seed
- Chile small lots of seed

Chilean Systems Approach Pilot

- Focus is on small lots of seed moving both ways between Chile and the U.S.
- Three virtual meetings to establish scope and introduce ReFreSH concepts and documents





Chilean Systems Approach Pilot

Participants

- APHIS and SAG
- ASTA and ANPROS
- Bayer, Corteva, HM Clause

Commodities

- Corn
- Squash
- Cucumber

Other Initiatives



ISF Systems Approach Working Group Projects:

- Developing discussion document to inform ISPM 38 annex development
- Organizing a seed systems approach pilot for import/export/re-export of cucumber seed among Australia, Chile, Netherlands and United States

Quads Seed Health Working Group

- Australia/Canada/New Zealand/United States
- Working with industry to develop a systems approach for tomato seed based on existing industry practices

Next Steps



- Implement various pilots
- Continue to support the development of the ISPM 38 Systems Approach Annex
- Continue to refine ReFreSH Standard and Manual by soliciting comments through Stakeholder Registry

Contact

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