



National Seed Health Accreditation Pilot Program (NSHAPP)

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Brief overview of Live Meeting

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- Challenges to APHIS of Seed Trade
- What is NSHAPP?
- Why is APHIS interested in CGMMV?
- Roles and Responsibilities
- Enrollment
- Positive Find Reporting
- Benefits to APHIS and Industry
- Questions?

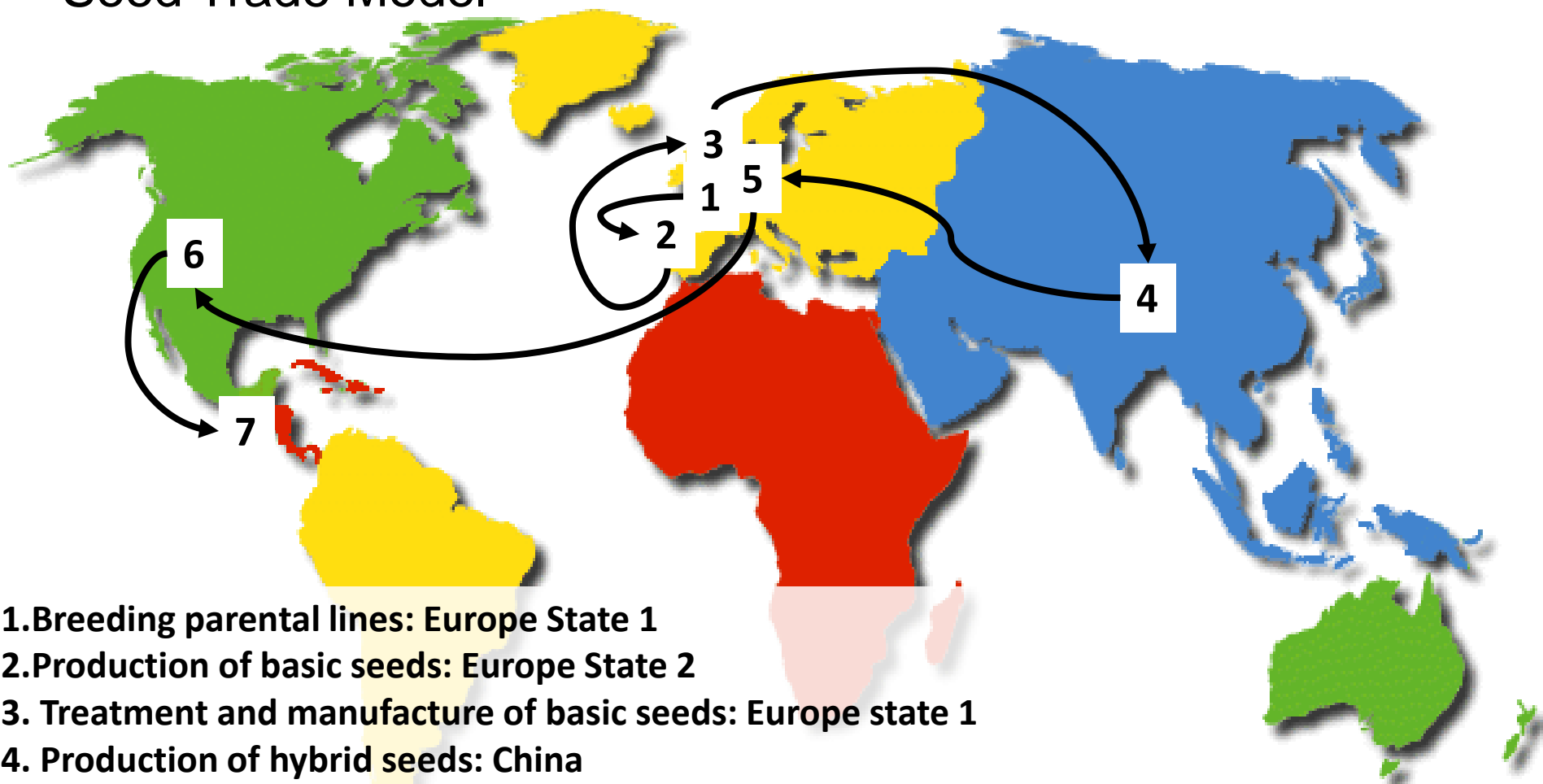
Challenges of Seed Trade

- Historically seed moved without many phytosanitary barriers
- Seed moves in complex global patterns

Traditional Trade Model



Seed Trade Model



1. Breeding parental lines: Europe State 1
2. Production of basic seeds: Europe State 2
3. Treatment and manufacture of basic seeds: Europe state 1
4. Production of hybrid seeds: China
5. Treatment and manufacture of commercial seeds: Europe state 1
6. Commercial packaging: USA
7. Final market: Mexico

**Adapted from a presentation by Ric Dunkle, PPQ Seed Summit, 2014*

Challenges of Seed Trade

- Many pathogens are transmitted by seed
- Majority of pathogens cannot be found through visual inspection
- Countries moving towards more import testing requirements
- Import testing requires infrastructure and resources at port of entry

What is NSHAPP?

- National Seed Health Accreditation Pilot Program (NSHAPP)
- Alternative to Rulemaking approach to mitigating risk of incoming seed
- Funded by Farm Bill for FYs 15 & 16
- Iowa State partner with APHIS

What is NSHAPP?

- Voluntary program for companies to test imported seed
- Model for pilot project: Cucurbit Seeds and Cucumber Green Mottle Mosaic Virus (CGMMV)



Source: Biosecurity Australia

Why is APHIS interested in CGMMV?

- Highly stable virus that persists in the environment
- Easily transmitted
- Results in high yield loss or unmarketable product
- Found in area of high agricultural yield



Roles and Responsibilities-APHIS

- Regulatory oversight
- Procedure and policy development
- Steering committee
- Operational oversight



Roles and Responsibilities-APHIS

- Enroll companies in NSHAPP
- Coordinate with State Dept. of Agriculture
- POC for questions and concerns
- Site visits and/or perform audits, if needed
- Operational guidance
- Address non-NSHAPP issues as needed
- Coordinate re-export or destruction of positive lots
- Refer issues that may arise to other government agencies

Roles and Responsibilities-Industry

- Test all incoming cucurbit seed using the approved ELISA method
- Cb 3.1 ISTA Assay 7-026



Roles and Responsibilities-Industry

- Report all tests once per month using form designed by ISU
- Report all positive finds immediately to National Seed Health Coordinator
- Assist APHIS is building robust non-regulatory framework for limiting introduction of seed transmitted pathogens



Roles and Responsibilities-ISU

- Methods development
- Testing seed for participants without an accredited lab
- Random confirmatory testing
- Data management

Enrollment Process

- Interested companies contact National Seed Health Coordinator
- Companies provide proof of accreditation, list of facilities, contact person(s), disposal protocol

Enrollment Process

- Local PPQ/State Department of Agriculture meet with company to sign compliance agreement
- Iowa State adds company name to website



What happens when a lot is positive for CGMMV?

- Company contacts National Seed Health Coordinator at APHIS immediately and provides required information

Positive Find Required Information

- Crop species and variety
- Unique seed lot identification number
- Seed origin
- Year produced
- Testing location, date
- Current location of impacted seed lot and safeguarding measures
- Volume of positive seed lot
- Customs entry number and a copy of the foreign phytosanitary certificate

Positive Find

- Local PPQ/State Department of Agriculture meet with company to give them the option to re-export or destroy seed

Positive Find: Destruction Methods

- T415-a - Garbage: Incinerate to ash
- T415-b – Dry heat: 2120F for 30 minutes followed by burial in a landfill
- T408-a – Dry heat: various time/temperature combinations above 230oF
- T408-b – Steam: 250oF @ 15 pounds per square inch for 30 minutes
- Deep burial

Positive Find

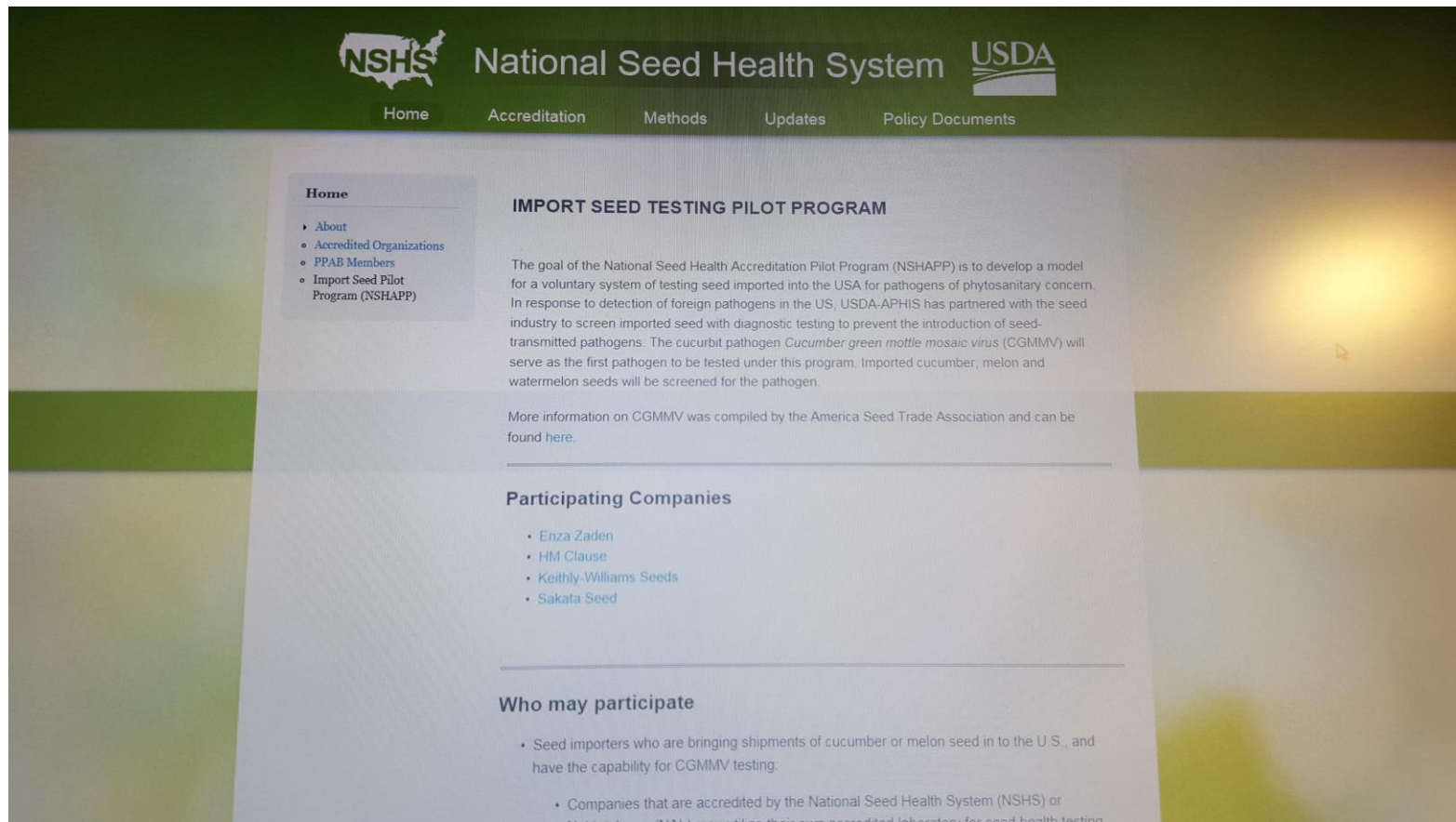
- Local PPQ/State Department of Agriculture can assist with and may choose to witness the destruction of the impacted seed lot(s)
- All positive lot information is kept confidential by APHIS

Benefits to APHIS and Industry

- APHIS avoids restricting trade
- APHIS has the opportunity to test a novel approach to limiting risk of imported seed
- APHIS and industry work collaboratively on mitigating seed import risk
- Industry avoids a more cumbersome regulatory solution
- Industry can use participation in marketing

More Information?

- <http://www.seedhealth.org/imported-seed-pilot-program-nshapp>





More Information?

- Contact

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Questions?