



# APHIS/Industry Seed Summit: Summary, Next Steps

Phytosanitary Committee

Tampa, FL

January 26, 2015

# APHIS Seed Summit (July 15-17, 2014)

- Brought together 80 participants from USDA, universities, and the seed industry/ASTA (17) to:
  - Begin a dialogue to explore and identify new/improved approaches to address/mitigate phytosanitary risk associated with **seed transmitted pathogens**
  - Identify/address seed trade/export issues of concern to the industry

# Summit Outcomes

- Cross-functional working groups have been established for each topic area (Corn diseases, vegetable seed viruses/viroids, etc.)
  - Approaches to reducing/managing phytosanitary risk will be a joint industry/APHIS effort!
  - Approaches will be customized according to the specific issues associated with each topic
- **APHIS is looking for voluntary industry actions that will significantly reduce the need to develop additional regulations**

# Summit Outcomes, continued

- **A pilot project based on CGMMV is under construction:**
  - **Voluntary** accreditation program for seed companies (will include seed testing, traceability)
    - Up to 10 companies to be in the pilot
    - The accreditation will also serve as a brand for marketing
  - Baseline monitoring of seed (to be implemented by USDA and States)
  - Growers will be encouraged to only purchase seed tested for CGMMV
  - CGMMV workshop planned for January 28, 2015

# Accreditation Features

- Quality management programs/procedures used by companies that reduce phytosanitary risk of introduction/establishment of CGMMV will be accredited/recognized by APHIS
  - Proposed new accreditation category under NSHS
  - Could be used as a brand for marketing purposes
  - Apply to large companies that have control over all aspects of seed production as well as dealers/brokers and smaller companies that import seed

# Workshop Agenda

	Topic	Presenter	Time
I.	Opening Remarks	Ric Dunkle William Thomas, APHIS Robert Bailey, APHIS*	8:30 a.m.
II.	Setting the stage: CGMMV in California; Challenges To, and Options for, regulating seed	Robert Bailey, APHIS* Shailaja Rabindran,, APHIS Nick Condos, CDFA*	8:35 a.m.
III	Stakeholder Issues: Potential Impacts on Growers and Others in the Value Chain	Bob Morrissey, NWA	9:00 a.m.
III.	Overview of ASTA Farm Bill Proposal “Development of a Pilot Biosecurity Framework for Importation of Seeds to Prevent Entry/Establishment of Seed Borne Diseases”	Ric Dunkle	9:30 a.m.
IV.	Seed Industry Quality Management Practices that Reduce Risk of Seed Transmitted Pathogens	Dr. Samantha Thomas	10:00 a.m.
V.	Break		10:30 a.m.
VI.	Elements of A Seed Monitoring Program	Nick Condos, CDFA* William Thomas Robert Bailey*	11:00 a.m.
VII	Elements of an Accreditation System: Report from APHIS/Industry Denver Meeting Nov 18-19, 2014	William Thomas Shailaja Rabindran Alec Ormsby, APHIS	11:30 a.m.
VIII	Lunch		Noon
IX	Review of Accreditation Documents and Industry Comments	Shailaja Rabindran William Thomas Ric Dunkle	1:00 p.m.
X.	Setting Up the Pilot Program: <ul style="list-style-type: none"> <li>• Accreditation component</li> <li>• Seed monitoring component</li> <li>• Evaluation component</li> </ul>	Breakout sessions	1:30 p.m.

# Workshop Agenda

X.	<b>Setting Up the Pilot Program:</b> <ul style="list-style-type: none"> <li>• Accreditation component</li> <li>• Seed monitoring component</li> <li>• Evaluation component</li> </ul>	Breakout sessions	1:30 p.m.
IX.	Reports from Breakout Sessions		2:30 p.m.
XI	Break		3:15 p.m.
XII	Q/A session	Workshop Participants	3:30 p.m.
XI.	Summary, Next Steps	Ric Dunkle William Thomas Nick Condos*	4:00 p.m.
XII	Adjourn		4:30 p.m.







# Veg Tech Report

Phytosanitary Committee

January 29, 2015

# Veg Tech Summary January 7, 2015

## Syngenta Research Facility

- Appointed; Chair: Samantha Thomas, Monsanto  
Vice Chair: Laurel Carter, Syngenta
- ISF Pest List: Update from Jim Cucuzza on workshop the day before Veg Tech
  - > 4 species complete
  - > 6 Species close to completion
  - > 2 initiated
  - > [www.worldseed.org](http://www.worldseed.org)
- Collaboration for Plant Pathogen Strain Identification: Phyllis Himmel
  - > Goal to standardize identification of strains used for disease resistance claim verification by providing differential host sets and reference pathogens
  - > Seed Biotechnology department at UC Davis has agreed to house the differentials
  - > New Website is : [CPPSI.org](http://CPPSI.org)

# Veg Tech Summary January 7, 2015 Syngenta Research Facility

- Update on Phytosanitary issues: Ric Dunkle
- Update on the US ISHI : Samantha Thomas
- Update on the NSHS: Gary Munkvold
- Seed Pathology Issues: Lindsey du Toit
  - > Phomopsis on Spinach
  - > Outbreak of Phoma this year on Brassicas in Willamette Valley; ODA has come out with permanent ruling
- Betsy Peterson gave us an update from CSA, along with a Food Safety update.
- Next meeting is June 10, 2015 Sacramento Area.



# IPPC and NAPPPO: Prognosis for New IPPC Seed Standard; Summary of NAPPPO 2014 Annual Meeting

Phytosanitary Committee

Tampa, FL

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# The Making of the ISPM on Seed

- CPM needed to be convinced of the necessity, i.e. why the current ISPMs are inadequate 1999 - 2009
- CPM added developing a standard on seed to the work programme and scope identified 2010
- IPPC call for experts to be nominated to the Expert Working Group Dec 2012
- EWG Meeting and first draft of the standard 2013-July, 2014
- Review of draft standard by IPPC Standards Committee 2014
- **IPPC member consultation** July- November 2014
- Adoption by CPM March-April 2016 ?
- In effect from 2017 ?

# Draft Seed Standard

- Provides guidance to NPPOs on the criteria for harmonizing import requirements, export/re-export procedures
- Addresses commercial seed as well as seed used for research, breeding and multiplication
- Address unique aspects of seed compared to other commodities

# Summary of Standard

- Introduction cross references applicable standards already in place
- Divided into 5 main sections:
  - **Section 1:** Risk assessment/seed as a pathway; assessment of risk of different categories of seed (R&D, breeding, stock seed, commercial seed, etc.)
  - **Section 2:** Phytosanitary measures that could be used to prevent entry/establishment of pests potentially associated with seed

# Summary of Standard (2)

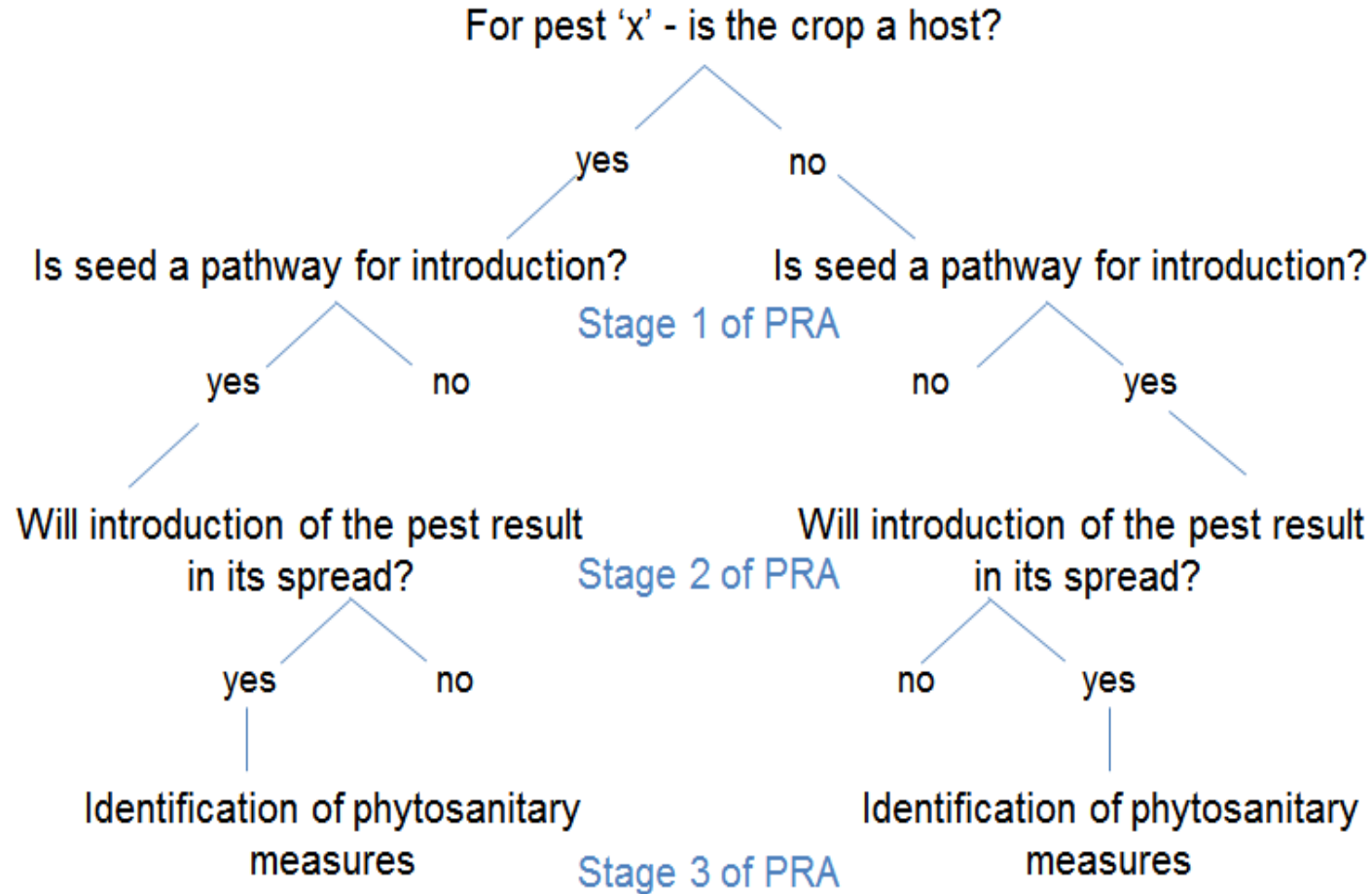
- **Section 3:** Importance of establishing equivalent phytosanitary measures, especially for seed re-export
- **Section 4:** Lists and explains when necessary requirements are that are specific to seed need to be considered (field inspection, sampling seed lots (small and commercial) and detection methods



# Summary of Standard (3)

- **Section 5:** General considerations on phytosanitary certification, followed by technical annexes/appendices for reference purposes; includes a link to ISF pest lists and ISHI seed testing methods
  - This information is for guidance only and is not binding

# Seed as a pathway for pests



Introduction: The entry of a pest resulting in its establishment [FAO, 1990; revised FAO, 1995; IPPC, 1997] Spread: Expansion of the geographical distribution of a pest within an area [FAO, 1995]

# ISF Crop Specific Pest Lists

- » 12 vegetable crops

Species	
✓ Onion	✓ Spinach
Lettuce	✓ Melon
Tomato	Brassica
Carrot	Bean
Squash	Watermelon
✓ Pepper	Cucumber

# Next Steps

- Country consultation closed Nov 30
  - 177 pages of comments
  - Several NPPOs and RPPOs were critical (Australia, Korea, COSAVE): too industry driven, redundant with other standards
  - ISF has compiled all comments
- The steward will review the comments and develop a proposed revision
- Revised version will be presented at next IPPC Standards Committee meeting (May, 2015): a second round of country consultation is likely (standard may now not come up for adoption until 2017)

# Next Steps

- Another seed delegation (ISF, SAA) is being organized to attend CPM 10 in Rome (March, 2015)
  - To demonstrate continued support and need for the standard
  - To make another presentation during the technical session of the IPPC agenda
  - To prepare and circulate a white paper on ISPM 12 (phytosanitary certification) which is up for review/revision

# NAPPO

- Organizational Changes may be possible:
  - Ian MacDonell, NAPPO's Executive Director, retired last July; recruitment for his replacement is underway
  - Location of Secretariat, currently in Ottawa, could change:
    - To Toronto?
    - To Mexico City?
  - May depend on who is selected as the new Executive Director



# North American Plant Protection Organization Annual Meeting; Huatulco, Mexico

Followed by Symposium: Electronic  
Phytosanitary Certificates, from  
Concept to Implementation

# North American Plant Protection Organization Annual Meeting; Huatulco, Mexico

- Three day meeting to discuss current pest issues within North America on various commodities.
- Breakout sessions with Industry and Government from Canada, United States, and Mexico.
- Joint session with each country.
- Main accomplishments from the Seed Sector was:
  - 1) Prioritizing the seed proposals for NAPPO.
    - > Harmonizing of Seed Testing methods in the NAPPO region
    - > Accreditation of Seed Company Quality Management Practices
  - 2) Recommendation to reinstate the Seed Expert Panel



# North American Plant Protection Organization Annual Meeting; Huatulco, Mexico

3) Seed is recognized as a role model for an industry  
working together in all the NAPPO countries

- Day after NAPPO was a **Symposium on Electronic Phytosanitary Certificates** ( Sending and receiving E-Phyto's between NPPO's)
- Some Benefits:
  - > Reduce possibilities for fraudulent documents
  - > Improve security in transmission
  - > Improve planning for the arrival and clearance
  - > Reduce delays in receiving and replacement certificates
  - > Harmonize codes and processes

# Phytosanitary Certification Issues with the EU

- EU phytosanitary import requirements for freedom from Stewarts wilt based on EU Directive:
  - Seed can be certified either on the basis of no detections during a phytosanitary field inspection **OR** a negative seed test
  - If there was a positive field inspection **OR** a positive seed test, the seed could not be certified
- **OR**, the seed came from a pest free area

# Summary of 2014 Actions

- In early 2014 ASTA asked for a review/reconsideration of the EU's import requirements for Stewart's wilt:
  - Worked with ISU to update the pest risk assessment
  - Proposed a tolerance level for occurrence of Stewart's wilt in a field inspection (based on Block et al pub showing that infected corn leaf area below 25% results in no seed transmission)

# 2014 Actions, con't

- APHIS presented all information developed by ASTA and the industry to the EU at a technical bilateral in the spring of 2014
- In a recent follow-up technical bilateral held in late October, the following was agreed to:

# 2014 Actions, con't

- Regarding the Stewart's wilt tolerance proposal: The EU was receptive but requested further review primarily to determine how a tolerance would be used from a practical standpoint
- For phytosanitary certification in general:
  - For **corn, sunflower, bean (genus Phaseolus), and tomato seed:**

- Even if there is a positive detection of a regulated pathogen in a field inspection, if the seed is tested and is negative for that pest, the seed can still be certified
  - A treatment is not required unless specified in the EU directives
  - Therefore, for Stewart's wilt, a negative seed test can now trump a positive field detection

# **Brazil Normative 36 (Now Ordinance 380)**

- New version of N-36, Ordinance 380, was released through WTO for comment (60 day)
- Comment period closes Feb 22; Brazil's goal for entry into force is June 1, 2015
- Main changes from most recent version:
  - Back to country annexes; more pests added
  - Field inspection option for viruses/viroids removed

# Brazil Normative 36

- APHIS/ASTA are preparing comments
  - No indication that previous responses have been considered – technically unjustified pests are still on the new U.S. annex. No acknowledgement from MAPA that comments were even received
  - APHIS (CPHST) is reviewing the annex and will provide its analysis to ASTA to review (by Feb 1)
  - APHIS will share draft comments with ASTA for review/input (before Feb 10)
  - Comments to be submitted in Portuguese
  - ABRASEM has been very helpful!



# Brazil Normative 36

- MAPA has sent the signal that a phase-in (up to 2 yr.) plan is being planned
- MAPA has indicated that initially there will be 100% retesting at POEs, but will reduce frequency based on test results
- Testing methods to be used may become a major issue
  - For example, there are internationally recognized tests for only 4 viruses/viroids and many ELISA –based tests that are largely unproven for regulatory use
- ASTA continues to partner with ISF on this process

# Brazil Ordinance 59 (Seed For Research and Testing)

- Brazil has been in the process of revising its rules for all types of germplasm (both plant and animal) for several years
  - This process has been largely kept internal
- ASTA received a draft copy late last summer
- APHIS, although never officially notified, sent comments to MAPA
- Rule has apparently been finalized and is to become effective February 15

# Brazil Ordinance 59

- Major issues:
  - Sample size and testing of small lots!
  - Risk levels of seed appear not to be considered; e.g. seed for lab analysis vs. open field evaluation
  - What is a seed lot? (one envelope of seed, or one carton with many envelopes?)
  - Should conform to new draft international seed standard or perhaps wait until standard is adopted

# Brazil Ordinance 59

- Major issues:
  - Process and time involved for obtaining import permits appear excessive
  - Nobody yet knows what will be in the final rule; there appears to be no more opportunity to impact the final rule
  - Wait-and-see.....

# New Chile Regulation

- Chile has recently published an update of seed phyto import requirements which go into force Feb 15, 2015
- Applies to all trading partners
- Covers 49 plant (seed) species, 21 quarantine pests, 67 host/pest combinations
- Pests include pathogens plus several insect (Bruchid) species
- Fumigation required for insect pests

# New Chile Regulation

- Pathogens requiring either a field inspection **or** a treatment:
  - *Colletotrichum truncatum*
  - *Colletotrichum acutatum*
  - *Colletotrichum capsisi*
  - *Colletotrichum orbiculare*
  - *Phoma apiicola*
  - *Asochita rabiei*

# New Chile Regulation

- Pathogens requiring...”shipment comes from a nursery inspected **and** analyzed (specify diagnostic technique):
  - *Xanthamonas campestris* pv *cucurbitae*
  - *Xanthamonas hortorum* pv *carotae*
  - *Pseudamonas syringae* pv *lachrimans*
  - *Pseudomonas syringae* pv *pisi*
  - *Curtobacterium floccumfaciens* pv *floccumfaciens*
  - Arracacha virus B

# New Chile Regulation

- Requirements for PSTVd: Inspection and analysis **or** lab test
- The major problem is for pathogens requiring analysis of mother plant material (assuming this is what this requirement means)
- ANPROS has negotiated an agreement with SAG to also accept seed testing (Resolution 9425)
- APHIS is requesting SAG to remove the requirement for analysis of mother plant material
- Bottom line: much more testing!



# Vietnam PRA Requirements

- PRA requirements appear to be down to only a few seed spp. (Cynodon, Lactuca, Panicum, Medicago) where PRA is still an issue.
- ASTA has asked for clarification regarding how best to obtain import permits
- ASTA has been asked to coordinate the development of a PRA for Medicago (alfalfa)
- If your company runs into issues, contact ASTA!