



NSHS
National Seed Health System

NSHAPP SYSTEMS APPROACH CONCEPT

Overview

- Introduction to NSHAPP
- Small lots – Infection Unit Approach
- Systems approach
 - ▣ Pest Management Plan
- How to assess the program?
- Other considerations

NSHAPP Program Overview

- Collaboration between industry, National Seed Health System and USDA-APHIS
- Testing program for imported seed
- Prevent introduction of pathogens into the USA
- Voluntary
- Initial target – CGMMV in cucumber, melon, watermelon

Collecting Data on CGMMV Imports

Started collecting data Jan 2016

- Started accepting “small lots” data shortly after
 - Accept 5% of lots smaller than 20,000 seeds
 - Based on an “infection unit” approach
- Currently have 7 companies participating
- Data reported to NSHS monthly
- Positive finds reported immediately
 - Two options on how to handle seed lots that test positive: re-export or destroy

NSHAPP Data

- Almost 30,000 lots reported
- 40 positive lots reported (0.13% lots positive)
- Positives have been found from the following countries:
 - ▣ China
 - ▣ India
 - ▣ Israel
 - ▣ Peru
 - ▣ Spain
 - ▣ Thailand
 - ▣ Vietnam

Systems approach

- Testing every lot requires a lot of time and money
- Consider if we could reduce reliance on testing for low risk seed lots and still maintain phytosanitary security
- Goal – start with small lots of cucurbit seed moving into the US for planting

Systems approach



NSHAPP Specifics

- Limited to cucurbits
- Scope only includes CGMMV at this time
- Limiting the scope to breeder seed being imported from
 - ▣ **Netherlands** (~15% of cucurbit imports)
 - ▣ **Chile** (~50% of cucurbit imports)
 - ▣ **Australia**
 - ▣ **Mexico?**
- Companies will continue to report on commercial lots being tested at import and imported small lots not produced within the scope of this systems approach

So, how will this work?

- Companies will submit their plan for pest management and documents
- There will be an implementation audit covering their plan
- Will need to cooperation of NPPOs in exporting countries as there will need to be audits outside the US
- Will need to be able to demonstrate that managements were completed effectively with documentation and internal audits

Pest Management Plan

How do you get CGMMV in your seed?

- Plant infected seed
 - ▣ Was it tested before planting?
- Plant clean seed into an infected area
 - ▣ Surveys done or never reported?
- Mechanical transmission
 - ▣ Workers, pollination, equipment?
- Sick plants tested when rouged?
- Bees?
- Weed hosts?

How will we assess this project?

- Will have to be some testing to verify that seed being produced under the program is negative
- Immediate reporting of any positive results obtained from planting seed under this program in the US
- Wait and see?

Other considerations

- No countries are currently included where positive seed lots have come from
- So we have already limited the risk
- Breeder seed is very highly monitored in comparison with large open field production
- Lesson from the first 3 years of NSHAPP – hope for the best but prepare for the worst
- How do the current CGMMV issues in California affect this?



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QUESTIONS?

Thank You.