

# NSHAPP: Pilot Program for Imported Cucurbit seed testing

# Import Testing Pilot Program

- 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

# Program Scope

- Cucumber, melon and watermelon seed
- ISTA method 07-026 (ELISA) for CGMMV
  - 2,000-seed samples
  - Untreated seed only
- Began accepting small lots March 1, 2016
  - 5% sampling of lots smaller than 20,000 seeds
- NSHS or NAL accredited labs in the US may test

# Import Testing Pilot Program

- Started collecting data Jan 2016
- 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

# Current Participants

- Bayer
- Enza Zaden
- HM Clause
- Keithly-Williams
- Monsanto
- Rijk Zwaan
- Sakata

# NSHAPP Successes

- Detected and destroyed positive seed lots
- Increased collaboration with industry
- Increased knowledge of seed business models within APHIS
- Creating ideas for future seed work

# Results

- 10995 lots tested
- 24 positives
  - All seeds lots were destroyed or not imported
- Limited number of “spot-check” samples tested by ISU
  - All negative
- Will be completing a proficiency test of participants and industry labs in the next few months
  - Occurring in place of future spot checks

# Positive Detections

<b>Seed Species</b>	<b>Origin</b>	<b># of samples</b>	<b># of positives</b>	<b>Total samples</b>	<b>Total positives</b>
Watermelon	China	27	1		
	India	110	1		
	Israel	21	6		
	Thailand	263	1		
	All Others	1721	0	2142	9
Melon	China	277	6		
	India	64	1		
	Israel	3	1		
	Vietnam	1	1		
	All others	5363	0	5708	9
Cucumber	China	54	3		
	India	60	2		
	Spain	5	1		
	All others	2986	0	3105	6
				<b>10955</b>	<b>24</b>



# Moving forward

- Wider participation is needed
  - smaller seed companies, seed brokers
- Program will be moving toward a systems approach for production of CGMMV free seed
  - Will allow companies who have strong risk mitigation strategies to not have to test all imported lots
  - Will still accept if some companies continue to test all imported lots instead of moving to a systems approach
- Will begin auditing companies in Fall '18

# Contact info

**Tracy Bruns**

National Seed Health System

Accreditation Coordinator

Iowa State University

515-294-6493

[tlbruns@iastate.edu](mailto:tlbruns@iastate.edu)

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