



# Understanding CGMMV Presence in Northern California



# HISTORY AND WHERE WE ARE TODAY

- Five years ago CSA hosted similar outreach meetings about Cucumber Green Mottle Mosaic Virus (CGMMV).
- Industry increased sampling and laboratory testing of seed to assure parent seed stock was CGMMV-free.
- Implementing biosecurity best practices to prevent the introduction and spread of the virus.
- CGMMV has not gone away.
- In 2017— while not in large numbers — there were several detections of the virus in seed crops grown in Colusa, Glenn and Sutter Counties and a detection in fresh Asian greens grown in Fresno County.

# HISTORY OF DETECTS

When	Field(s)	Where (county)	What	Additional Notes
2017	7* 1?	Sutter, Glenn, Colusa, Fresno	Watermelon in seed production fields of S, G, C Commercial Opo squash in F	Seed positive for watermelon fields Fields inspected
2016	2	Yolo, Colusa	Watermelon from two different companies	Seed positive Fields inspected Colusa volunteers and broadleaf weeds tested and found to be neg.
2015	1	Sutter	Not specified in CDFA report	Seed positive Field inspected Volunteers neg.
2014	?	Fresno, Kern, San Joaquin	Commercial triploid production (diploid as pollinator)	Unable to determine origin Multiple transplant houses Two different Asia strains (B. Falk)
2013	1	Yolo	Melon seed field with suspected SqMV symptoms 2 Cucumber and watermelon fields also found to be positive Trace back to Sutter production	EU Strain
2012	?	Sutter	Seed produced was positive	

\*Some still pending confirmation by CDFA

# QUESTIONS AND SEED INDUSTRY ACTION PLAN

- Why Is The Virus Continuing to Show Up In Our Cucurbit Seed Crops?
- CSA Re-established a Seed Industry CGMMV Working Group to work on a plan to find answers to:
  - Can we increase the number of companies to sample and test?;
  - What can we learn from other areas of the world where the virus exists?;
  - Is there an alternative environmental host or hosts in California?;
  - How can we work closer on the regulatory issues with our partners at the USDA, CDFA and the County Agricultural Commissioners?;
  - Have we identified each area in the production of seed – from planting, growing, harvest, handling and processing – that may be vulnerable to the introduction of a virus and the bio-security best practices to prevent an introduction? and,
  - What's the best way to sustain ongoing outreach and training regarding the virus and bio-security best practices needed to prevent the introduction of viruses in each step of seed production?

# OUTREACH AND TRAINING

- The Working Group's First Priority Is To Step Up Outreach and Training
- ASTA Bulletin updates have been completed and reflects new information in both English/Spanish and are available today.
- CSA is helping arrange disease training sessions
  - Disease cards for distribution
  - The Two Training sessions this week will include:
    - Growers
    - Transplant houses
    - Contract field workers
    - Bee companies
    - Seed companies
    - County Ag personnel
    - CDFA

# TRAINING WORKSHOP

Training sessions will include:

- what we know to-date about the virus in California and around the world;
- review of field disease identification information – we have printed disease resource and field guides for you to take with you;
- what are the best bio-security practices we can implement to prevent introduction of viruses; and,
- the system the seed industry is using to test for CGMMV to assure virus-free seed stock.

# THE SEED INDUSTRY IS COMMITTED

- Industry has committed the necessary resources to fund the working group's research recommendations.
- We have formally requested that the USDA reengage its leadership role through reestablishing its regulatory coordination group amongst the industry, CDFA and the County Agricultural Commissioners.
- We all have a stake in the production of quality disease free seed. Together, we can identify and implement the necessary actions we need to prevent introduction of CGMMV and other viruses and diseases into cucurbit seed crops.
- Do not hesitate to provide your feedback regarding any of the information that's presented today or if you have ideas on how to reach out to others who have a role to play in our efforts to keep our seed crops disease free.

# AGENDA FOR TODAY

- Chet Kurowski from HM Clause will be conducting the training session and providing guidance on using the disease cards we have available.
- Tony Sandoval from Monsanto and Michael Evans from HM Clause will provide a production update and address best practices.
- Leonard Jones from HM Clause will give an overview of the NSHAPP Pilot Program for Imported Cucurbit Seed Testing.
- Questions & Group Discussion.
- Lunch

## National Seed Health System (NSHS)

The NSHS was established by [7 CFR 353.9](#). The NSHS specifies standards for laboratory seed health tests and seed crop field inspections used for issuing phytosanitary certificates that meet international regulations pertaining to seed exports from the United States.

## Seed Health Accreditation Program

The U.S. Seed Health Accreditation Program, in the form of the NSHS has been established by the U. S. Department of Agriculture-Animal and Plant Health Inspection Service (USDA-APHIS) to accredit entities to perform laboratory seed health testing, seed sampling, visual inspections, and phytosanitary field inspections. Authority for the establishment and operation of the seed health accreditation program are described in Title 7 Code of Federal Regulations (7 CFR) Parts 300 and 353.

# APHIS ENTITIES CURRENTLY ACCREDITED UNDER THE SEED HEALTH PROGRAM (03/19/18)

Cucurbitaceae for the pathogen: Cucumber green mottle mosaic virus

**California Seed and Plant Laboratory**  
3556 Sankey Road  
Pleasant Grove, CA 95668

**Eurofins/STA Laboratories, Inc.**  
1821 Vista View Drive  
Longmont, CO 80504

**H.M. CLAUSE**  
555 Codoni Avenue  
Modesto, CA 95357

**Iowa State University Seed Science Center (Cucumber, Melon & Watermelon)**  
2115 Osborn Drive  
Ames, IA 50011

**Monsanto Company**  
Seminis Vegetable Seeds, Inc.  
37437 State Highway 16  
Woodland, CA 95695

**Oregon State University Seed Laboratory**  
3291 Campus Way  
Corvallis, OR 97331

**Sakata Seed America, Inc. (ISTA Method)**  
105 Boronda Road  
Salinas, CA 93940

**Summit Plant Laboratories, Inc.**  
3003 West Vine Drive  
Fort Collins, CO 80521

**Sunburst Plant Disease Clinic (ISTA Method)**  
677 East Olive Avenue  
Turlock, CA 95380

**Syngenta Seeds**  
6338 Highway 20-26  
Nampa, ID 83687

Link to Accredited Entities:

[https://www.aphis.usda.gov/plant\\_health/acns/downloads/SeedHealthProgram/Entities/EntitiesAccredited.pdf](https://www.aphis.usda.gov/plant_health/acns/downloads/SeedHealthProgram/Entities/EntitiesAccredited.pdf)

Short Url: <https://goo.gl/9ixzbA>

Testing method: <http://seedhealth.org/cb3-1/>



# California Seed Association

For More Questions, contact

California Seed Association

1521 I Street, Sacramento, CA 95814

(916) 441-2251

[www.calseed.org](http://www.calseed.org)