CALIFORNIA CITRUS PEST AND DISEASE PREVENTION PROGRAM SCIENCE SUBCOMMITTEE MEETING

Meeting Minutes Monday, May 8, 2017

The Science Subcommittee Webinar was called to order at 3:00 p.m. on May 8, 2017.

Committee Members Present:

Jim Gorden* Dr. Jason Leathers* Dr. Etienne Rabe*

Dr. Beth Grafton-Cardwell*

Committee Members Absent:

Tom Avinelis Ed Civerolo George McEwen

Interested Parties:

Jill Barnier*Dr. Neil McRoberts*Bob Wynn*Victoria HornbakerDr. Spencer Walse*Judy Zaninovich*

* Participated via Webinar

Opening Comments

Dr. Etienne Rabe welcomed the Subcommittee, staff, and members of the public participating in person and online. It was noted that there was not a quorum for the meeting.

Status Update on the CA-1 and 1b EDT Studies

Dr. Neil McRoberts provided status updates for CA-1 and 1b early detection technology (EDT) studies. Neil described CA-1 as a baseline survey of presumptively healthy citrus trees state wide in California. The sampling will be done at 1 tree per 10 acres, a 10 percent sampling ratio of 1000 trees. The targeted varieties will be orange, lemon and Mandarin as they are the most prevalent commercial varieties in California. The survey began about a month ago and includes samples for the following techniques:

- Slupsky's Metabolomics
- Leveau's Leaf Microbiome
- Fink's Volatile Organic Chemicals
- Ma's secreted protein analysis
- Pathsensor's analysis using the Hartung protocol
- McCollum's optimized PCR
- USDA CPHST Confirmatory PCR protocol

100 trees have been sampled so far, which includes all of the required samples for Southern California, except for Ventura and Santa Barbara, which are still being sampled. The surveyors are also collecting samples in Kern County. Neil noted that the project is getting fantastic cooperation from the Grower Liaison and the Growers. CDFA has been collecting regulatory samples in the event that there is a suspect from any of the EDT's. Neil mentioned that the sample collection for CA-1 should be complete by July.

Neil also discussed the CA-1b, noting that it is a companion to the CA-1 that will include approximately 240 samples from trees known to have other pathogens (selected with input from the) or selected from the

HLB quarantine areas from sites likely to be exposed to HLB. CDFA is collecting the samples from the HLB quarantine areas and sending them to the Meadowview lab where they are being processed by Brianna and Jenny from Neil's lab. Some of the 1b samples have been collected by CDFA already.

The group was happy to hear of the progress of both CA-1 and 1b.

Updates on Mitigations for Fruit Movement

Dr. Spencer Walse presented an update on the progress of the ACP mitigation measures for bulk citrus, noting that currently the focus is on the foggers. He stated that in the month of April, he conducted an insect efficacy trial at Corona College Heights. In this trial they placed 1000 ACP in vials throughout the load and they also placed filter paper in vials (to absorb the pesticide residue) throughout the load. The truck was tented and fumigation was conducted, however, Spencer noted that there was an issue with a variable speed fan that turned off due to the oscillation. He stated that they detected ACP survivors in the bins adjacent to the failed fan, but even with that, they achieved 85 percent efficacy. They also conducted 2 demonstrations, one in Ventura and one in Exeter. Both trials were well attended and well received by industry.

Spencer stated that they have another trial scheduled for May 24th in Riverside and he will continue to conduct trials to determine efficacy and residue. He is also interested in seeing how elevated temperatures impact the efficacy and distribution of the fog.

Dr. Beth Grafton-Cardwell added that people ae intrigued by the progress and they are working to get the kinks out of the mechanics of delivering the fog evenly throughout the load. She is eagerly waiting for the results of the filter paper to see if there is a correlation between efficacy and the residue levels in the filter paper. If there is a positive correlation, then they might be able to use the filter paper without ACP which will allow tests to be done in more areas and much faster.

Etienne asked about the potential to bring the time down from the current time of 2 hours and Spencer responded that he is confident that the time can be reduced as the process is optimized.

Beth will be able to make a recommendation to CDFA to include the fogger once she is confident in the efficacy of the protocol.

The meeting was adjourned at 3:32 p.m.