CALIFORNIA CITRUS PEST AND DISEASE PREVENTION PROGRAM SCIENCE AND TECHNOLOGY SUBCOMMITTEE MEETING

Meeting Minutes Wednesday, November 6, 2019

The Science and Technology Subcommittee meeting was called to order at 2:00 pm on November 6, 2019.

Science Subcommittee Members Present:

Dr. Ed Civerolo	Dr. Beth Grafton-Cardwell	Dr. Jason Leathers
Aaron Dillon*	Dr. Melinda Klein	Dr. Etienne Rabe

Science Subcommittee Members Absent:

Kevin Olsen

Interested Parties:

Teri Blaser	Sara Khalid
Holly Deniston-Sheets	Leslie Leavens*
Rick Dunn	Ray Leclerc*
Tina Galindo*	Neil McRoberts
Jim Gorden	Tracy Moehnke*
Subhas Hajeri*	Curtis Pate*
Victoria Hornbaker	Lea Pereira*

Sylvie Robillard Lydia Rodriguez* Jason Sapp* Cressida Silvers* Judy Zaninovich* Sandra Zwaal*

* 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 a quorum for the meeting.

Strategy 1-Find and Eradicate HLB

Data Analysis and Tactical Operations Center Activity Update

Holly Deniston-Sheets presented the Data Analysis and Tactical Operations Center (DATOC) activity update. She presented on exposure and density of diseased trees in southern California in residential areas. 80 percent of all the infected trees were within 80 meters of another infected tree, and 95 percent of trees were within 320 meters of infected trees. Holly mentioned that this analysis only considers infected trees that have been identified as diseased. This same scenario was looked at again with more updated data. Now, 95 percent of trees were within 210 meters of infected trees. When looking at data from May 2018 to present, new detections were broad but were commonly closer to earlier detections. Half of the new detections occurred within 270 meters of previous detections

and 90 percent were within one and a half kilometers. Etienne asked why certain cities reached 90 percent quicker than other cities. Neil McRoberts suggested that it could be because certain properties are more densely packed than other areas.

Holly then presented what the considerations, metrics, and /or benchmarks should be to make the decision to terminate Huanglongbing (HLB) positive tree removal in southern California. Key points were the current strategy may be slowing disease spread but focusing on HLB finds is costly and may not be addressing all infected areas. Shifting the focus to psyllids may be a better tactic, and *Candidatus* Liberibacter asiaticus (*C*Las) will spread regardless of infected trees. However, one can assume that residential *C*Las positive trees pose a risk to groves. DATOC also answered the question of if the core of the HLB epidemic is connected to the fringes of the disease. Based on the Ct values, the core may be connected to the edges.

DATOC ran an agent-based model for San Gabriel and compared the results with the current protocols. If no activities were to be conducted, there would be more infected trees, and by the end of 2019, between 1,150 and 2,015 trees will be infected. Actual HLB positive tree detections in San Gabriel to date is 76.

Next steps would be to determine potential replacement strategies for operational activities. DATOC would then explore running the risk-based survey without HLB infected trees and focus only on Asian citrus psyllid (ACP). Then, explore funding the model to predict outcomes of changing activities. These results will be shared with Florida and there are plans to work on this model/scenario collaboratively.

Strategy 3-Suppress Asian Citrus Psyllid Population

Ethyl Formate Update: Bulk Fruit Movement Mitigations

Etienne Rabe gave a brief update on the registrations progress for Ethyl Formate, noting that the application for the registration is on track to be submitted before the end of the year.

Mapping Out Periods of Treatment

Ray Leclerc presented on the timing of area wide buffer treatment of residential citrus. He mentioned that they should be at 100 percent for the winter treatments. It was discussed to move into buffer treatments only, and to look at previous years' compliance with buffer treatments and prioritize those that have more than 90 percent participation.

<u>Closing</u>

The meeting was adjourned at 3:09 pm. The next Science and Technology Subcommittee meeting will be held on March 4, 2020.