

**CITRUS PEST AND DISEASE PREVENTION COMMITTEE  
OPERATIONS AND SCIENCE JOINT SUBCOMMITTEE WEBINAR MEETING**

**Meeting Minutes  
Wednesday, May 6, 2020**

**Operations Subcommittee Members Present:**

Kevin Ball	Kevin Severns	Keith Watkins
Zac Green	Roger Smith	

**Operations Subcommittee Members Absent:**

John Gless

**Science Subcommittee Members Present:**

Aaron Dillon	Dr. Melinda Klein	Dr. Etienne Rabe
Dr. Beth Grafton-Cardwell	Kevin Olsen	

**Science Subcommittee Members Absent:**

Dr. Ed Civerolo	Dr. Jason Leathers
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**CDFA Staff:**

David Gutierrez	Sara Khalid	Lea Pereira
Amelia Hicks	Anmol Joshi	David Phong
Victoria Hornbaker	Magally Luque-Williams	Jennifer Willems
Gavin Iacono	Keith Okasaki	

**Guests:**

Lori Apodaca	Jim Gorden	Curtis Pate
Bob Atkins	Christopher Greer	Sylvie Robillard
Teri Blaser	Alyssa Houtby	Margo Sanchez
Casey Creamer	Jessica Leslie	Dr. Greg Simmons
Melissa Cregan	Marcy Martin	Stephanie Stark
Natalie DeAngelo	Tom Mazzetti	Seth Tillery
Holly Deniston-Sheets	Brianna McGuire	Jack Williams
Enrico Ferro	Dr. Neil McRoberts	Lein Wynn
Rick Dunn	Le Nguyen	Judy Zaninovich
Sara Garcia Figuera		

**Opening**

The Joint Subcommittee meeting was called to order via webinar at 9:00 a.m. on May 6, 2020. Keith Watkins welcomed the subcommittee members, guests, and staff participating via webinar.

**DATOC Progress on Southern California Analysis**

Holly Deniston-Sheets stated that the Data Analysis Tactical Operations Center (DATOC) has been using the agent-based model to study the effectiveness of tree-

removal on Huanglongbing (HLB) spread. Findings from 100 simulations show that tree removal and insecticide applications affect spread synergistically; 16.6 percent reduction compared to 14.3 percent using chemical control and 0.2 percent using tree removal. In a ten-year model, the synergistic effect would increase. She explained that DATOC's recommendation is to continue tree removal as long as insecticide applications continue in delimitation zones. Tree removal also affects public perception of the severity of HLB and California Department of Food and Agriculture's (CDFA's) response. She stated that the actual detected proportion of diseased trees in San Gabriel is two percent. She explained that the model includes cryptically diseased trees which are not typically detected by delimitation survey. Dr. Etienne Rabe asked if the model can predict the symptomatic and asymptomatic infection across Southern California. Holly explained that DATOC will bring that data back to the committee, but that the agent-based model runs on a smaller geographic scale. Dr. Neil McRoberts is working with Dr. Gilligan on the Cambridge model that can be run across a larger scale.

### **Ethyl Formate Update**

Etienne stated that the paperwork for Ethyl Formate will be submitted within two weeks to the United States Environmental Protection Agency, with a review timeline of 19 months.

### **Update on Area-wide IPM Demo Project for Asian Citrus Psyllid (ACP)**

Dr. Greg Simmons stated that he and Dr. Richard Stouthammer put together a two-year demonstration project funded by the HLB Multi-agency Coordination (MAC) to evaluate the impact on ACP populations of using augmentative natural enemy releases, area-wide ant control and urban pesticide buffer treatments. It began in September 2019 and will continue for 15 months. He intends to integrate these methods into the current ACP control zones and buffer treatment areas, to rear and release the *Diomus pumillo* beetle and to evaluate the potential of two commercially produced predator species. He noted that parasitism levels with ants in the system run at 5 to 16 percent, and parasitism rates are much higher if the ants are removed. He believes that ant control may be more effective than continuing to release natural enemies. The program is serving as the pilot for a virtual application to gather ACP biocontrol data.

Greg explained that the program tested 166 homes using biweekly releases of 20 of each predator and 25 *Tamarixia radiata* per tree in July and August 2019. There is monthly monitoring using one trap per ten trees, and tree-tap and shoot samples on one of every five trees. He stated that the program is attempting to use an area-wide boric acid-sugar ant treatment to control ants and increase the effectiveness of natural enemies. Ant bait stations were increased from one in ten trees to one in every five trees in January 2020. The program is studying flush on one in ten trees. He stated that they are doing biocontrol, ant treatments and no treatments on both sides of the 400-meter pesticide buffer. There is a difference in ACP populations between inner and outer buffer treatment areas, which he attributed to the Hemet Citrus Pest Control District and CDFA resuming buffer treatments. He has submitted another MAC proposal to sample ACP populations in buffer treatment areas and the HLB quarantine zone.

### **Options for New Organic Citrus Movement to Packing New Materials for Conventional Spray and Move**

Dr. Beth Grafton-Cardwell stated that bulk citrus movement between zones requires wet wash, mechanical cleaning or spraying the orchard with broad-spectrum pyrethroids or neonicotinoids. Moving fruit out of Zone 6 requires washing or two mitigations. She noted that Ethyl Formate will not help organic growers. Pre-harvest insecticides include two Neonicotinoids (Actara and Admire foliar), three Pyrethroids (Danitol, Mustang and Tombstone) and combinations thereof. Lannate was replaced by Sivanto and Fujimite as bee safe products that can be used during bloom. She explained that Fujimite has no aerial application and a three-day pre-harvest interval and Sivanto has no maximum residue limit established for China, New Zealand or Korea. She explained that Pyrethroids and Neonicotinoids last the longest while organic products last the shortest length of time. Organics struggle to reduce nymphs and adults even when two applications are applied. She stated that Dr. Qureshi's data from Florida supplemented her MAC grant data by ranking insecticide duration and reduction magnitude. She noted that organic growers have local packing, wet wash and grate systems available for bulk citrus movement.

### **Review Protocol for Moving Nursery Stock into CDFA-approved Structures in the HLB Quarantine**

Keith Okasaki stated that if a nursery is within five miles of an HLB detection, a hold is placed on the plants and the nursery will have the option to build a CDFA-approved insect resistant structure. The nursery stock moved into such a structure will need to have the following mitigations; a two-year hold placed on all nursery stock, inspected every 30 days and testing every six months. The nursery can also opt to destroy the stock. He stated that from October 2019 to March 2020, over 6,700 trees were voluntarily destroyed. He explained that there is no mechanism for replenishing nursery stock inventory in the CDFA approved insect resistant structures which will present an issue as the quarantine zone expands.

Keith Okasaki presented a proposal for nurseries to be able to receive new plants from an Animal and Plant Health Inspection Service-approved facility by clearing the two-year hold, selling all original nursery stock, giving 72-hour notice to CDFA, tagging each tree upon arrival and maintaining compliance. He explained that this will result in increased inventory within the HLB quarantine and continuity of supply as the quarantine expands but will require additional 30-day inspections. It was suggested that if there is no mechanism in place to sell stock, an underground mechanism will emerge. The Operations Subcommittee motioned to recommend the proposal to the full Citrus Pest and Disease Prevention Committee (CPDPC) for consideration.

### **Review Protocol for Planting Outdoor Grown Nursery Stock on Property when an HLB Quarantine is Established**

Keith Okasaki presented a proposal for nurseries to plant outdoor stock on site or adjacent if the area moved under an HLB quarantine. This can be facilitated by signing a hold notice for all plant parts except fruit and an HLB quarantine grower compliance agreement. He explained that this will result in fewer trees destroyed but will require

CDFA staff to conduct inspections to verify the planted trees conform to normal commercial grove practices. The Operations Subcommittee motioned to recommend the proposal to the full CPDPC for consideration.

### **Update on Proposal to Reduce HLB Delimitation and Treatment Areas**

Holly explained that reducing the HLB delimitation zone to 300 meters from 2012 to April 2019 would only have resulted in the program missing four *Candidatus Liberibacter asiaticus* (CLAs)-positive ACP; reducing the zone to 250 meters would result in eight missed CLAs-positive ACP. She noted these numbers may be an overestimation if the ACP were found by the risk-based survey. She estimated that the program would save \$20,980 on delimitation, treating, sampling and testing by reducing zone size to 300 meters and save \$29,220 by reducing zone size to 250 meters. Dr. Neil McRoberts added that reducing the size of the delimitation from 400 meters to 250 meters is over a 60 percent reduction in area. Brianna McGuire added that 97.5 percent of HLB-positive trees are found at 400 meters, 96 percent of trees at 300 meters and 95 percent of trees at 250 meters. The Science Subcommittee motioned to recommend the proposal to the full CPDPC for consideration.

### **Review HLB Quarantine Boundaries**

Keith Watkins stated that at the last Subcommittee meeting a working group was established to make recommendations on the quarantine boundaries. He added that organic fruit from high ACP population areas are moving into low ACP population areas, or from outside the quarantine zone into the quarantine with no treatment required.

Tom Mazzetti suggested that the Corona College Heights (CCH) packinghouse should be held to the same standard as other packinghouses in the donut hole. He noted that CCH can harvest fruit in the same area that Blue Banner harvests fruit, but CCH does not need to conduct any mitigations. Victoria Hornbaker explained that the current regulatory framework is based on a five square mile radius from HLB-positive tree detection and that the quarantine zone is only expanded with new detections.

### **ACP Control/Suppression Regional ACP Update**

Bob Atkins stated that the situation in San Joaquin Valley has remained the same. The Southern District is being treated with similar results, with most psyllid management areas reaching 90 percent treatment. He noted that David Gutierrez and Victoria Hornbaker have been working diligently with legal staff to comply with AB5 for grower liaison contracts, complicated by the San Diego County vacancy and the Statewide Coordinator contract ending in June 2020. He requested the Committee give clear direction to the grower liaisons on how much work to put in with the smallest growers. He will be attending a Pest Control District meeting in Imperial County.

### **Data Management Report**

Rick Dunn stated that he assisted CDFA staff with major reconfiguration of San Joaquin Valley trapper configurations due to Cooperative Agricultural Support Services (CASS) shortages. He has updated the citrus layer for San Diego, Imperial and Riverside Counties and Santa Barbara County is almost complete. He added the history of ACP

samples collected in 2019. It was determined that the number of ACP collected was not the sole factor of CLas-positive samples.

Rick looked to replace the NOMAD system used for the CASS grove trapping program. Los Angeles County is developing a trapping application called "CalTrap" and CDFA is collaborating on the project. All CDFA trapping programs will move to this format, with a launch date of August 2020 for desktop and early in 2021 for handheld application. Grove sampling will instead be handled by the Citrus Surveyor program. Victoria explained that housing all trapping data on one platform would make it easier to manipulate that data. Colleen Murphy noted that 90 percent of counties will use "CalTrap" for all trapping. She added that CDFA intends for the app to be expandable for the future. She stated that all costs are being paid through CDFA, except for purchasing the ipad devices and possibly future maintenance costs.

### **Closing**

The meeting was adjourned at 12:20 p.m. The next meeting will be held via webinar on June 3, 2020.