

**CALIFORNIA CITRUS PEST AND DISEASE PREVENTION PROGRAM  
OPERATIONS SUBCOMMITTEE MEETING**

Meeting Minutes  
Wednesday, February 10, 2016

**Opening:**

The regular meeting of the Operations Subcommittee was called to order at 10:10 a.m. on February 10, 2016 in Tulare, California by Subcommittee Chair Jim Gorden.

**Committee Members Present:**

Richard Bennett	Jim Gorden	Kevin Olsen
John Gless	Link Leavens*	

**Committee Members Absent:**

Scott Mabs	Kevin Severns
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**CRB Staff:**

Rick Dunn	Gary Schultz
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**Interested Parties:**

Erin Betts*	Luci Kumagai*	Greg Simmons*
Dan Dreyer	Magally Luque-Williams*	Brian Specht
Enrico Ferro*	Neil McRoberts	Debby Tanouye*
Tina Galindo*	Alex Muniz*	Dan Willey
Victoria Hornbaker	Curtis Pate*	Bob Zuckerman*
Umesh Korida*	Sylvie Robillard*	Sandra Zwaal*
John Krist*	Cressida Silvers*	

**\* Participated via telephone/WebEx**

**Opening Comments**

Subcommittee Chairman Jim Gorden welcomed staff and the members of the public participating in person and online. There was a quorum for the meeting.

**Approval of minutes**

Jim Gorden reviewed the minutes from the Operations Subcommittee meeting that took place on December 9, 2015. There were no corrections.

**Nursery Mitigations for Regional Quarantine**

Kevin Olsen discussed the outcome of a meeting on regional quarantines with key nursery representatives that was held on February 9, 2016. The Nursery representatives felt that fruit movement and nursery stock movement should be decoupled and analyzed independently with a

focus on the risk of moving ACP/HLB from one region to another. They felt that the area which presents the highest risk for moving ACP/HLB is Southern California, the lowest risk is associated with the areas free from ACP/HLB and all other areas (Bay area and the Central Valley) are medium risk. They noted the varying levels of risk for nursery stock movement under the CTV quarantine as a precedent for this decision.

The group agreed that:

- Production nurseries are a lower risk than retail nurseries due to the existing mitigations (isolation, screenhouses, inspections, treatments).
- Nursery stock from a screenhouse should continue to move with the current mitigations.
  - Pre-shipment inspections and treatment with a systemic insecticide.
  - The group recommended maintaining existing movement permits.
- Outdoor grown nursery stock may move to retail if:
  - It is from a non-quarantine area moving into a quarantine area or within a contiguous quarantine area with 30-day inspections and pre-shipment treatment with a systemic insecticide.
  - The group recommended maintaining existing movement permits.
  - The group understands that maintaining outdoor grown nursery stock carries a level of risk, noting that if HLB is found within 5-miles of outdoor grown nursery stock, then it is subject to hold and voluntary destruction (per quarantine guidelines).
- Retail nurseries should implement a program to maintain the shelf life of nursery stock (90-150 days, depending on efficacy of systemic insecticide used), with retreatment or destruction at the end of the protected period and limits on amount of nursery stock at an individual retail nursery (Something like Aaron's retail Nursery Protocol).
- Risk areas should be evaluated on an annual basis and the regulations should be amended if applicable.
- The map presented should be revised to include the potential regulatory area expansion.
- Everyone was in agreement that additional resources should be focused on regulatory enforcement.
  - USDA will not have the staff our resources for inspecting all production nurseries, so group recommends that the State contract with the Counties for nursery inspections.
  - The State will regulate bulk citrus movement.

### **Regional ACP Update**

A report was included in the meeting packet. Jim Gorden was concerned that the winter dormant treatments for the area wide management were going on too late to be effective. He felt that they should be targeted earlier to get efficacy. Victoria mentioned that CDFA has to conduct an environmental consultation prior to conducting activities and she also stated that there might be issues with limited numbers of CDFA applicators and contractors. Link mentioned that in Ventura there have been issues with weather delaying applications as well.

Victoria discussed the plan for developing a list of neglected and abandoned groves per county. The idea is that Bob or Victoria will make contact with the responsible party for each grove and

start a dialogue with them about why they need to remove the grove and will track their progress. She also mentioned the success that Roberta Willhite, San Bernardino County Ag Commissioner is having with the removal of a 350-acre abandoned grove.

### **Hacienda Heights and San Gabriel Risk-Based Survey**

Tina Galindo gave an update on the HLB risk-based survey. There have been 100 traps serviced in November, December and January. There were 97 traps with ACP in November, 85 traps with ACP in December, and 65 traps with ACP in January. In November there were 4,237 ACP collected, 635 ACP collected in December and 215 ACP collected in January. Treatment with Tempo only began on January 19, 2016 and ended on February 10, 2016. October 17, 2015. CDFA staff is currently finishing up cycle 1 which began on January 12, 2016.

In San Gabriel, 100 traps were serviced in November, December and January. There were 93 traps with ACP in November, 89 traps with ACP in December, and 79 traps with ACP in January. In November there were an estimated 4,091 ACP collected, 900 collected in December and 550 collected in January. Treatment with Tempo only began on January 11, 2016 and ended on January 29, 2016. CDFA staff began cycle 1 in San Gabriel on January 7, 2016. An additional 800 meter survey is being conducted around the new HLB positive trees in San Gabriel.

In La Puente, staff is conducting an 800 meter survey and collecting plant samples from all host plants, so far 448 properties have been surveyed with 254 plant samples and 241 ACP samples collected. There are 168 properties that do not have host plants. Treatment will be scheduled for the 800 meter area once the survey is complete.

### **California High Risk Survey**

Magally Luque-Williams reported that cycle 2 for 2015 is complete for all counties; staff are entering the data from the survey. Staff is waiting for Dr. Gottwald to provide the sites for cycle 1 of the 2016 risk-based survey.

### **Southern California Treatments**

Tina Galindo gave an update on the southern California urban treatments. In Ventura County, the areawide winter treatment (Tempo only) began February 1, 2016, there are 49 psyllid management areas (PMA) in Ventura and the treatments will move one area at a time. In Santa Barbara, areawide treatment (Tempo only) began on January 25, 2016. There are 13 PMA's in Santa Barbara. Staff are receiving a large number of opt-outs in Santa Barbara. In Riverside, the Coachella and Hemet areawide treatments began on February 8, 2016. In San Diego, Pauma and San Pasqual areawides are pending verification of meeting the 75 percent threshold for treated acreage. In Imperial, areawide treatment is due to begin on February 16, 2016. The treatments along the border with Mexico are pending completion of the environmental consultation.

### **Biocontrol Update**

Alex Muniz reported that 2015 has been the best year so far for Tamarixia production, with over 2 million Tamarixia being released last year. This represents all sources of Tamarixia, UCR, USDA, CDFA and Foothill Ag Resources. In January 2016 the program released 59,000 Tamarixia and 7,200 Diaphorencyrtus. The program is continuing to conduct field sampling at 29 locations to assess percent flush and ACP density and is collecting infested flush samples for

lab dissection to determine the stages ACP and to look at percent parasitism. It was noted that there are variations in collections of ACP and Tamarixia by area, with the inland area showing the best parasitism by area. It was noted that temperatures in the desert areas might be lethal to both Tamarixia and ACP. In all areas, the parasitism rates increased over the year and by the end of the year some areas had good parasitism rates.

Greg Simmons, USDA stated that he and Dr. Morgan are working on a release protocol that they will share at the March 9, 2016 CPDPC meeting.

### **Resampling Hacienda Heights CRB Transect Survey Sites**

Richard Bennett discussed the need to resample the CRB transect survey that was conducted several years ago using multiple early detection technologies (EDT). He stated that Dr. Phil Berger made the comment that PCR can't detect the bacteria for 6-14 months after a tree is infected and that is based on small nursery trees. Richard wants to see if the EDT's are faster than PCR and he is recommending that CDFG go back to the sites where 2 or more EDT's indicated a suspect HLB tree and intensively sample the trees. A map was shown that includes the results of the multiple EDT samples in the Hacienda Heights area as well as sites with inconclusive PCR results. The information from CRB and CDFG samples will be shared with Neil McRoberts so he can evaluate the situation and give direction to CDFG. Everyone felt that it would be a good idea to use the evaluation from Neil to inform the resample. Richard also wants the Bakersfield area resampled using EDT's. A second map was shown of Kern County, the EDT samples and PCR samples that are in the inconclusive range. Victoria will have them added to the list for resampling.

### **Sacramento Laboratory Activities**

Luci Kumagai reported there was one CLAs positive ACP sample. We had the sample genotyped and the bacterial genotype from that sample is similar to the Hacienda Heights genotype, but different and also different from the San Gabriel bacterial genotypes. There were 2 trees that tested positive for HLB in the San Gabriel cluster area, a kumquat that didn't have very good symptoms and an orange tree that had pretty good symptoms, both of those trees were sampled last year and were negative for CLAs. The total number of samples processed by the CDFG lab in 2015 was 25,897 plant samples and 80,105 ACP samples for a total of 107,002 samples. So far for 2016 the lab has processed 5,291 plant samples and 8,388 ACP samples. The total number of samples processed for HLB since 2008 is 100,427 plant samples and 196,381 ACP samples for a total of 296,808 samples (some ACP samples were analyzed by CRB). Approximately 1/3 of the samples were plant and 2/3 were ACP and a majority of the samples came from Los Angeles County.

### **CRB Laboratory Updates**

Cynthia provided a written document for review; it focused on the Progress of the Texas II field study

### **The PMA Triage concept**

Rick Dunn presented information from the PMA Triage Working Group. This is being done to look at the PMA's to determine if they have been correctly developed. Criteria used to draw up the PMA boundaries differ regionally. These different approaches reflect the philosophy of the

regions' ACP/HLB Task Force. For example, in the San Joaquin Valley, the PMAs were drawn in such a way that about 25 neighboring growers were grouped together with a maximum of 5,000 acres of groves included in each PMA. There, the emphasis was placed on developing a practical voluntary communication network. In contrast, in Ventura County, PMAs were drawn up with any number of neighboring growers grouped together with a maximum of 1,500 acres of groves included in each. The emphasis being optimized use of limited application infrastructure in that case. In San Bernardino, there are several PMA's that are just one grove. There are also some PMA's that have multiple groves that are all managed by the same entity. Some PMA's are very small acreage, as low as 5 acres.

Rick stated that they also looked at the cost of treating the buffer areas within ¼ mile of the commercial citrus groves. This treatment is contingent on voluntary participation in coordinated treatments by at least 75% of the commercial groves within the PMA. CDFA experience indicates that in areas where commercial citrus is grown, about 50% of residences have citrus trees planted in the landscape. Based on several factors, Rick was able to estimate the cost of treating a residential parcel from \$24 to \$54 per property to as high as \$112 per property treated by a contractor. Based on these numbers, the cost per commercial citrus acre of treating the residential buffer properties ranges from \$0 to >>\$3,000 per acre. The median is \$40 - \$140 per commercial citrus acre.

Rick also talked about the residential risk of HLB, using Dr. Tim Gottwald's residential and commercial risk models he determined that most commercial citrus looked to be in the higher risk areas. The predicted risk of HLB to commercial citrus is a factor that can be used to weight the economic threshold for programmed treatment of each PMA. Proximity to potential psyllid hotspots identified by David Bartels should also be considered as a risk indicator and the proximity of actual HLB detections and infective ACP detections to a PMA are another factor that can be used to further weight the need to treat a PMA buffer. The economic threshold may vary regionally based on crop value, grower participation and external considerations. Using the concept of triage we could define 3 groups of PMAs:

1. Hopeless cases where the cost or practicality of buffer treatment would be too high in comparison with the value of the citrus to justify treatment.
2. Ignorable cases which are at very low risk or have no residential neighbors
3. The majority of PMAs, those on which treat/no treat decisions would be made based on their ET.

All three of these categories need to be defined by set rational and transparent criteria. Subjective criteria like the economic threshold proposed above should only be used as guidelines in the ACP/HLB Task force decision making process.

The Subcommittee was very appreciative of the work that Rick and the working group did. Jim Gorden asked that the report be consolidated into a recommendation to the Subcommittee and CPDPC.

The meeting was adjourned at 12:30 p.m. The next meeting will be held on April 13, 2016 at 10:00 a.m. in Visalia, California.