

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

Meeting Minutes  
Wednesday, September 4, 2019

**Opening:**

The regular meeting of the Operations Subcommittee was called to order at 9:00 a.m. on September 4, 2019 by Chairman Keith Watkins.

**Subcommittee Members Present:**

Ted Grether*	Brian Specht*	Keith Watkins
Kevin Severns*		

**Subcommittee Members Absent:**

John Gless	Zac Green	Roger Smith
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**CDFA Staff:**

Jon Babineau*	Sara Khalid*	David Morgan*
Tina Galindo*	Luci Kumagai*	Keith Okasaki*
Craig Hanes	Magally Luque-Williams*	Nawal Sharma*
Victoria Hornbaker		

**Guests:**

Bob Atkins	Sara Garcia-Figuera	Ken Pellman*
Kevin Ball*	Dr. Beth Grafton-Cardwell*	Sylvie Robillard
Franco Bernardi	Leslie Leavens*	Robert Roma*
Jonathan Bixler*	Link Leavens*	Jason Sapp*
Teri Blaser	Jessica Leslie*	Cressida Silvers*
Melissa Cregan	Karen Lowerison*	Jason Schwartze*
Holly Deniston-Sheets	Neil McRoberts	Jack Williams*
Rick Dunn	Tracy Moehnke*	Judy Zaninovich*
Sean Farnum*	Curtis Pate*	Sandra Zwaal*

**\* Participated via Webinar**

Keith Watkins welcomed the Committee, staff, and members of the public participating in person and online. He stated that there wasn't a quorum for the meeting.

**STRATEGIC PRIORITY 1 – Find and Eradicate HLB**

**Laboratory Update**

Luci Kumagai stated that her lab received 5,411 plant samples, Citrus Research Board (CRB) received 1,714 Asian citrus psyllid (ACP) samples and the University of Arizona received 12 ACP samples in August, averaging 7,000 plant samples and 2,500 ACP samples per month. She explained that 75,823 combined plant and ACP samples were tested to date in 2019, which is 33,000 less than last year. She stated that as of August 28, 1,597 Huanglongbing (HLB)-positive trees have been detected and removed. This includes 403 HLB-positive trees from Los Angeles

County, 1,187 trees from Orange County and seven from Riverside County. She noted one *Candidatus Liberibacter asiaticus* (CLAs)-positive ACP sample was detected in Glendora in the HLB expansion zone caused by the Duarte detection. She explained that Montebello, Westminster, Santa Ana, Anaheim and Garden Grove are active areas for HLB detections.

Luci explained that the United States Department of Agriculture's (USDA) laboratory has analyzed 96 HLB positive samples from California and identified six genotype groupings. She explained that the criteria used was looking at tandem repeat numbers and different phages found in the strains. Type 1 is widely distributed in Los Angeles, Orange and Riverside County. Types 2-4 are more limited in distribution. Type 2 was found in Los Angeles County: San Gabriel, Rosemead and Temple City. Type 3 was found in Orange County: Garden Grove, Westminster, Orange and Tustin. Type 4 was found in Orange and Los Angeles Counties: La Habra and Whittier. Type 5 is unique to Cerritos and Type 6 is unique to Hacienda Heights. The La Habra isolate seems to match with the Florida, South Carolina, Texas and Puerto Rico strain, which is Type 4. The India isolate found in Riverside was a unique Type 3. The isolates from Alabama and Guam match with the Cerritos isolate. She noted that three cities have multiple types: Garden Grove and Westminster have Types 1 and 3, and Whittier has Types 1 and 4. She explained that California Department of Food and Agriculture (CDFA) will continue to send HLB positive plant samples to USDA for genotyping. She also noted that she has received isolates from a phytosanitary lab in Mexico and she has sent them to USDA for the genotyping study.

### **Risk Survey Update**

Magally Luque-Williams stated that the Cycle 2 survey for 2019 was completed in August except for Los Angeles County. This included 1,802 square miles and 87,295 properties, and gathering 15,956 ACP samples and 17,653 plant samples. Magally gave an update on the progress at on the HLB delimitation surveys, including Anaheim with 60 areas at 43 percent complete; Garden Grove with 30 areas at 26 percent complete; Westminster with nine areas at 29 percent complete; Santa Ana with 14 areas at 32 percent complete; Huntington Beach with five areas at 42 percent complete; Tustin with eight areas at 74 percent complete, Placentia with two areas at 17 percent complete, and the City of Orange with 17 areas at 80 percent complete. 1,145 properties surveyed were infected, with 1,597 HLB-infected trees and 263 CLAs-positive ACP. She stated that 990 quadrant samples were completed in August, with 5,954 quadrant samples completed year to date. The summer cycle of the HLB border survey is complete, with 265 sites surveyed over 38 square miles in Imperial County and 226 sites surveyed over 22 square miles in San Diego County.

### **HLB Detection and Tree Removal**

Tina Galindo stated that the San Gabriel delimitation survey is mostly done except for no contact properties. She stated that Pico Rivera core areas were being resurveyed, but that team is now in Whittier. Staff are working on a new Glendora find site, two and a half miles east of the Duarte find Tina stated that HLB retreatment is performed once per year and area wide treatments are performed twice per year at least. She explained that Compton, El Monte, Temple City, La Puente and the Norwalk and Yorba Linda retreatments are complete. Montebello is waiting on public meetings for the last expansion. Pico Rivera, Rosemead, Whittier and Fullerton retreatments are in progress. Area wide treatment has begun in Riverside, Santa Barbara, San Bernardino and Ventura. Area wide treatment in Hemet will begin in September.

## **STRATEGIC PRIORITY 2 – Control ACP Movement, Enforce Regulations**

### **Regulatory Activities Update**

Nawal Sharma stated that 143,861 bins were moved between ACP quarantine zones during the first six months of 2019. He noted that nine percent of bins were field cleaned, down from 37 percent last year, while 87 percent of bins were spray and harvest. Zone 2 moved the most bulk citrus, moving 27 percent of bins primarily to Zone 4; Zone 6 moved 22 percent of bins to Zones 4 and 5; and Zones 3 and 4 each moved 20 percent of bins primarily to Zone 2. He explained that 51,405 bins were moved to Zone 2's San Joaquin Valley, with San Luis Obispo moving 44 percent of bins and Ventura moving 34 percent of bins. 96 percent of grate-cleaned fruit was moved from Monterey to Ventura County. In 2018, 4,411 total inspections of growers, transporters and packers found 512 violations and 89 percent compliance. In 2019, 6,869 total inspections found 750 violations and approximately the same percentage of compliance. It was noted that 87 percent of violations occurred in Tulare County and that 99 percent of violations were tarping violations. It was noted that Tulare County adopted a three strikes policy prior to levying civil penalties against offenders.

### **Mitigation of Bulk Citrus into HLB Quarantine**

Nawal stated that currently the program only requires tarping as mitigation for shipping bulk citrus into Zone 6, which has the HLB quarantine area. Sara Garcia-Figuera stated that when the bulk citrus movement model was created, there was no data regarding volume of unmitigated fruit coming into the quarantine. She explained that the Data Analysis and Tactical Operations Center (DATOC) lab had nine individual risk models which were combined into the consensus risk matrix the Committee adopted in March 2019. At the time, the risk of movement into Zone 6 was seen as medium risk. She noted that the matrix contained two tables, to define the requirements for shipping within the same quarantine zone and to a different quarantine zone. One of these tables contained an inaccurate footnote. Victoria stated that it was impossible to track fruit without an ACP-free Declaration form. The footnote had to be changed to track that data. Sara stated that DATOC found there was only one packinghouse in Zone 6 and one packinghouse in Zone 5 just outside the Riverside HLB quarantine, with 589 bins shipped into Zone 6 in a one-year period from October 2017 to September 2018.

## **STRATEGIC PRIORITY 3 – ACP Control/Suppression**

### **Trapping and Treatment Updates**

Sara Khalid stated there were no new finds in San Joaquin Valley or the Central Coast since May, with the only recent finds in Santa Clara County and suspects in Placer County traps. Victoria recommended Colleen follow up on communication protocol.

### **Biocontrol Update**

David Morgan stated that CRB is currently at full *Tamarixia* production capacity after being delayed by the unusual spring, exceeding 6,000,000 for the year. David explained that 75 percent of current releases are still focused on HLB areas, with over two million releases concentrated in HLB areas. He noted that there were releases in Kern, Santa Clara, Tulare and Monterey Counties in August and plans to release in San Luis Obispo and Santa Barbara in September. He stated there have been 2,787,018 releases in 2019 with 15,457,382 releases since 2011. He explained that there is fewer ACP in urban areas, but a slight increase was recorded in July 2019.

## **Regional ACP Management**

Bob Atkins stated that cannabis operations in Santa Barbara County are using air to cool their plants which may draw in local pesticides. He stated that the F1K9 group scouted groves from three regions in Ventura County and grove owners are voluntarily removing trees where dogs sat. He suggested the program remind growers to get quantitative real-time polymerase chain reaction (qPCR) samples from the tree to corroborate the sit and to spray the area prior to removing trees, to ensure growers are mitigating the psyllids. He explained that Sandra Zwaal did outreach with small growers in San Bernardino. The MAC-funded biological control project in Hemet is working just outside the residential buffer. Greg Simmons and Richard Stouthammer are working with the Pest Control District (PCD) on *Tamarixia* releases and ant control. He stated pre-fall flush treatments are ongoing and will be evaluated shortly. Victoria explained that a lab can collect and test a sample from a grower or liaison, but a regulatory sample can only be collected by county or state personnel. She noted that dog alerts are not validated technology, and therefore it is inaccurate to call a dog alert tree an HLB-positive.

## **STRATEGIC PRIORITY 4 – Improve Data Technology, Analysis and Sharing**

### **DATOC Update**

Holly Deniston-Sheets stated that DATOC wants more data on where activity is occurring, more local input, and the differences between “hot” areas with infections and “cooler” areas where ACP has not been discovered. She explained that delimited section township ranges (STRs) get sampled intensively, so there is no need to resample them with the risk-based survey. STRs with delimited areas greater than ten percent will not be collected with the risk-based survey in 2019. Victoria noted that when an area is delimited it is surveyed at least once per year. She explained that any retreatment requires a resurvey. It was suggested that DATOC analyze the timeline, the extent of and the result of the survey. Holly stated that 25 percent of the 1,017 STRs sampled in 2019 as part of the risk-based survey are located in the “hot” areas of Los Angeles and Orange Counties and are in the highest category of risk. DATOC compared the STRs sampled in this “hot” area to 40 selected STRs in Ventura County. She suggested that canine teams might increase risk and change the number of STRs selected for the survey in these areas.

Dr. Neil McRoberts stated that there has been talk of reallocating resources to the core or elsewhere and firing up calculations for commercial risk-based surveys. He noted that there may be value in creating a hybrid of residential and commercial risk-based surveys. Victoria noted that CDFA requested the Gottwald commercial risk-based survey and intends to use it to inform the decision of what areas to survey in the citrus commodity survey. Holly noted that Dr. Bartels will be taking over the hot spot cluster analysis. It was suggested to compare positive and inconclusive numbers prior to use of the Ribonucleotide Reductase (RNR) primer with post-RNR primer tests and how that may color projections. Victoria noted that there was less than a 10 percent overlap because CDFA does not use sentinel locations and there are few inconclusives since switching to RNR. Neil stated that the risk-based survey is currently based on ACP numbers and local involvement can come into play after each STR has been modeled and risk levels allocated. Colleen noted that Google Earth Pro is a public-facing site, and suggested ArcGIS Online as a more secure alternative.

### **Data Management Report**

Rick Dunn stated that he is revising the statewide commercial citrus layer for San Diego and Ventura Counties, analyzing the possible utilization of unconfirmed psyllid collection data,

researching a hardware replacement for the aging NOMAD data collection system and mapping the Gottwald risk model. He explained that CRB placed many grove traps in 2009 but switched to area-wide sampling in Southern Counties in late 2013. Only those groves located in a PCD were trapped. He noted that 10 of the 15 trapped grids caught ACP between July 1 and August 8, 2019. Those traps can support regulatory action like treatment of the surrounding buffers. He explained that there are 1,650 sample grove sites with sentinel trees located in 112 one square mile grids. These sites are inspected twice per month in alternating cycles of odd and even numbered sites, with 660 sentinel trees inspected in 83 grids between July 1 and August 8, 2019. He stated that 709 suspected ACP were collected in alcohol during 186 of the 660 inspection events. These were found in 45 sample grids. He explained that the insects were sent to a lab for PCR analysis, but the pest and damage records do not identify the insects as ACP and cannot be used as regulatory evidence. The insects did not pass through a CDFA lab with a regulatory entomologist. Victoria explained that these areas are endemic with ACP. There are traps laid out for buffer treatments which are identified by an entomologist. Tina explained that CDFA traps are placed in the 400-meter buffer zones around groves in Ventura and Santa Barbara, and CRB grove trapping data is used elsewhere. Rick noted that traps were increased in Coachella Valley, Borrego Springs and Santa Barbara/Goleta, but found many groves inaccessible.

#### **CLOSING COMMENTS & ADJOURNMENT**

The meeting was adjourned at 12:17 p.m. The next Operations meeting will be held in Visalia, California on October 2, 2019 at 9:00 a.m.