

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

Meeting Minutes
Wednesday, December 11, 2019

Opening:

The regular meeting of the Operations Subcommittee was called to order at 9:00 a.m. on December 11, 2019 by Chairman Keith Watkins.

Subcommittee Members Present:

John Gless*	Roger Smith	Keith Watkins
Zac Green*		

Subcommittee Members Absent:

Kevin Severns

CDFA Staff:

Jonathan Babineau*	Gavin Iacono*	Magally Luque-Williams*
Cassandra Davis*	Sara Khalid*	Keith Okasaki*
Tina Galindo*	Lucita Kumagai*	Lea Pereira*
David Gutierrez	Jason Leathers*	Nawal Sharma*
Victoria Hornbaker		

Guests:

Bob Atkins*	Subhas Hajieri*	Curtis Pate*
Kevin Ball*	Tia Heu*	Sylvie Robillard
Jill Barnier*	Dr. Melinda Klein*	Lydia Rodriguez*
Teri Blaser*	Link Leavens*	Jason Schwartze*
Brad Carmen	Jessica Leslie	Cressida Silvers*
Holly Deniston-Sheets	Mark McBroom*	Judy Zaninovich
Rick Dunn	Dr. Neil McRoberts*	Sandra Zwaal*
Sara Garcia-Figuera	Tracy Moehnke*	

*** Participated via Webinar**

Keith Watkins welcomed the Subcommittee, staff, and members of the public participating in person and online.

STRATEGIC PRIORITY 1 – Find and Eradicate Huanglongbing (HLB)

Laboratory Update

Lucita Kumagai stated that during November 2019, the California Department of Food and Agriculture (CDFA), Citrus Research Board (CRB) and University of Arizona labs received 5,776 plant samples and 5,051 Asian citrus psyllid (ACP) samples. She noted that ACP sample numbers started increasing in October 2019. She stated that the combined total of plant and ACP samples year-to-date is 104,580 samples, and she expects 2019's total samples will be lower than 2018's 151,740 samples. Lucita explained that positive detections included 1,629 plant samples and 153

ACP samples from the HLB response survey and 115 ACP samples and 85 plant samples from the risk survey. She stated that 70 percent of the 1,240 positive sites were recorded in Orange County, 29 percent were in Los Angeles County, and less than one percent were in Riverside and San Bernardino. She stated that 70 percent of the 1,714 HLB-positive trees detected were in Orange County, 25 percent in Los Angeles County and five percent in Riverside and San Bernardino. She added that 71 percent of the 268 positive ACP samples detected were in Orange County and 28 percent in Los Angeles County. She explained that 34 percent of all samples were taken from Los Angeles County, 30 percent were from Orange County, 12 percent were from San Diego County, 6.6 percent were from Riverside, four percent were from San Bernardino County, 6.5 percent were from Imperial County and 1.4 percent were from Fresno County.

Lucita stated that a positive tree detection occurred in Montclair, 25 miles west of the 2017 San Bernardino County ACP positive site. She noted that this was the first positive tree detected in San Bernardino despite resurveys of the ACP site in San Bernardino by Pest Detection and Emergency Projects staff. She stated that there are no tree detections in Glendora. There have been ACP positive detections in Corona, both adults and nymphs, and Lucita is waiting on confirmation of a positive tree. Victoria stated that the Citrus Pest and Disease Prevention Division (CPDPD) will use CDFAs' abatement authority to remove the tree where the positive nymph sample was collected. Lucita explained that Orange County added two new areas in 2019, Huntington Beach and Placentia, with a new positive tree detected in Huntington Beach and three in Placentia. She stated that there are five new areas in Los Angeles County: Temple City, Montebello, El Monte, Compton and Alhambra. Riverside has one new area, Corona, and San Bernardino has one new area, Montclair. She noted that most positive finds are coming from Anaheim, Garden Grove, Santa Ana and Westminster, suggesting that there are still hot spots in those areas. She added that Montebello is the new hot spot for 2019.

Lucita presented graphs tracking infection rate per month that showed that September and December 2017, January, June and July 2018, and April, June and August 2019 all had a detection rate greater than one percent among samples taken. She stated that April 2019 had the highest rate of detections, at 1.93 percent. She added that 88 percent of the 163 trees detected that month came from Westminster and Montebello. She noted that four of those months with high rates of infection overlapped with months which were above the average for samples collected: December 2017, January and June 2018 and April 2019. Four of those high infection months were also below average for samples collected: September 2017, July 2018 and June and August 2019. She added that for July 2018 and June and August 2019, the sample size was small, but the percentage of samples collected from Los Angeles and Orange County was high: in July 2018, 76 percent of samples coming from those two counties; in June 2019, 71 percent came from those counties; and in August 2019, 78 percent came from those counties. She suggested that several factors contribute to infection rate: the number and rate of samples collected, where the samples come from, if that area is a hot spot, and the rate of quadrant sampling. It was noted that August 2017 was when quadrant sampling was adopted.

It was suggested that the Subcommittee needs an objective measure of the performance and consistency of the program. Victoria explained that there are two surveys: a delimitation survey which is a mandatory sampling of every host plant and psyllid within 400 meters of a detection site, and a risk survey which is an ongoing year-round state-wide survey with no requirement to

collect non-symptomatic plant samples. She stated that depending on the survey, the quantity of samples taken is not necessarily a good measure of program efficacy. She suggested that the delimitation survey may be a better demonstration of work due to staff visiting every site within 400 meters of find sites, unless the survey is an expansion. She noted that expansion finds near the edge of a core result in only the bump out area being surveyed. Magally Luque-Williams stated that the program has always been understaffed for survey work. She also noted that psyllid populations were down for at least three months. It was suggested that delimitation and risk-based surveys could be separated out to give a more objective measure of lab work. Victoria explained that Dr. Tim Gottwald recommended doing only visual survey and psyllid samples for his risk survey. Lucita noted that the lab has capacity for 11,000 samples per month due to more full-time lab staff and more sampling hoods. Jim Gorden suggested that the program's lab capacity outstrips field collection capacity, and the Subcommittee should discuss more systematic and effective ways to collect psyllids. Magally noted that psyllids are collected from all surveys. Victoria explained that when the CRB lab was reaccredited, the intent was for them to be able to run 100,000 samples per year; and she intends for them to run nursery plant samples. Dr. Neil McRoberts stated that the number of psyllid detections becomes independent of psyllid sample intensity once 7,000 to 8,000 samples per month is achieved. His preliminary look at the data suggests that 100,000 samples per year should be enough. Victoria recommended that Lucita, Magally, Jim and Roger Smith form a Working Group to investigate the surveys and collected samples. Tina Galindo noted that symptomology is not the best method, because many things can mimic HLB-positive symptomology.

Risk Survey Update

Magally stated that Cycle 1 for 2019 is in progress. This statewide resurvey includes 6,479 entomology samples and 4,619 plant samples collected from 27,763 residences across 17 counties. She stated that Madera, San Benito, Santa Barbara and Ventura Counties are complete, and estimated that all counties should be completed by the end of January 2020. She added that delimitation was on-going; Anaheim (70 areas) was 42 percent complete, Garden Grove (43 areas) was 26 percent complete, Westminster (19 areas) was 29 percent complete, Santa Ana (30 areas) was 32 percent complete and Tustin (11 areas) was 82 percent complete.

HLB Detection, Delimitation and Tree Removal

Los Angeles County

Tina stated that San Gabriel's new expansion is 88 percent complete and should be completed next week. She explained that there are two new HLB areas pending survey next week; El Monte 2, southeast of the original El Monte area, and Whittier 26, south of El Monte 2. She stated that three staff are working on the San Gabriel expansion, 12 surveyors are working on the high-risk survey and three staff are working on the CRB tissue sampling project and performing quadrant intensive sampling on new find sites and adjacent properties. She explained that 16 of the CRB tissue sampling project's 18 sites are completed. She added that her staff are also performing the same tissue sampling at the find sites.

Orange and Riverside Counties

Magally explained that the 400-meter delimitation in Placentia (four areas) was 41 percent complete, City of Orange (19 areas) was 83 percent complete, the new expansion in Montclair was 7 percent complete, Corona's first ACP find was 14 percent complete and the resurvey of San

Bernardino was 45 percent complete. She explained that there are 63 staff working on the risk-based survey: five staff in Kern, nine staff in Tulare, nine staff in Fresno, four staff in San Bernardino, six staff in Riverside, six staff in Orange including one working on quadrant sampling, 11 staff in San Diego including three working on the border survey, 12 staff in Los Angeles and one in Kings. She stated that there are 12 staff working on the delimitation survey: six in Orange County, three in Montclair and three in Corona. The Orange County staff include two staff in Santa Ana, two staff in Tustin, one in Placentia and one staff member working on tree removal. She summarized HLB detections to date as 1,230 total properties, 1,700 HLB-positive trees and 268 positive ACP. She stated that 124 quadrant samples were taken in November 2019. She explained that the HLB border survey's fall cycle in Imperial County's Calexico and Winterhaven was 79 percent, and San Diego County's Tecate, Potrero, San Ysidro and San Diego is 100 percent complete. She added that the winter cycle will begin next week.

STRATEGIC PRIORITY 2 – Control ACP movement and Enforce Regulations

Regulatory Activity Update

Nawal Sharma explained that starting this season, the system for tracking and reporting bulk citrus movements has been changed to allow more accurate reporting. County staff will collect data from the local growers and packing houses and submit that data to the local CDFA office, which will verify with the County Agricultural Commissioner (CAC) and send the data to headquarters. He explained that CDFA is more concerned with bulk citrus movement from high-pressure ACP areas to quarantine zones. He stated that 53,631 bins of citrus were shipped between ACP regional quarantine zones during September and October 2019. Zone 2 shipped 28.77 percent of bulk citrus movement, Zone 5 shipped 29 percent, Zone 4 shipped 22.85 percent and Zone 3 shipped 18.33 percent. He noted that 11.79 percent of bulk citrus bins were field cleaned, and 85.82 percent used spray and harvest. Nawal specified that 15,710 bins were moved to Zone 2, San Joaquin Valley, with 30 percent field cleaned and 70 percent disinfested by pre harvest sprays. He stated that Ventura County and Santa Barbara County combined made up 62.6 percent of bulk citrus moving into Zone 2, San Luis Obispo was 23.5 percent of the total of bulk citrus and Riverside was 12 percent. He suggested a study looking for the relationship between detections of psyllids and bulk citrus moved from high-risk areas. He explained that for the purposes of this study, field cleaned fruit are those cleaned using field cleaning machines, not the grate-cleaning method. Keith Okasaki explained that there are two growers in Monterey County shipping to Ventura County and two growers in San Luis Obispo County shipping to Tulare County, but these were not included because grate-cleaning is not a standard mitigation method and the San Luis Obispo growers are done for the season.

Nawal stated that the counties have been contracted for enforcement, with the counties reporting data to CDFA on a monthly basis. He stated that based on data gathered between January 1, 2018, and September 30, 2019, grower inspections stayed nearly the same, packer inspections and Notices of Proposed Action (NOPA) decreased, while transporter inspections and Notice of Violations (NOV) increased. He explained that these NOVs were tarping violations, with 86 percent of tarping violations reported by Tulare County and nine percent reported by Ventura County. He noted that Tulare County has issued fewer NOPAs in 2019 but still accounts for 94 percent of NOPAs issued with the remaining six percent issued by Ventura County.

Discuss Quarantine Logistics

Keith Okasaki explained that the 2012 Technical Working Group recommended a period of two years without an ACP find before a county would be allowed to transition out of an ACP quarantine. This same time frame has been suggested for moving from active regional quarantine zones into Quarantine Zone 1. Keith explained that Zone 1 regulations allow fruit to move freely if it is tarped, with no pre-harvest treatment or machine field cleaning required. Negative data from San Joaquin County and Kern County that met that two-year mark was sent to the United States Department of Agriculture (USDA) but these areas remain quarantined. He stated that CDFA sent a letter to USDA in October 2019 outlining the protocol, including CDFA's intensive trapping treatment, positive tree removal and quarantine activities as support material. He stated that Madera, San Benito, Merced, Yolo, Solano, Alameda, San Joaquin, Placer and Stanislaus Counties have all been ACP-free for over two years. He noted that quarantine zones could be assigned differently if counties began transitioning back to Zone 1.

Victoria explained that USDA has not allowed a county to move out of a quarantine zone once the zone is established. She hopes this negative data will lead to a change in USDA policy. She stated that the argument is that transitioning counties back to Zone 1 gives them more protection from ACP. She noted that USDA has suggested that they can quarantine the whole state of California which would allow more intrastate movement of bulk citrus and nursery stock. She explained that quarantining the state would primarily impact nurseries and bulk citrus to a lesser extent, and it would allow any state not quarantined for non-HLB diseases like canker and black spot to move fruit into California. Keith explained that in process of transferring counties to Zone 1, CDFA would send letters to all entities in the new Zone 1 counties, approximately 180 growers and 13 nurseries, to cancel their existing compliance agreements. This would not impact the normal flow of citrus and nursery stock, but outdoor grown nursery stock would no longer be eligible for shipment into the new Zone 1 counties from counties outside of Zone 1.

STRATEGIC PRIORITY 3 – ACP Control/Suppression

Trapping and Treatment Updates

Southern California

Tina stated that HLB treatment is in progress in Los Angeles and Orange Counties. Treatments in Anaheim, Orange, Santa Ana, Tustin, the Cerritos retreatment, the La Puente retreatment and Glendora are complete. She added that the Hacienda Heights retreatment is almost completed, and the San Gabriel retreatment is in progress. She stated that meetings are pending for San Gabriel, El Monte, Tustin, Orange, Placentia, Whittier, Montclair, Corona, and the San Bernardino, Duarte and Lakewood retreatments. She explained that the San Bernardino County winter area-wide treatment has begun and will be completed by the end of December 2019, and Ventura County and Santa Barbara County area-wide have begun this week. She stated that meetings are pending for Coachella, Hemet, University of California Riverside and San Diego. Notices of Treatment (NOTs) for Imperial County have been sent out and grove area-wide can begin next week. She expects to finish the winter round of treatments within the allotted window. She added that refusals have been increasing and she has reached out to Nuffer Smith Tucker for assistance with the San Bernardino area.

Central Valley and Northern California

Victoria noted that Monterey County had the biggest finds in 2019, with reoccurring finds in Tulare County and at a trailer park in Santa Clara County. It was stated that in a discreet location like the Santa Clara trailer park the whole park can be treated without as much difficulty as backyard plants. Victoria stated that the biocontrol approval protocol for non-generally infested areas like Santa Clara is for Victoria and Bob Atkins to interface with Dr. David Morgan and the CAC and have either Dr. Morgan's staff or county staff release *Tamarixia radiata*. Releases have occurred in Kings County, Kern County and Tulare County.

She explained that CPDPD and county staff are asking residents to comply with voluntary treatments. She stated that 41 properties were treated in Soledad in November at a trailer park that was a potential repeat infestation. Nine properties in Coalinga were treated and there was one find site in Bakersfield. She noted that there are no other with hosts in the 50-meter Bakersfield treatment area.

Biocontrol Update

Victoria stated that CRB is performing well with field cage *Tamarixia* production. She explained that agent releases are focused around borders, HLB quarantine areas, newly established ACP areas and trade routes. She stated that 16,925,208 agents have been released to date since 2011. 4,254,844 agents were released in 2019, including agents provided to Arizona and Mexico, exceeding CDFA's goal of four million insect releases in 2019. She added that *Tamarixia* cost approximately \$0.27 per insect. Dr. McRoberts noted that the HLB Multi-Agency Coordination group (MAC) project scouts discovered that ACP numbers are down generally, but that there are sites with high numbers of ACP.

Regional ACP Management

Bob Atkins stated that ACP finds in 2019 are consistent with past finds. He explained that fall flush treatments have come in and winter treatments have begun or will begin treatments soon. He noted that a San Diego tribal ranch has not completely moved into tribal status so the local Pest Control District (PCD) will be sending them a notice of assessment to encourage them to remove unproductive or dead trees and treat the remaining acreage. This will allow the area to reach the 90 percent area-wide treatment. He noted that counties have been acting on neglected or abandoned groves in San Diego, Ventura and Riverside Counties, as well as the PCD in Coachella. He stated that he has been working with Orange County and found one piece of land with 800 trees in the mandatory treatment area in south Tustin and Alan Washburn found another area east of Yorba Linda. He has been working with Jeff Croy's staff to treat or remove trees in commercial groves and 25-plus tree groves. He added that San Diego County, Nawal and Mike Hennessey held a meeting with nursery citrus growers.

STRATEGIC PRIORITY 4 – Improve Data Technology, Analysis and Sharing

Data Analysis and Tactical Operations Center (DATOC) Update

Holly Deniston-Sheets stated that Sara Garcia-Figuera has been working with a team from Florida on a new model, that will be used to analyze the program's activities in essential areas, particularly as it relates to tree removal in San Gabriel. She added that Sara has been looking at area-wide participation levels with Dr. Beth Grafton-Cardwell and they will be proposing a protocol for new buffer treatments based on average audience participation at the January 15 full Committee

meeting. The new method is expected to make it easier to plan treatments and cut costs. She stated that DATOC is scheduling another meeting for late January 2020 to review tracking and sampling data on ACP populations in California.

CLOSING COMMENTS & ADJOURNMENT

It was noted that there are only 19 nurseries in California, compared to 200 nurseries in Tulare County alone two generations ago, due to regulatory changes including those associated with ACP.

The meeting was adjourned at 11:09 a.m. The next Operations meeting will be held in Visalia, California on January 8, 2020 at 9:00 a.m.