CALIFORNIA CITRUS PEST AND DISEASE PREVENTION PROGRAM OPERATIONS SUBCOMMITTEE MEETING

Meeting Minutes Wednesday, October 2, 2019

Opening:

The regular meeting of the Operations Subcommittee was called to order at 9:00 a.m. on October 2, 2019 by Chairman Keith Watkins.

Subcommittee Members Present:		
John Gless*	Zac Greene	Keith Watkins
Subcommittee Members Absent:		
Ted Grether	Roger Smith	Kevin Severns
CDFA Staff:		
Jon Babineau*	Gavin Iacono*	David Morgan*
Cassandra Davis	Sara Khalid	Keith Okasaki*
Tina Galindo*	Lucita Kumagai*	Lea Pereira*
Craig Hanes	Magally Luque-Williams*	Nawal Sharma*
Victoria Hornbaker		
Guests:		
Dov Adler*	Leslie Leavens*	Curtis Pate*
Bob Atkins	Link Leavens*	Sylvie Robillard
Franco Bernardi	Jessica Leslie*	Cressida Silvers*
Teri Blaser	Marcy Martin	Jack Williams*
Sara Garcia-Figuera	Mark McBroom	Helene Wright
Holly Deniston-Sheets	Neil McRoberts	Judy Zaninovich
Rick Dunn	Tracy Moehnke	Sandra Zwaal*
		Saliula Zwaal
Melinda Klein		
* Particinated via Wahinar		

* Participated via Webinar

Craig Hanes welcomed the Subcommittee, staff, and members of the public participating in person and online.

Citrus Staffing Update

Craig stated that due to the Budget Change Proposal, the Citrus Program became the Citrus Division as of July 1 and is in the process of filling vacant positions from the top down This includes Victoria Hornbaker as director, a branch chief by mid-October, three program managers one each in Sacramento, Fresno and Cerritos by the end of October, three senior supervisors working under each program manager by mid-November, and down the organization chart to field staff. At the same time Pest Detection/Emergency Projects Branch (PD/EP) has also been hiring field staff for Citrus Division positions. Tina Galindo noted that there are currently 23 True Green

trucks under contract for Asian citrus psyllid (ACP) treatments, with numbers fluctuating depending on need.

STRATEGIC PRIORITY 1 – Find and Eradicate HLB Laboratory Update

Lucita Kumagai stated that 4,600 plant and 2,200 ACP samples have been received for the month. The lab has received 61,061 plant samples and 22,000 ACP samples year-to-date. She noted that sample numbers are lower compared to 2018. She stated that 1,645 Huanglongbing (HLB)-positive trees have been detected and removed to date; 422 from Los Angeles County, 1,216 from Orange County and seven from Riverside County. She noted that additional trees have been removed voluntarily at the request of homeowners. She stated that Orange County contains 76 percent of detected HLB-positive trees, with Anaheim, Garden Grove, Santa Ana, and Westminster having the largest number of positive tree detections. HLB positive trees in Huntington Beach, Placentia, La Puente, Temple City, Montebello, El Monte and Compton were all first detected in 2019. She explained that her lab will begin working with Subhas Hajeri at the Tristeza lab this month on a two-year longitudinal study to evaluate *Candidatus* Liberibacter asiaticus (*C*Las) titers in different tissue types, as well as evaluating trees throughout the year to determine seasonality in HLB detection. She stated that the lab will begin monthly testing on ACP and plants at the biological control facilities at California Polytechnic State University and Mount Rubidoux.

Risk Survey Update

Magally Luque-Williams stated that Cycle 2 for 2018 was completed in August 2019 (with the exception of Los Angeles). 89,479 properties were surveyed with 16,637 ACP samples and 17,937 plant samples collected. Cycle 1 for 2019 has begun, with 17 counties to be surveyed. She explained that her teams have surveyed 101 square miles including 4,147 properties and have collected 727 ACP samples and 652 plant samples. She stated that the HLB delimitation survey includes 69 expansion areas in Anaheim that are 43 percent complete, 43 expansion areas in Garden Grove that are 26 percent complete, 19 expansion areas in Westminster that are 29 percent complete, 27 expansion areas in Santa Ana that are 32 complete, five expansion areas in Huntington Beach that are 42 percent complete, eight expansion areas in Tustin that are 79 percent complete, two expansion areas in Placentia that are 17 percent complete and 11 expansion areas in the City of Orange that are 84 percent complete. She noted that the survey refusal rate is approximately 0.4 to 0.5 percent. She stated that 1,181 properties, 1,645 HLB-positive trees and 264 *C*Las-positive ACP have been detected to date.

Magally explained that three delimitation survey staff are working in the City of Orange and two in Tustin. 58 statewide high-risk survey staff are working in Kern, Tulare, Fresno, San Bernardino, Riverside, Orange, San Diego, Los Angeles and Ventura, with one staff member in Orange performing quadrant sampling and three staff in San Diego performing border survey. Magally stated that the program's ideal staff would be 80 to 100 staff on high-risk survey and 40 staff on delimitation survey. High-risk survey staff can be sent to help the delimitation survey as needed. She stated that her surveyors performed quadrant sampling on 246 trees in September, with a year-to-date total of 6,200 quadrant samples. Luci noted that 37 percent of HLB-positive tree finds were discovered using quadrant sampling. The fall cycle of the HLB border survey has started in San Diego County. Magally's staff have surveyed five grids of 22 in Tecate, Potrero, San Ysidro and San Diego and have collected eight ACP samples and 32 plant samples. She noted that the contract

for the Imperial HLB border survey will begin soon. She stated that previous San Bernardino delimitation area will be resurveyed.

HLB Detection and Tree Removal

Tina Galindo stated that delimitation survey staff are working in the new Glendora area with 71 percent of sites complete, the recent expansion La Puente 4 with 98 percent complete and expansions in Montebello with 94 percent complete. Her survey staff discontinued the Whittier resurvey. She noted that the San Gabriel resurvey was complete but that there were78 no-contacts and refusals, additionally, a tree was found during re-survey that expanded San Gabriel. Tina stated that HLB treatments in Fullerton, La Puente, Placentia, Yorba Linda and the Rosemead retreatment are complete, with La Habra complete, barring pending Saturday visits for no contact properties. Staff are performing HLB treatments in Garden Grove, and Pico Rivera. The Whittier retreatments are on hold pending blocks hitting the merit anniversary date. She noted that area wide treatment is being performed in San Bernardino, the Hemet area of Riverside, Ventura and in San Pasqual. University of California Riverside and Santa Barbara treatments are complete. Preparations are underway for the winter round of area wide treatment.

STRATEGIC PRIORITY 2 – Control ACP Movement, Enforce Regulations Regulatory Activities Update

Nawal Sharma stated that the California Department of Food and Agriculture (CDFA) has cooperative agreements with counties to enforce regulations and record bulk citrus movement. There were inconsistencies in the county records, with inaccurate, incomplete or late data provided. He explained that CDFA is offering county staff their assistance in recording citrus movement at packinghouses in Zones 2, 4 and 5 and sending it to CDFA's Sacramento office. He noted Tulare County was very positive about the grate-cleaning project.

ACP/HLB Cooperative Program, Baja California

Cesar Paredes from USDA-APHIS International Services explained that a Memorandum of Understanding (MOU) is required to work in Mexico. The initial MOU in 2009 involved detection and reaction while the current MOU is revised for a strategy of HLB survey. He noted that the original MOU expired in 2014 and the program worked without an MOU for four years. He explained that under the initial MOU the program worked 100 miles into Mexico, but the program is currently working in the urban cities along the Mexico border. He stated that the goal is to work with CDFA to treat a two-mile buffer along both sides of the border blocks using biocontrol releases of 9,000 *Tamarixia radiata* per week until December 2019, HLB surveys around homes and nurseries, and yellow panel traps. On the Mexico side, that includes 19,142 homes and 7,424 city. Mexico requested the program to look for other diseases such as necrosis and black spot. He noted that Mexico also did not allow synthetic insecticides to be used in the new MOU.

He stated that the current MOU allows surveys and plant samples, unlike the initial MOU that only allowed ACP samples. ACP adult and nymph samples go to the United States Department of Agriculture lab and the plant samples go to the Mexico lab in Mexico City. He stated that the program discovered *C*Las-positive ACP in Tijuana, this included a total of three ACP found on one site. 623 samples were taken year-to-date, with a total of 3,087 ACP and 2,634 nymphs. A total of 2,238 samples were taken since 2009 including sampling of 15,521 ACP and 2,634

nymphs. He confirmed that three HLB sites have been found. Three trees were removed at a plantation in Ensenada, 200 trees were removed at a two-acre grove in Mexicali and *C*Las-positive ACP was found in Tijuana. He explained that the program is waiting for the lab result but that the Tijuana tree will be removed. He explained that when an *C*Las-infected ACP is found, the program surveys within one square mile for infected adults, nymphs and plant tissue showing symptoms. He explained that the program completed an 800-meter treatment at the Tijuana find site, treating 1,072 citrus trees in 76 private residences and leaving 190 citrus trees untreated. The plant samples have found no symptoms of HLB positive trees, but the root sample is still in progress. He explained that lemons, limes, oranges and grapefruit are the usual examples of citrus. The program has 17 staff members.

STRATEGIC PRIORITY 3 – ACP Control/Suppression Trapping and Treatment Updates

Cassandra stated that the program is considering flush-centered sampling and collection of nymphs. She stated that Monterey County finds have expanded. ACP have been found beyond the initial trailer park in Soledad. She added that there have been a few finds in Santa Clara County, and that there have been fewer finds in Central Valley than in previous years. She stated that county traps found a psyllid on a previous Soledad find site. Victoria suggested this is either a remaining low-level psyllid infestation or a re-introduction from a mobile home park's transient population. The time between treatment and finding the new psyllid was seven months. Cassandra stated that 17 find sites are in the mobile home park and four sites were found in town within the 400-meter delimitation survey area. All find sites and 30 adjacent properties have been treated. She noted that all Soledad finds except one have been survey finds. Cassandra explained that the Program is scheduling a public meeting and another 400-meter treatment of Tempo foliar. She stated that there is a total of 456 properties in the various 400-meter survey areas, with 31 properties left to survey. 27 of these properties are no contacts. Victoria noted that the nearby growers use field cleaning and suggested that Bob Atkins recommend to the growers that they use dual organic sprays. Cassandra noted that the response to a single ACP find is treatment on adjacent properties out to 50 meters.

Biocontrol Update

David Morgan stated that the Biocontrol Program released over 600,000 agents in September, up from 450,000 released last year. They have released 3,500,000 biocontrol agents year to date and 16,000,000 since the start of the program. He stated that 67 percent of agents are released around HLB find sites, and releases along the border have increased from nine percent to 12 percent. He explained that the program will be releasing agents in the residential areas around the Soledad treatment area in October. The program has been providing insects for releases in Arizona and Mexico and for researchers such as sniffer dogs. He stated that the BSL-3 lab opened at the end of September. He noted that the lab is still organizing their infected ACP colonies, and his program can provide them with clean ACP under permit. He explained that the Biocontrol Program's ACP production is a closed system, and the program has updated its HLB testing protocol to ensure cleanliness. Under the revised program, they will test 30 plants and 225 insects each month at the Meadowview lab and at the Citrus Research Board's (CRB) Dimitmen lab.

Regional ACP Management

Bob Atkins stated that fall treatments are all nearly completed. Imperial and San Diego County are reviewing the 25 or more properties in their counties to coordinate treatments. He suggested that commerce from Mexico into San Diego and Imperial County could influence risk and could affect the risk-based survey. He stated that Dr. Tim Gottwald received and will continue to receive latitude-longitude coordinates for Section Township Range (STR) centers in San Diego County.

STRATEGIC PRIORITY 4 – Improve Data Technology, Analysis and Sharing DATOC Update

Holly Deniston-Sheets stated that the Data Analysis and Tactical Operations Center (DATOC) is evaluating the effectiveness of program activities in Southern California residential areas. She stated that an expert panel met in Denver during September 2019. The panel decided that DATOC cannot use the presence or absence of infected trees in Southern California to measure success. She explained that DATOC is considering switching focus from infected trees to psyllids, though there are still benefits to identifying infected trees. She stated that DATOC will evaluate program activities, including applying Dr. Gottwald's agent-based model to San Gabriel and comparing it to data from 2015. DATOC will collate its data by Spring 2020. Victoria noted that HLB is a federally actionable pathogen. DATOC is working on an analysis of Dr. Beth Grafton-Cardwell's collected data combined with existing ACP data in California. She noted that analysis is in progress, but preliminary data supports anecdotes of lower ACP numbers. Victoria explained that the program has not detected many *C*Las-positive psyllids and suggested a year-by-year comparison. Holly noted that Dr. Bartels has studied ACP in Texas and can compare it to California year-by-year. She explained that DATOC is developing best practices for deploying canine teams in California.

Data Management Report

Rick Dunn stated that he is assisting the San Joaquin Valley Task Force and working on the Statewide Commercial Citrus Layer. San Diego and Ventura County layers are under revision, with Ventura nearing completion. He stated that he is researching hardware and software to replace the aging NOMAD data collection system. He noted that suspect insects were collected for PCR testing but were not confirmed as ACP at the CDFA lab, so they cannot be used for supporting areawide buffer treatments. He explained that he created the Static Point Layer and interactive maps for these unconfirmed insect collections. Victoria noted that unconfirmed ACP are a result shifting to collecting live psyllids for CLas analysis and sending those ACP directly to University of Arizona or the CRB Lab. If a psyllid is found to be infected, CDFA would return to the site, sample the tree and survey a 400-meter delimitation. She explained that if a nymph is found to be carrying CLas, CDFA can perform a nuisance abatement against that tree.

Victoria stated that CDFA's Plant Data Analysis Services uses Geographic Information System mapping, but some PD/EP mappers use a different system and as the Citrus Division grows, citrus mapping duties will be transferred to the new unit. She noted that CDFA's mapping data is still based on paper maps.

CLOSING COMMENTS & ADJOURNMENT

The meeting was adjourned at 11:57 p.m. The next Operations meeting will be held in Visalia, California on November 6, 2019 at 9:00 a.m.