CALIFORNIA CITRUS PEST AND DISEASE PREVENTION PROGRAM
OPERATIONS SUBCOMMITTEE MEETING

Meeting Minutes
Wednesday, August 8, 2018

Opening:
The regular meeting of the Operations Subcommittee was called to order at 9:00 a.m. on August 8, 2018 in Visalia, California by Chairman Keith Watkins.

Committee Members Present:

John Gless*	Ted Grether*	Roger Smith
Zac Green	Link Leavens*	Keith Watkins

Committee Members Absent:
Kevin Severns

CDFA Staff:

Jonathan Babineau	Tina Galindo*	Cheol Min Lee*	Nawal Sharma*
Cassandra Davis	Victoria Hornbaker	Magally Luque-Williams*	Bob Wynn*
Sean Farnum*	Matthew Lai*	David Morgan*	

CRB Staff:

Rick Dunn	Holly Deniston-Sheets	Carolina Evangelo

Guests:

Bob Atkins	Beth Grafton-Cardwell	Mark McBroom*	Sylvie Robillard
Erin Betts*	Alyssa Houtby	Edwin Moscoso	Cressida Silvers*
Teri Blaser	Leslie Leavens*	Tracy Moehnke*	Judy Zaninovich
Jim Gorden	Karen Lowerison	Curtis Pate*	Sandra Zwaal*

* Participated via Webinar

Opening Comments:
Keith Watkins welcomed the Committee, staff, and members of the public participating in person and online. He stated that there was a quorum for the meeting.

Public Comments:
No public comments.

STRATEGIC PRIORITY 1 - Find and Eradicate HLB

Laboratory Update
Victoria Hornbaker reported that 11,223 samples had been processed in the month of July, with 5,992 of those being plant samples analyzed for HLB. She explained that additional samples were distributed to other labs, Citrus Research Board (CRB) receiving 4,486 and University of Arizona receiving 745 samples. Total samples for the year to that point were 95,290. Victoria noted that

140,561 plant and ACP samples were tested last year, while as of July 2018, CDFA and related labs tested 95,290 samples, on track to meet or exceed the numbers from 2017. She explained that in Orange County, Garden Grove shows the highest number of HLB positive trees detected, followed by Anaheim. She noted that in the Los Angeles County area Whittier and Pico Rivera have surpassed San Gabriel in number of trees detected and removed.

Risk Survey Update
Magally Luque-Williams stated that the risk-based survey was in cycle 1 of 2018. She explained that surveys in Fresno County were 47 percent complete, Kern County was 33 percent complete, Merced County was 75 percent complete, Placer County was 41 percent complete, Sacramento County was 30 percent complete, San Joaquin County was 3 percent complete, and Stanislaus was 50 percent complete, all counties with no ACP found. Imperial County surveys were completed, Los Angeles County was 13 percent complete, Orange County was 44 percent, Riverside County was 45 percent complete, San Bernardino County was 29 percent complete, San Diego County was 28 percent complete, and Ventura County was 43 percent complete, all counties with ACP found.

Magally stated that the surveys should be complete by October except for Los Angeles, which will take longer. She mentioned that the data collected in the survey will be provided to Dr. Gottwald who will use the data to create cycle 2. It was noted that ACP samples were being collected in some counties that were not on the survey list such as Santa Barbara, using sentinel trees sampled twice a year. It was explained that trap density varied; some urban areas such as Monterey contain 5 detection traps per square mile, while urban areas like Tulare contain 16 traps per square mile. Commercial groves often contain up to 50 traps per square mile. Detection and grove traps are placed and collected by different groups.

Magally stated that CDFA was doing quadrant sample in Orange County and LA County in sites adjacent to find sites as well as all trees remaining in find site locations. She noted that this type of sampling was labor intensive but valuable. 1,395 quadrant samples were taken in July 2018, which is significantly higher than previous months. Magally stated that the teams were still performing delimitation but were short workers in Santa Ana and Garden Grove. Victoria noted that survey teams were transitioning away from CASS by the end of the fiscal year, and that not all CASS surveyors reapplied to work seasonally.

HLB Detection and Removal
Tina Galindo gave an update on HLB detections in LA County. Surveys are complete in Norwalk, with surveys ongoing in Pico Rivera, Rosemead and Whittier. Tina noted that ten new positive trees had been found in Whittier and two in Pico Rivera.

Victoria noted that the labs could not currently test the flush, because there isn't a protocol for testing flush. Victoria made a note to check with United States Department of Agriculture (USDA) to see if they are working on a protocol to test nymphs and flush together.

Tina Galindo stated that her team is currently working with Magally to re-treat Orange County and an expansion in Pico Rivera. She stated that there are meetings coming up to look at re-treating La Habra and San Gabriel. There are no area wide treatments currently planned. Tina explained that her team is getting a trickle of requests from the labs to sample properties with inconclusive test results.

Victoria noted that Luci is working with USDA to help validate a newer, more specific primer, RNR, which will help reduce inconclusive results.

STRATEGIC PRIORITY 2 - Control ACP movement and Enforce Regulations

Regulatory Activity Update
Nawal Sharma provided an update on regulatory activity. He noted that the number of signed compliance agreements have been increasing each month. Inspections, Notices of Violation and Notices of Pending Action issued are also increasing. Nawal noted that almost all growers, packing houses, and transporters should be compliant as of July 31, 2018. He specified packing houses as being very helpful in ensuring grower participation.

Nawal stated that 61 percent of all commercial growers are located in the Central Valley (zone 2), followed by 25 percent of growers in the south (zone 5) and 12 percent in Ventura (zone 4). He suggested using this information to allocate resources appropriately. Nawal explained that bulk citrus movements were not accounted for in his chart; he noted that zone 4 moved double the amount of bulk citrus into zone 2 as zone 5 did, despite having only half as many growers.

Nawal noted that more focus is being put to transporters and packing houses, rather than growers. Transporter and packer inspections increased 300 percent from June to July 2018 compared to the increase from May to June 2018. It was asked if CDFA had any plans to find noncompliant or illicit citrus movement. Nawal explained that over the last two years, CDFA stationed CHP blitzes along all major traffic corridors into zone 2 and found nothing. Nawal noted he would not suggest another similar blitz in the future.

Nawal gave a summary of field cleaning. He showed that field cleaning machines almost exclusively averaged 0-10 leaves per bin, while hand cleaning showed a much wider variability. Some growers still averaged 0-10 leaves, while others showed more than 150 leaves per bin. Though Nawal noted that there is no standard protocol for acceptable leaf numbers and therefore there is no violation for having an excess of leaves, 0-10 is the generally acceptable range and 40 or more is considered poor cleaning.

> **Motion:** Recommend to the full committee to eliminate the hand cleaning method when moving between quarantine zones.
> First: Roger Smith
> Second: Zac Green
> Motion passes: 4 yays (Zac Green, Roger Smith, John Gless, Keith Watkins) and 2 nays (Ted Grether, Link Leavens) and 1 abstain (Kevin Severns)

It was suggested that the Committee educate picking crews rather than eliminating hand cleaning as an option, possibly by having the more skillful grower crews educate the others. Other options are to regulate the hand cleaning method or to not move between zones.

STRATEGIC PRIORITY 3 - ACP Control/Suppression

Trapping and Treatment Updates

2017-2018 Finds
Cassandra Davis stated that there are two new ACP finds, one located in a tree in Kern County and one at a packing house in Tulare County. She noted that the find in Tulare was a regulatory find, from a trap on the front of a building.

Cassandra noted that Nipomo treatments were completed. She explained that two refusal properties had host trees, and CDFA worked together with the county to gain access. She noted that the upper find in Nipomo was beyond the usual 50-meter radius treatment area and would not have been discovered if the team had not surveyed beyond the treatment area.

> **Motion:** Recommend to the full committee to revise the response protocol when ACP with breeding populations are detected, to extend ACP eradication area from 50 meters to 400 meters.
> First: Zac Green
> Second: Roger Smith
> Motion passes: The motion passed unanimously.

Cassandra stated that a public meeting with the 41 treatment properties in the area around the Kern County find was scheduled for August 9, 2018, and treatment was scheduled to begin on August 13, 2018.

Biocontrol Updates
David Morgan stated that since inception the biocontrol program has released over ten million insects, and in 2018 have release 1.5 million. He noted that agent release numbers increase each year. He noted that the Foothill Agricultural Research contract expired and UCR insects are used primarily for production, but CRB is beginning their field cage production. He noted Cal Poly Pomona is producing much more in 2018 compared to 2017, while *D. aligarhensis* production was discontinued due to price and poor recapture rate. David stated that a colony was sent to Brazil if it is decided to use *D. aligarhensis* again later.

David explained that 75 percent of biocontrol releases focused on the HLB areas in Los Angeles and Orange County. Agents were released into Bakersfield townships such as Arvin, Mettler, and Buttonwillow, as well as Nipomo and a preventative release in Grover Beach. David stated that biocontrol adjusted their release areas as HLB has spread.

David stated that transect data was relatively sparse, only recorded since the beginning of 2018. These data points suggested very low levels of ACP at most find sites, with the occasional site showing very high ACP numbers. David could not determine what factor or combination of factors have caused it, but ACP numbers have declined year by year from 2015 to 2018. He stated that a scientist from UC Davis was assisting the biocontrol team with ant data. David explained that controlling ants was key to controlling ACP in urban areas.

A biocontrol meeting was held in Riverside on ACP predators. David noted that Alan Washburn is releasing lacewings in conjunction with a University of California Riverside (UCR) study,

CDFA biocontrol is developing an urban agricultural interface study looking at ant control and parasitoid releases, and Mark Hoddle's lab at UCR developed an effective ant gel bait. David worked with a USDA researcher to analyze data, including other states that use biocontrol.

David noted that there is an increasing interest among UCR and other researchers in studying ACP predators. This includes common predators like lacewings (green and brown varieties), ladybugs, and hoverflies. David also noted that the CDFA biocontrol program is having difficulty recruiting and maintaining workers.

Regional ACP Updates
Bob Atkins stated that area wide treatments were on schedule. He noted that Alan Washburn was releasing biocontrol agents in residential areas around groves as a buffer zone. Bob noted that dealing with abandoned orchards, notably in Ventura, were still a work in progress alongside the new agricultural commissioner.

He stated that California Citrus Mutual (CCM) is promoting discussion among growers on what to do when HLB reaches groves. It was suggested that growers want a wider treatment area, rather than the 800-meter treatment area being reduced to 400 meters, a motion passed in the previous CPDPC meeting. It was explained that CCM is working with USDA and CDFA to host focus groups and tabletop sessions with growers in Southern California, Ventura, Riverside, Imperial County, South and North Tulare, and the Central Valley with the intention of discussing grower response to HLB.

STRATEGIC PRIORITY 4 – Improve Data Technology, Analysis and Sharing

Data Department Update
Rick Dunn noted that Robert Johnson was updating the University of California Agriculture and Natural Resources (UCANR) interactive web map for ACP, *C*Las positive ACP and HLB detection data. Rick updated the commercial citrus layer, notably Ventura County's map support services. He explained that the trapping efficiency project was complete, barring a few grove traps still to be installed. Data Management continues to produce data summaries about grove trapping and sampling, monthly biocontrol point maps, and other projects.

Holly Deniston-Sheets explained that the HLB Data Analysis Tactical Operations Cell (DATOC) currently has six projects. The exposure definition project is defining the likelihood of a tree being exposed to HLB. Holly reminded the subcommittee that Karen Jetter is providing a cost-benefit analysis for HLB detection and prevention in residential areas, expected to be complete in September 2018. She explained that Sara Figuera of the McRoberts lab is looking for a more nuanced model to mitigate risk when transporting citrus. Holly explained that David Bartels is running simulations on anticipated ACP and HLB progress and analyzing HLB samples for hotspot cluster analysis. DATOC is also updating the quarantine briefing paper and will update the committee on the emerging epidemiology.

CLOSING COMMENTS & ADJOURNMENT
The meeting was adjourned at 12:00 p.m. The next meeting will be held in Visalia, California on September 5, 2018 at 9:00 a.m.