CALIFORNIA CITRUS PEST AND DISEASE PREVENTION PROGRAM
OPERATIONS SUBCOMMITTEE MEETING

Meeting Minutes
Wednesday, March 6, 2019

Opening:
The regular meeting of the Operations Subcommittee was called to order at 9:00 a.m. on March 6, 2019 in Visalia, California by Chairman Keith Watkins.

Committee Members Present:
John Gless* Jim Gorden Roger Smith*
Zac Green* Ted Grether* Keith Watkins

Committee Members Absent:
Kevin Severns

CDFA Staff:
Victoria Hornbaker Sara Khalid Dr. David Morgan* Lea Pereira*
Gavin Iacono* Magally Luque-Williams* Keith Okasaki*

CRB Staff:
Rick Dunn Dr. Melinda Klein* Holly Deniston-Sheets

Guests:
Bob Atkins Jessica Leslie* Tracy Moehnke* Cressida Silvers*
Ameer Atrash* Colin Flippen* Gabe Olmos* Kirk Williams*
Jill Barnier* Adam Franscioni* Curtis Pate* Sandra Zwaal*
Teri Blaser Dr. Beth Grafton-Cardwell* Sylvie Robillard Judy Zinovich*
Link Leavens* Mark McBroom* Jason Schwartz*

* Participated via Webinar

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.

STRATEGIC PRIORITY 2 - Control ACP Movement and Enforce Regulations

Pilot Project Results for “Other” Bulk Cleaning Methods
Keith Okasaki stated that three groups of growers independently reached out to the California Department of Food and Agriculture (CDFA) and their local agricultural commissioners to propose an alternative Asian citrus psyllid (ACP) mitigation methods. The CDFA has developed a pilot project for these methods to allow for proof of concept and to gather efficacy data. He explained that Monterey County growers shipping fruit to Ventura County, growers shipping fruit to the Corona College Heights (CCH) Citrus packinghouse in Riverside County and San Diego County growers shipping fruit to Kern County are all attempting to demonstrate that their alternative methods for disinfesting bulk citrus of ACP are up to standard. He stated that the pilot program was originally slated to run through February 2019, but that the growers requested an extension due to poor weather interfering with the harvest. The pilot program will now run through
the end of March 2019. The pilot program involves inspectors monitoring the cleaning process at the origin and inspecting loads at the shipping destination.

Keith explained that 48 shipments were recorded, in which agricultural commissioner and CDFA staff inspected 59 percent of the 2,547 bins that were being shipped. The Monterey growers are showing consistently low leaf counts in the bins, except for one outlier due to a miscommunication. Growers shipping to CCH are showing inconsistent leaf counts, most likely due to having multiple crews across multiple counties. Victoria Hornbaker noted that each set of growers had a different technique to divest the fruit of stems and leaves. Dr. Beth Grafton-Cardwell explained that the techniques for disinfesting the load of ACP and stems and leaves are acceptable, and that technique will improve as growers become familiar with the new requirements.

Victoria explained that CDFA reviews and offers suggestions to the growers in the pilot program to allow them to be innovative in their designs, rather than implementing a standard practice. The Citrus Pest and Disease Prevention Committee (CPDPC) will meet in May 2019 and will review the data to determine if these devices are viable alternatives to existing mitigation methods.

Tracking Direction of Bulk Citrus Movement
Keith stated that there is an ongoing discussion between CDFA and county staff over improving communication and putting responsibility on growers and packers to notify the county for tracking purposes. He explained that cooperative agreements have been sent out for the next round of bulk citrus regulatory enforcement work beginning July 1, 2019.

STRATEGIC PRIORITY 4 – Improve Data Technology, Analysis and Sharing
DATOC Update
Holly Deniston-Sheets stated that the Science Task Force met to advise the Committee on effectiveness and future planning. She stated that the Task Force believed the Committee should respond to new trends in data as they arrive, especially the growth rate of disease incidence in Southern California. She explained that there was a sharp upswing in Huanglongbing (HLB)-positive tree finds halfway through 2017 and going forward. She noted that a segmented model fit the data points better than an exponential increase. She stated that the Data Analysis Tactical Operations Center (DATOC) has been tracking quadrant sampling and sampling intensity to see how it affected HLB-positive finds. Victoria suggested that the DATOC also look at when the cutoff for a positive find moved from a cycle threshold (ct) value of 32 to a ct value of 37.99.

Holly explained that the DATOC also looked at a month-to-month scale before and after quadrant sampling was introduced, finding increased variability in 2017 and extreme variability in 2018. She noted that records didn’t extend far enough to be sure how seasonal changes affected the sampling intensity. Victoria stated that Ribonucleotide Reductase (RNR) primer entered use as screening tools in September 2017, although RNR was not validated until November 2018. It was suggested that Anaheim infection sites being found in 2017 could be responsible for the upswing in HLB-positive trees found. Victoria explained that when the initial Anaheim HLB positive tree was discovered, the program did not have access to Dr. Gottwald’s risk survey at the time, CDFA had developed an interim survey. It was suggested that the Gottwald Risk Model may not take into account local knowledge of the areas. Holly noted that San Gabriel, Temple City and Rosemead HLB-positive finds stayed consistent and increased in a linear fashion as compared to Anaheim and Garden Grove.
Holly concluded that HLB cases are being detected faster, but it is unknown if this is due to accelerations in the epidemic or due to program activities. She stated that describing already-observed data only does so much, and a linear fit segmented model is at odds with the disease biology. The DATOC recommended that the Committee reach out to Dr. David Bartels to explore running regular projections of the spread of HLB using the APHIS/Cambridge simulation model to predict problem areas in the future. She added that the relevant stakeholders (Dr. Bartels, Chris Gilligan and Joel Nelsen) are interested in starting that project and will attempt to submit an HLB multi-agency coordination (MAC) proposal by the June deadline. It was noted that Dr. Bartels’ cluster analysis was done with the 16S primer, and his analysis is based on inconclusive ACP samples. The new RNR primer is more specific and more sensitive, with little chance of cross-reactions, and a higher ct value, so retesting old samples may have merit.

Victoria explained that CDFA is working on securing dedicated staff which will allow staff to focus on citrus rather than being pulled off to work on other needed projects. The citrus program is moving ahead with the plan to become a stand-alone division with 226 dedicated staff, including 61 new hires. She noted that the Legislative Analyst’s Office report was supportive of the dedicated citrus program, and that she will be meeting with them and testifying in legislative budget hearings.

**Data Management Report**

Rick Dunn explained that the Citrus Research Board has updated the Citrus Layer for Kern County and San Diego County. San Bernardino County will be updated next. He stated that traps will be set around chlorine water drench facilities due to elevated risk of ACP.

Victoria stated that a protocol has been created to remove an active Regional Quarantine Zone back to Zone 1 based on negative trap data. She explained that San Benito, Madera and Merced counties are being tracked for the required two years ACP-free declaration. The protocol requires CDFA to post a map and allow ten days for public comments before returning a Regional Quarantine Zone to Zone 1. She stated that being moved to the ACP-free Zone 1 protects the county by mitigating the movement of potential ACP into the county.

Victoria explained that the protocol will be presented to the Science Subcommittee, along with a protocol that will use a *Candidatus Liberibacter asiaticus* (CLas) positive ACP nymph sample as an indication that a tree has been exposed to CLas. By doing this, CDFA can use the nuisance abatement authority in the Food and Agricultural Code. She added that Lucita Kumagai at the CDFA Lab is studying how best to test citrus flush for CLas. Jim Gorden stated that Dr. Gottwald will be presenting information on the dog teams and on modeling projects using the Porterville area on March 12, 2019.

**CLOSING COMMENTS & ADJOURNMENT**

The meeting was adjourned at 11:12 a.m. The next Operations meeting will be held in Visalia, California on April 3, 2019 at 9:00 a.m.