CALIFORNIA CITRUS PEST AND DISEASE PREVENTION COMMITTEE MEETING

Meeting Minutes Wednesday, July 13, 2022

Committee Members Present:

Craig Armstrong John C. Gless Dr. Etienne Rabe*

Kevin BallJim GordenRod RadtkeFranco Bernardi*Mark McBroomRoger SmithAaron Dillon*Jared PlumleeKeith Watkins

Bob Felts Jr.*

Committee Members Absent:

Craig Armstrong Nick Hill Gregorio Rundini

John Gless

California Department of Food and Agriculture (CDFA) Staff:

Carl Baum*	Sarah Kraft*	Keith Okasaki*
Amelia Everett*	Luci Kumagai*	Grace Radabaugh*
David Gutierrez	Betty Lee*	Michael Soltero*
Victoria Hornbaker	Daniel Lee*	ThuyVy Truong*
Laura Irons*	Zachary McCormack*	Claudia Vazquez*
Anmol Joshi	Jana Miscevic	Jennifer Willems
Sara Khalid*	Alex Muñiz*	Jason Wu*

Guests:

Price Adams Melinda Klein Cressida Silvers Teri Blaser* Kirsten Skala Stuart Lockley Rick Dunn Tim Lyall* Greta Varien David Finke Marcy Martin **David Warda** Lisa Finke Mia Neunzig* Helene Wright* Margaret O'Neill Ariana Geurig* Qijun Xiang* John J. Gless* Curtis Pate* Judy Zaninovich* Sandra Zwaal Edgar Gutierrez Alexis Silveira

Opening Comments

Mark McBroom called the Citrus Pest and Disease Prevention Committee (CPDPC) meeting to order at 9:01 a.m. Mark McBroom welcomed the committee, staff, and members of the public participating in person and online. He also introduced the newest CPDPC member, Rod Radtke. There was a quorum for the meeting.

^{*}Attended the meeting virtually.

Public Comments

Tim Lyall commented that the Pauma Valley area may soon be declared a quarantine area for huanglongbing (HLB). Because Pauma Valley does not have any major packing houses and sends fruit for packing to the packing houses in Riverside, Tim asked if fruit moved from a potential quarantine area in Pauma Valley to Riverside would follow the same regulations as fruit moved within a contiguous quarantine area.

APPROVAL OF CONSENT AGENDA ITEMS

The Consent agenda contained minutes from April 13, 2022 Committee meeting.

Motion: To approve the consent agenda as presented.

First: Keith Watkins Second: John C. Gless

Motion Carries: The motion passed unanimously.

FINANCE SUBCOMMITTEE REPORT

Review 2020/2021 Budget Expenditures and Revenue

Bob Felts Jr. reported that expenditures increased by \$3,600,000 to a total of over \$20,000,000 in May. Expenditures increased by \$3,250,000 to a total of \$23,347,000 in June. Expenditures increased by \$3,150,000 to a total of \$26,493,129 in July. June has not closed in FI\$Cal. The total year end projection for 2022 is \$30,400,000. It is estimated that 85 percent of the proposed budget will be expended, which is a little higher than the average expenditures of the prior 5 years.

Bob reported that revenue increased by \$1,500,000 to a total of over \$7,000,000 in May. Revenue increased by \$1,760,000 to a total of \$8,957,215 in June. Revenue increased by \$856,000 to a total of \$9,813,769 in July. With a large lemon crop and Valencia crop, more revenue should be received during August and September.

2022/2023 Sweet Orange Scab Budget Request

Victoria Hornbaker reported that the agreement for emergency funds received for Sweet Orange Scab (SOS) operations ended in June. The expenditures for any future work for SOS would need to be absorbed by another program. Keith Okasaki and Paul Figueroa will work on a budget to be presented to the Committee at the next CPDPC meeting.

2022/2023 Biocontrol Facility Budget Request

Victoria explained that use of the Mount Rubidoux facility by the Biocontrol Program has previously been done under an agreement that repair work upkeep of the facility would be considered in lieu of rent. With the facility under new ownership, the previous agreement is no longer valid, and CDFA will now need to begin paying approximately \$5,000 per month in rent for a total of \$58,794.22 for the year.

Motion: To approve a biocontrol budget increase of \$58,794.22 to cover rent at the Mount Rubidoux biocontrol rearing facility.

First: Keith Watkins

Second: Jim Gorden

Motion Carries: The motion passed unanimously.

EXECUTIVE COMMITTEE REPORT

Program Environmental Impact Report (PEIR) Update

Victoria reported that the PEIR was decertified in May. CDFA has contracted with a consultant that is going to review the deficiencies in the PEIR. Work has started to update the document to reflect current California Environmental Quality Act law.

Citrus Yellow Vein Clearing Virus (CYVCV) Update

Victoria reported that there was a detection of CYVCV in the city of Tulare, Tulare County, in March. A delimitation is being conducted and multiple detections have been found in the area. CDFA is working with United States Department of Agriculture (USDA) to determine regulatory procedures and to develop an alternate delimitation survey protocol for areas outside of the delimitation core area. This detection is the first occurrence of CYVCV in the Western Hemisphere and was previously known to occur in Pakistan, Iran, India, Turkey, and China. There has been anecdotal evidence that CYVCV may also impact plants other than citrus. Research is being done to determine transmissibility of the virus. There are currently 5 vectors in California that can potentially spread CYVCV. The impact of this virus on California citrus is still being examined and expression of symptoms may change based on temperature, especially as summer heat continues.

Science Advisory Panel Update

Victoria reported that the multi day, in-person Science Advisory Panel (SAP) meeting in April 2022 went well. The panel developed a final draft report that is currently being reviewed by CDFA. The report will be reviewed by an independent review group before it is presented to the Science and Operations Subcommittees and the CPDPC in September.

Mark proposed having a full day meeting to discuss operationalizing the SAP recommendations.

Citrus Canker Update

Victoria reported that in February 2022, USDA determined that citrus canker (CC) was found at a nursery in South Carolina. The canker positive nursery had been selling citrus nursery stock to multiple states including California. The nursery issued a recall to citrus producing and adjacent states. Nursery stock was shipped to four locations in California. Keith and staff from Southern and Central Districts verified that 3 of the 4 locations received nursery stock. The nursery stock was collected and destroyed, and a 1-mile delimitation survey was implemented around each location to verify that CC is not present. These locations were found within San Luis Obispo, Chino, and San Diego. In addition, the State of Nevada notified CDFA of two locations where nursery stock may have been diverted from Nevada into California. One was sent to a California address in Huntington Beach and the other was sent to Colfax. The nursery stock was collected and destroyed, and maps are being prepared to implement a 1-mile survey

around these sites. All samples collected during delimitation survey have been negative for CC.

OPERATIONS SUBCOMMITTEE REPORT Laboratory Update

Lucita Kumagai presented the laboratory update for the HLB testing program from the Plant Pest Diagnostics Center (PPDC). She reported that 3,192 Asian citrus psyllid (ACP) samples were received in June. The monthly total of plant samples received for 2022 have averaged at 5,700 and ACP samples averaged at 3,000 per month. CDFA is currently working at full capacity to process these samples after losing 5 staff members in the lab. Two full-time technicians have been hired, but it will take time for them to become proficient in the work. To ease the burden on the CDFA lab, Luci has proposed reaching out to the lab at Citrus Research Board (CRB) for assistance. For 2022, the combined plant and ACP total samples received was 52,468 at an increase of 16 percent compared to the same period from the prior year. The tally of positive detections reflected 3,560 residential trees, 2,471 sites, and 444 ACP positive samples. 75 percent of positive trees, 72 percent of positive sites, and 63 percent of ACP positive samples were found in Orange County. A detection in Fontana resulted in an expansion of the HLB quarantine. ACP positive detections were also made in Pauma Valley and Vista. The samples from trees in those areas are being processed.

HLB Risk-based Survey

Daniel Lee presented data for 2021 Risk Survey cycle 2 and 2022 Risk Survey cycle 1. Cycle 2 2021 began in November 2021 and is 89 percent complete with 25 of the 37 allocated counties completed with 51,495 properties visited. 25,491 properties were sampled generating 12,306 entomology and 17,857 plant samples. In Northern California, 5 staff members from 2 offices have completed risk survey for 97 percent of 147 assigned grids with risk survey completed in 10 counties. In Central California, 10 staff members from 3 offices have completed risk survey for 100 percent of the 460 assigned grids with risk survey completed in 11 counties. In Southern California, 26 staff members from 6 offices have completed risk survey for 84 percent of 995 assigned grids with risk survey completed in Imperial, Riverside, San Bernardino, and Orange Counties. Cycle 1 2022 began in June 2022 and will contain 1,246 grids in 42 counties. Central District has begun survey for this cycle. Cycle 1 2022 is projected to be completed by December 2022.

CDFA Operational Update

David Gutierrez presented the operational update including ACP and HLB delimitation survey and treatment areas for the Southern, Central, and Northern Districts.

Southern District

The first *Candidatus* Liberibacter asiaticus (*C*Las) positive ACP sample was detected in Rowland Heights on May 11, 2022. The first HLB positive tree was detected in Fontana, causing a quarantine expansion. 299 HLB positive trees were removed from April through June with 159 additional trees pending removal. Residential treatments around commercial groves scheduled to begin on August 22 in Ventura, San Diego border buffer, San Bernardino, Hemet, and UC Riverside pending ACP detections. Residential

treatments around commercial groves will begin on September 22 in Santa Barbara if ACP is detected in in the area. The first ACP positive sample from Pauma Valley was found in an organic Valencia orange grove that measures approximately 9 acres in size. CDFA staff sampled 137 trees on the site and found that the grove was heavily infested with ACP. All collected ACP and nymph samples were sent to the PPDC for analysis. Victoria is working with officials to obtain access to and survey tribal lands south of the delimitation area. The first ACP positive detection in Vista was found on a residential site with 16 host trees. CDFA staff have also completed surveying all 32 properties within 250-meter delimitation area.

Central District

ACP detections since May include three ACP detections in Fresno County, 10 ACP detections in Kern County, and two ACP detections in Tulare County. ACP detection trapping is ongoing in Fresno and Madera Counties with ACP delimitation trapping ongoing in Fresno, Kern, San Luis Obispo, and Tulare Counties. ACP treatment for Fresno and Kern Counties were conducted in May and June in response to several ACP detections. *Tamarixia radiata* were released in Kern, Santa Barbara, and Tulare Counties.

Northern District

ACP detection trapping is ongoing in Placer, San Joaquin, and Stanislaus Counties. Winter ACP trapping will resume in November 2022 with training provided to county pest detection supervisors and trappers. ACP delimitation trapping is ongoing in Alameda County with no subsequent detections. Delimitation trapping is also ongoing in Santa Clara County with detections ongoing and traps serviced monthly. There has been no expansion of the delimitation area. Biocontrol releases are continuing in San Jose, Santa Clara County, with an average of 7,000 *Tamarixia* released monthly.

CDFA Regulatory and County Agreement Update

Keith presented the county monthly regulatory activity report for July 2021 through April 2022. For this period, grower, transporter, and fruit-seller inspections have increased while packing house inspections have decreased in comparison to the prior year. Notice of violations and notice of proposed actions numbers have also decreased. Regarding San Diego County's agreement, counties are asked to submit an agreement amount based on their industry and staffing abilities. County grate cleaning inspections have been going well, except for one packer in Tulare County whose grate cleaning ability has been revoked due to multiple violations. CDFA and Tulare County staff met with the packing house and issued a notice of violation. Keith explained that while the counties do the majority of bulk citrus movement enforcement, CDFA handles most of the work with nurseries, including the inspections of approved exclusionary facilities and nurseries. While conducting an inspection, CDFA staff discovered a nursery intentionally breaching their approved structure to move plants more easily in and out with tractors. CDFA performed a hold, issued a notice of violation, and decertified the structure while Tulare County has been working to issue a notice of proposed action and possibly issue a monetary fine. A compliance exhibit for growers operating as fruitsellers within HLB quarantine areas was discussed at the CPDPC Operations Subcommittee meeting last week and with counties earlier this week with plans to finalize and implement the exhibit as soon as possible.

Discuss Clean Nursery Stock Program

Keith reported that CDFA staff met with the Citrus Nursery Board to discuss the Citrus Nursery Stock Cleanliness Program. It was agreed that it would be best for the CPDPD to take over administration of this program.

ACP Detections in Central Valley

Victoria reported that the increase of detections in the Central Valley have been precipitated by events at packing houses. Grate cleaning and safeguarding bins before loading citrus onto trucks are important procedures to observe. There was a recent detection at a packing house in the Lemon Cove area of Tulare County which led to additional ACP detections (trapped and live ACP) on trees at the packing house property adjacent properties. All find sites have been treated. There was also a detection at a packing house in the Orange Cove area of Fresno County, which had thousands of nursery stock trees on the property. The find site has been treated. There was also a detection in a residential area in Fresno. Survey has been challenging due to language barriers, but Nuffer Smith Tucker (NST) has created several language-specific social media ads to help obtain access to all citrus trees. There were also detections in the Arvin area of Kern County.

Grower Liaison Update

Sara Khalid presented Grower Liaison updates. In the Central District, all growers have treated in the Fresno and Northern Tulare areas. In Southern Tulare, Jessica Leslie is reaching out to current and prospective psyllid management area (PMA) team leaders. Judy Zaninovich continues to keep the Kern citrus industry apprised of the recent detections through her email updates and meeting reports. She reminded growers that history shows that low ACP trap detections in the spring can possibly lead to high populations by fall. In Ventura County, a Ventura County Task Force Meeting was held and facilitated by the new Farm Bureau Chief Executive Officer on May 31st. Sandra Zwaal is distributing reminders for ACP treatments and will update the grove and grower contract data for both San Diego and San Bernardino Counties. Two Field Days are being planned, one in San Bernardino and one in San Diego to show growers and pest control advisors (PCA) how to identify, monitor, and manage ACP. Sandra is also working with the UC and this event may include additional UC presentations related to other citrus pests and diseases. In Imperial County, there have been a few ACP detections by pest control district (PCD) personnel, PCAs, and canine scouts. In mid-May, there were *Tamarixia* releases in the neighborhoods on the west side of Calipatria and Brawley. They have been unable to find parasitized ACP nymphs. In the coming weeks, Sandra will be reviewing PMA maps and grove and grower contact information.

Biocontrol Update

Grace Radabaugh reported that even with COVID-related personnel shortages, approximately 1,500,000 parasitoids have been released to date and releases are on track to reach the 4,000,000 projected goal. *Tamarixia* releases have been a multiagency production, including contributions from CDFA and CRB. This year, CRB is increasing its field cage production for the summer and has already started to provide

release material to CDFA. CRB has taken over maintenance of the *Tamarixia* iso-lines. CDFA is no longer receiving *Tamarixia* from the University of California (UC), Riverside. Over 25,000,000 parasitoids have been released since the start of the program, most of which were *Tamarixia radiata*. Due to the increase of ACP finds in the Fresno area, the biocontrol team will be working to conduct releases in Fresno next week. The strategy continues to focus releases around HLB quarantine areas, borders, trade routes, areawide management areas, and newly established ACP find areas. Collected data from region-wide urban monitoring from 2015 to present has shown that ACP populations are declining in these areas. The biocontrol team has released a publication on the contributions of classical biological control to the U.S. food security, forestry, and biodiversity titled "Successful Biological Control of Asian Citrus Psyllid, *Diaphorina citri*, in California."

Canine ACP Detection Working Group Update

Jennifer Willems reported that the Canine ACP Detection Working Group met in April and June and is looking to schedule a third meeting in August. Discussion included the status of the dogs, where the dogs are located, current schedules, federal funding, chain of custody, and how to determine an official sample or unofficial sample when the dogs alert. Due to the possible spread of CYVCV, sanitation of the dogs was also discussed to mitigate the spread of pathogens. Jennifer is drafting a standard operating procedure for when staff work with the dogs. It was also suggested to use the dogs at the source of origin, including allowing the dogs to sniff bins before they are loaded and transported. For the Orange Cove and Lemon Cove detections, Lisa Finke was able to work with Fresno County staff to work with the dogs in packing houses and orchards. Lisa suggested having dogs accompany county inspectors. The San Joaquin Organic Growers Group would like canines to inspect bins coming into packing houses and before leaving the orchard of origin. The group will draft and submit a proposal, seeking permission from food safety to certifying body before proceeding. Doc's Organics of Imperial County will cooperate in National Institute of Food and Agriculture (NIFA) grant research of canines inspecting bins of fruit as they arrive. This will be the last year that USDA will be providing financial support for the ACP canines, with funding ending in May 2023. With federal support, the annual price per team comes to a total of \$131,777. Without federal support, the annual price per team would total \$379,579. The annual total cost for the program would come to \$1,012,388 at \$973 per day and \$1.79 per tree.

SCIENCE SUBCOMMITTEE REPORT Ethyl Formate Registration Update

Dr. Etienne Rabe reported that the United States Environmental Protection Agency (EPA) pushed the deadline for registration to January 1, 2023 and signed the two deficiency letters that were to be submitted. EPA has also been asked to coordinate with California EPA and the Department of Pesticide Regulation. The registrant aims to provide ethyl formate to select packing houses and growers next year.

Neonicotinoid Risk Mitigation Update

Etienne reported that progress is being made with a revised draft that includes an

exemption for use on quarantine pests. The rate at which neonicotinoids may be used has been raised to the levels where bees would not be affected, but not to the maximum levels.

Sweet Orange Scab (SOS) Biology and Regulation Update

Keith reported that CDFA regulatory staff met with the USDA SOS Cross-Functional Working Group regarding the quarantine area that will need to be observed. Once a quarantine radius has been approved, regulatory staff will proceed with SOS rulemaking.

Data Analysis Tactical Operations Center (DATOC) Update

Etienne reported that the DATOC team has completed the statistical analysis of cycle threshold values in various citrus tissues. Subhas Hajeri and Luci Kumagai will report the findings to the CPDPC Science Subcommittee. The DATOC team is also currently examining whether the 50-meter treatment radius is adequate, examining all available data regarding the pattern of detections to determine if the higher number of detections in 2022 are an anomaly, and examining if more ACP needs to be analyzed for CLas before trees are treated. Because there is only 1 percent infection rate among ACP, Subhas suggests that analysis be done on as many ACP samples as possible.

OUTREACH SUBCOMITTEE REPORT

Price Adams introduced Kristen Skala who will be serving as the new director of community and government relations at NST, she will lead the elected official outreach on ACP and HLB presence in California. Price explained that according to Nielsen, 71 percent of consumers trust advertising, opinions, and product placements from influencers. Therefore, NST will be working to create Citrus Pest & Disease Prevention Program (CPDPP) partnerships on Instagram, Facebook, and TikTok. CPDPP social media accounts have shared content on tips for growing, harvesting, and sharing homegrown citrus to prevent the spread of HLB and ACP. NST has made a push in broadcasted and printed Hispanic news outlets on awareness of ACP and HLB as well as tips on how to prevent its spread. NST has also made a push in outreach to printed and online Asian language news outlets regarding Tamarixia releases in Santa Clara County. Over 4,800 citrus annual reports were mailed and emailed to compliance agreement holders with a digital version posted to CitrusInsider.org. In June, there was a 91 percent increase in the average number of new subscribers from the past six months in 2022. The Fruit for Thought e-newsletter on CitrusInsider.org shared news alerts on new detections and received a 50 percent open rate. Over the past several months, NST has had a booth presence at several conferences and events, connecting with elected officials from across the state. In May, CPDPP connected face-to-face with more than 100 mayors, city council members, and city managers at the Southern California Association of Governments and California Contract Cities annual meetings. The Chula Vista Lemon Festival in San Diego County is scheduled in August. NST is also looking for additional social media influencer partnerships, developing content for CaliforniaCitrusThreat.org, developing video content, and is working to help facilitate the Science Advisory Panel.

United States Department of Agriculture (USDA) REPORT

Helene Wright reported that USDA is working closely with CDFA on CYVCV and SOS so that quarantine regulation may move forward. National Operations Manager Leon Buntz has retired. Mayra Arredando from the citrus program in Texas will be filling in until a replacement can be found.

California Citrus Mutual (CCM) Report

Alyssa Houtby noted that Citrus Health Response Program (CHRP) and HLB Multiagency Coordination (HLB MAC) funding is appropriated annually by congress. Congress is currently working on the 2023 fiscal year budget; House agricultural appropriations did include funding at current levels for both CHRP and HLB MAC. It is estimated that 2023 will begin at the existing level which is at \$61,000,000 across all citrus producing states for CHRP and \$8,500,000 for HLB MAC. Scheduling is in progress for a citrus sector meeting hosted annually by USDA and is expected to occur later this summer. Regarding CYVCV, CDFA was able to access some of the emergency funds. CCM is working with the State legislature to see if there is the potential to obtain any additional state funding to offset the funding that needed to be reallocated for CYVCV operations.

Citrus Research Board (CRB) Report

Marcy Martin announced that CRB concluded its referendum which occurs every 5 years and received an almost completely unanimous win. CRB has also completed its statement of work and developed its budgets as requested by CDFA. There have been some staffing changes in the diagnostic lab. CRB will also be looking to address if the number of management positions may be reduced so that the number of technician positions may be increased. CRB received funding through HLB MAC to implement the Citrus Research and Field Trial Project, whose focus is to encourage commercial growers who are subject to assessments through the marketing order to participate in implementing additional mitigations to manage ACP with a reimbursement component to this process. Melinda Klein reported that she has been working to get the application for the program set up through USDA and online and will share more information as the project develops.

Citrus Pest Detection Program (CPDP) Report

Dr. Subhas Hajeri presented the pest control district updates for San Joaquin Valley from April through June 2022. He explained that the CPDP uses a combination of a risk-based survey model and the deployment of 3D traps in commercial citrus groves. In April through June 2022, 1,003 traps were deployed, 1,731 vials sent to the lab for inspection, 13,141 trees were visually inspected, 191 plant samples were sent to the lab, and 3 insect samples were sent to the lab. So far, no ACP have been detected in the collected vials. Lucita Kumagai of CDFA and Ray Yokomi of USDA have been collaborating on a research project examining the reliable sampling tissue and seasonality for consistent detection of *C*Las.

CLOSING COMMENTS AND ADJOURNMENT

The meeting adjourned at 12:48 p.m. The next meeting will be on September 21, 2022 in Visalia, California.