#### CALIFORNIA CITRUS PEST AND DISEASE PREVENTION COMMITTEE MEETING

# Meeting Minutes Wednesday, July 10, 2019

# **Opening**:

The regular meeting of the Full Committee was called to order at 10:00 a.m. on July 10, 2019 in Visalia, California by Chairman Jim Gorden.

#### **Committee Members Present:**

Kevin BallJim GordenJames McFarlaneAaron DillonTed GretherRoger SmithBob Felts, Jr.Mark McBroom\*Keith Watkins

John Gless\* George McEwen

#### **Committee Members Absent:**

Craig Armstrong Nick Hill Kevin Severns Ed Civerolo Etienne Rabe Brian Specht

#### **CDFA Staff:**

Jonathan BabineauGavin Iacono\*David Morgan\*Cassandra Davis\*Sara KhalidKeith Okasaki\*Ryan FongJason Leathers\*David PaynterTina GalindoRay Leclerc\*Lea Pereira\*Craig HanesMagally Luque-Williams\*Nawal Sharma\*

Victoria Hornbaker

#### **CRB Staff:**

Franco Bernardi Diana Fernandez Dr. Melinda Klein Holly Deniston-Sheets Lisa Finke Qijun Xiang\*

Rick Dunn

#### **Guests:**

**Bob Atkins** Sara Garcia-Figuera\* Curtis Pate\* Price Adams Beth Grafton-Cardwell\* Francisco Ouintana\* Ameer Atrash\* Alyssa Houtby Sylvie Robillard Jill Barnier Wendy Jen Jason Sapp\* Teri Blaser Ellen Kragh\* Jason Schwartze\* Casey Creamer Leslie Leavens\* Cressida Silvers\* Link Leavens\* Cassandra Davis\* Helene Wright Sandra Zwaal\* Dan Dreyer Jessica Leslie Judy Zaninovich Scott Fister Karen Lowerison\* Colin Flippen\* Neil McRoberts

# \* Participated via Webinar

# **Opening Comments:**

Jim Gorden 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.

# **Transitioning Area Wide Buffer Treatments**

Victoria Hornbaker stated that CDFA met with local Task Forces and Pest Control Districts (PCDs) to discuss transitioning treatments of commercial groves to local entities. She stated that most of the local entities reported that they do not have authority, the trained staff or the equipment to perform treatments. Potential exceptions are San Diego, Imperial and Coachella, and a follow-up meeting will be scheduled with those entities. Tina Galindo suggested that the summer round of Imperial, Borrego Springs and Coachella area wide treatments could be skipped based on the Program's monitoring of Asian citrus psyllid (ACP) populations. She stated that Dr. Beth Grafton-Cardwell is meeting with the grower liaisons to change the program to be timed with the grower liaisons.

#### **Consent Agenda**

Victoria presented the consent agenda, which consisted of meeting minutes from the May 8 and May 29 meetings, calendars for 19/20 Committee and Subcommittee meetings, a revised commercial grove delimitation survey protocol and the grate cleaning protocol. Victoria explained that the grate cleaning protocol includes a ten-leaf limit per bin, any bin with ten or more leaves or any shipment exceeding an average of eight leaves across all bins may be rejected by the receiving Agricultural Commissioner. Nawal Sharma explained that most of the shipments during the pilot program had under five leaves per bin. Dr. Neil McRoberts stated that the Data Analysis Tactical Operations Center (DATOC) is analyzing the data to determine if the leaf limit in the existing protocol is appropriate. Jim Gorden requested that the Operations Subcommittee oversee this procedure and report to the Full Committee going forward.

**Motion:** Moved to approve the Consent Agenda as presented.

First: George McEwen Second: Keith Watkins Motion carries: All in favor.

#### FINANCE SUBCOMMITTEE REPORT

### Review Fiscal Year 2017/2018 Budget Expenditures and Revenue

Bob Felts, Jr. stated that the Finance Subcommittee met and discussed expenditures and revenue for Fiscal Year (FY) 2018/2019. He noted that FY 17/18 is closed out, but there have been issues with tracking numbers and putting them in the correct line items. He explained that Ryan Fong found \$861,000 in Citrus Research Board (CRB) expenses posted to January 2019 rather than July, August and September 17/18. This brings the expenditures for FY 17/18 to \$34,137,000, still \$7,200,000 short of the budget. He stated that there are no adjustments to FY 17/18 revenue of \$15,137,500. There may be slight adjustments to FY 17/18 expenditures in the future.

# Review Fiscal Year 2018/2019 Budget Expenditures and Revenue

Bob stated that the new tracking and coding system is in place as of July 1, 2019. Victoria explained that most of the work is handled by the Pest Detection/Emergency Projects (PDEP), including developing Monthly Activity Calendars (MAC), a process of reallocating salary hours from staff's home code to Citrus Division. She noted that the budget will transition over to the Citrus Division as new staff are hired. Bob stated that expenditures through June 2019 total \$11,179,282, still far from proposed budget expenditures. Victoria explained that Biocontrol expenditures are down due to Biocontrol staff residing with PDEP, resulting in the late MAC billing and the lack of a Cooperative Agricultural Support Services (CASS) contract for field staff as of the end of June 2019.

Victoria explained that an additional \$2,900,000 in Federal Citrus Health Response Program (CHRP) funds will be split between the California Department of Food and Agriculture (CDFA) and the United States Department of Agriculture (USDA) staff in California. Bob stated that the May 2019 assessment revenue is \$3,200,000 compared to a FY 17/18 May revenue of \$2,600,000. June 2019 revenue is \$1,900,000 compared to FY 17/18 June revenue of \$1,200,000. The total revenue of FY 18/19 through June 2019 is \$15,365,141, approximately \$2,600,000 shy of projected budget revenue. It was suggested that the extended crop of Navel oranges still being picked may make up some deficiencies in budget revenue.

#### Status for FY 2019/2020 Dedicated Resources

Victoria stated that the Budget Change Proposal made it through the Governor's budget without cuts, resulting in an additional ongoing \$2,500,000 in general funds for a total of \$5,000,000 ongoing. She noted that the Citrus Division received 61 positions for administrative, management and field staff and are looking for a location to house the new positions. She expects to continue to share space with PDEP to defray costs. She explained that a CASS contract is in place for the Citrus Division for commercial grove trappers and Biocontrol. The Citrus Division is working with fleet for long-term car rentals. She noted that the Citrus Division will be seeking additional monetary and staff resources from the general fund, including a Pest Exclusion unit. Pest Exclusion will continue to assist with regulatory enforcement for the next FY.

Casey Creamer noted that California Citrus Mutual (CCM) faced difficulties with the ask for additional general funds because the program had not fully spent their budget in prior years. He explained that CCM intends to work with CDFA to bump up their internal numbers. He stated that CCM received \$10,000,000 in one-time funding from the Legislature in the previous year. He noted that CCM will continue to seek additional State Funding.

#### **EXECUTIVE SUBCOMMITTEE REPORT**

#### **Memorandum of Understanding**

Victoria explained that the Food and Agriculture Code states that CDFA must enter into a yearly agreement with the Central California Tristeza Eradication Agency. The Memorandum of Understanding (MOU) describes their independent authorities and how the agencies work together. She explained that the MOU has not changed from previous years.

**Motion:** Moved to approve the Memorandum of Understanding between the California Department of Food and Agriculture and the Central California Tristeza Eradication Agency as

presented.

First: James McFarlane Second: George McEwen Motion carries: All in favor.

# Asian Citrus Psyllid/Huanglongbing Action Plan Revisions

A concern was raised that the commercial grove response in the ACP/HLB Action Plan was unclear. Victoria explained that she revised the response to HLB positive trees and/or *Candidatus* Liberibacter asiaticus (*C*Las) positive ACP into separate residential, commercial and nursery responses. She explained that the time frame for commercial growers to remove an HLB positive tree was clarified to be within 48 hours of meeting the restricted entry interval. She also clarified that if a site ID is bifurcated by the 400-meter radius it would be included in the response. She added that Dr. Beth Grafton Cardwell clarified that growers using foliar insecticides or participating in area wide treatments only need one retreatment. She explained that the excerpt will go into the larger Action Plan.

**Motion:** Moved to approve the amended ACP/HLB Action Plan as presented.

First: Keith Watkins Second: Bob Felts

Motion carries: All in favor.

Victoria noted that the Action Plan is a living document posted online on CDFA's website and will be reviewed at least once per quarter.

# **OPERATIONS SUBCOMMITTEE REPORT STRATEGIC PRIORITY 1 – Find and Eradicate HLB**

# **HLB Risk Based Survey Update / Orange County HLB Survey Update**

Magally Luque-Williams presented the statewide high-risk surveys and section township ranges (STRs) proposed for Cycle 2. She stated that the risk-based survey for all counties are complete except for Los Angeles and Orange County. She noted that the number of STRs was similar or lower than in the first 2018 cycle, but the density was almost double. She stated that there were two new find sites in Riverside and one in La Habra, Orange County. She noted that delimitation survey work begins at the core and the 400-meter border and the surveyors work inwards. She stated that there are 1,074 HLB find sites, with 1,484 HLB-positive trees and 240 *C*Las-positive ACP. Quadrant sampling involves dividing the tree into four quadrants and taking 20 samples per quadrant totaling 80 leaves. She stated that they have collected 746 quadrant samples in June and 83 quadrant samples in July. She explained that the HLB border survey is 90 percent complete in Imperial with no ACP found, and 100 percent complete in San Diego with ACP collected from 25 sites.

#### **HLB Survey Analysis**

Maegan Salinas showed the Committee a time series map of HLB-positive detections by month through June 2019, distinguishing between life stages of ACP. It was suggested that mapping

existing *C*Las infections will help the program chart the spread of the disease. It was noted that some HLB-positive ACP were found without a nearby HLB-infected tree to explain their presence.

# STRATEGIC PRIORITY 2 - Control ACP movement and Enforce Regulations Movement of Bulk Citrus from any ACP Regional Quarantine into the HLB Quarantine

Nawal Sharma stated that the seven ACP regional quarantine zones were created on January 1, 2018 for movement of bulk citrus. One of the seven zones was designated Zone 6, the HLB quarantine. He explained that the Committee decided that there should be mitigation measures when shipping bulk citrus from one quarantine zone to another, either field clean or spray and harvest. He noted that as of January 2018, any shipments can be shipped into Zone 6 without any mitigation method when shipping from low risk zones to high risk zones. Mitigation methods would be applied prior to leaving Zone 6. He explained that the Qualitative Risk Model for Bulk Citrus Regional Movement study done by DATOC with assistance from Sara Figuera-Garcia and Neil McRoberts recommends maintaining uniform mitigation requirements when moving bulk citrus between any ACP regional quarantine zones. It was noted that shipments lacking mitigation can move ACP into an HLB quarantine zone which can be problematic. Jim recommended that the Operations Subcommittee discuss the issue and bring a recommendation to the full Committee.

# STRATEGIC PRIORITY 3 - ACP Control/Suppression Regional ACP Management

Bob Atkins stated that Erin Betts has been replaced by Jessica Leslie as the South Tulare Grower Liaison. He noted that monthly Grower Liaison updates will be sent out to Committee board members by email blast. He stated that work on the Early Detection Technology Task Force concluded and use of canines to detect HLB will continue. Bob suggested sharing lists with PCDs to improve grower outreach.

## **Biocontrol Update**

Keith Watkins stated that David Morgan reported Biocontrol production trending upwards and that the Biocontrol program is having an effect correlating *Tamarixia* releases with low ACP populations. He stated that *Tamarixia* releases are focused around HLB find areas and travel corridors. It was noted that ACP numbers are down significantly in the biocontrol monitoring areas.

### **Northern California Trapping and Treatment Update**

Cassandra Davis stated that 35,205 sticky traps are deployed in Northern California and the Central Valley, including County Agriculture Commissioner traps, CDFA traps, grove traps and Glassy-Winged Sharpshooter traps. She stated that there has been one find in Nipomo since her last report, near previous Nipomo find sites. The recent Nipomo find and two adjacent sites were treated on July 9, 2019. She stated that Kern County has had heavy infestations in Maricopa, but that Maricopa is an isolated area. Victoria stated that the lack of ACP finds in Kern County in 2019 is due to a combination of factors including wet weather, intensive trapping, treatments, biocontrol releases, and tarping requirements. Cassandra noted that there has been a reduction in traps but that the program still has adequate coverage. It was suggested that holding steady on eradication in Bakersfield three years ago was a good decision, and that Central Valley Grower Liaisons have been coordinating with growers and should be recognized.

Cassandra stated that the Santa Clara ACP treatment in the San Jose area is complete. Victoria explained that Santa Clara was having repeat detections in mobile home parks and transient areas, making treatment a priority to prevent movement offsite. Cassandra stated that three mobile home parks in San Jose are now treated.

## **Southern California Trapping and Treatment Update**

Tina Galindo stated that PDEP produced a schedule for Southern California area-wide treatments. She explained that Dr. Beth Grafton-Cardwell stated that winter is the most important time for treatment, and so Coachella, Borrego Springs and Imperial County border and grove summer treatments will be postponed. She explained that meetings will be set within three weeks to get started on August treatments. Beth noted that her findings are based on scouts finding a lack of psyllids in desert areas in the spring. She stated that winter treatments are most crucial in areas where the flush is hardened.

Tina produced maps showing potentially treated and currently treated areas that met 90 percent compliance and have the ACP detections to justify treatment, including both Hemet areas. Beth noted that Pest Control Advisors (PCAs) would prefer more threshold-based treatments, but she concluded that staff should continue treating areas at a similar time for the area-wide effect. Tina stated that treatment plans start in the east and move west. It was stated that the major problem with these treatments is that CDFA staff are pulled off ACP treatments to treat more urgent finds. It was suggested that the maps should include treatment participation. Tina stated that three zones in eastern Santa Barbara, including Montecito and Carpenteria, didn't reach 90 percent participation, while some zones west of Montecito met 90 percent participation but didn't have detections. She explained that staff will work on increasing traps or collecting more frequently, and she suggested changing the maps to differentiate these two types of areas. She stated that the San Bernardino map had four zones, two zones which will be treated and two which had no detections. Staff will be treating San Pasqual in San Diego County. Beth stated that she listed treatment windows to coordinate with the major flushes. It was noted that the Pauma Paula area is only short of the 90 percent due to one ranch with dry wells.

Tina stated that Whittier, Pico Rivera, El Monte, Temple City, Montebello and Norwalk are being treated or re-treated and Anaheim, Garden Grove, Santa Ana and Westminster treatments are complete. She stated that Compton, la Puente, Rosemead, Fullerton and Yorba Linda are pending treatment. San Bernardino retreatment, la Habra 2, Santa Ana 17, Montebello 6-12, Garden Grove 36 and Westminster 15-19 meetings are pending. She stated that treatment is contracted to True Green, with a maximum of 7.5 gallons of Merit per tree, approximately costing \$60 per tree.

#### SCIENCE SUBCOMMITTEE REPORT

# STRATEGIC PRIORITY 4 – Improve Data Technology, Analysis and Sharing Report on Joint Operations/Science Subcommittee Meeting

Keith Watkins stated that Dr. Etienne Rabe asked what considerations, metrics and benchmarks should be taken to terminate HLB-positive tree removal in residential Southern California. Quantifiable factors and the hurdles associated with those factors that should be exceeded to aid the formulation of an objective decision-making process. He stated that the rationale is that there are increasing numbers of Polymerase Chain Reaction (PCR)-positive trees in Southern California. These trees are found by accident during the risk-based survey after the initial finds. He suggested

that these symptomatic PCR positive trees are the tip of the iceberg, and there are trees that are equally infectious that go unfound. He asked if the Committee is being effective with this approach. He noted that while there is no push yet for moving away from the region for tree-removal purposes, it will become increasingly unjustifiable. The overwhelming scientific view is that without managing the vector when removing trees, the exercise is futile. He requested the Finance Committee isolate the social risk-based and tree-removal cost for better understanding of the financial implications. He asked these questions of DATOC: 1) Scientists provide the gates where it becomes a futile effort to remove trees. 2) Create a model of finds versus latent infections to assist in making the decision. 3) Do a financial risk-reward analysis to be conducted. 4) DATOC organizing a closed meeting of scientists in Denver on September 19, 2019 to answer some of these questions.

Neil noted that the futility of tree removal in the absence of vector control relates to commercial production. He will attempt to address the question of how connected the infections taking place at the interface are to the core areas at some distance from commercial citrus and to find the probable effect of not removing trees from core areas. He stated that DATOC is currently working on setting up Tim Gottwald's agent-based model. He noted that the initial study areas are in Ventura, but the model can be moved to look at other areas. The model includes different types of entities represented in the simulation, called agents. He explained that there are rules in the simulation for what psyllids, trees and growers will do to simulate the behavior of biology. Keith noted that stopping tree-removal removes a regulatory tool. Tree-removal cannot be stopped in some areas but continued in others. Neil explained that California is doing better than other states at fighting HLB, and it is uncertain how the tree-removal program affects that. He suggested that tree-removal helps maintain the emergency status of the program. It was stated that San Gabriel is a great test model to see and understand patterns and level of success. Neil stated that Drs. Gottwald and Weigi Lo performed calculations based on survey results and found the probable proportion of infected trees in each section township range (STR) that are infected but not detected. That data was put before the Science Subcommittee but was not passed up to the full Committee as a recommendation

Keith stated that Etienne reported on Ethyl Formate, noting that the registration is on track for the end of 2020. Because it is moving toward a Section 3 registration, it was determined that there was not much benefit to a Section 18 registration. Keith stated that the Section 18 for Evergreen has been in place for over six months and isn't used anywhere due to Evergreen's complexity. He recommended that the Department of Pesticide Regulation (DPR) cancel the Section 18.

**Motion:** Moved to withdraw the Section 18 for Evergreen.

**First:** James McFarlane **Second:** Roger Smith

Motion carries: All in favor.

Keith noted that Dr. Spencer Walse has run some trials with Ethyl Formate on trailer, ground and tarps in an effort to make it as flexible an application as possible. Beth stated that having the tarps connect to a solid surface works better than dirt, due to leakages making the correct concentration of fumigant difficult. The fumigant will be flexible and easy to use and will revolutionize how people move bins around the state.

Keith stated that Jim Cranney provided a presentation on the antibiotic debate in the media. Jim requested \$60,000 to \$100,000 from the full Committee to defend bactericides in the public perception. He noted that Nuffer Smith Tucker (NST) was not able to participate in outreach to support the bactericides, as it is outside their scope of work. He suggested producing a pamphlet with talking points to defend future bactericides from being targeted in the same way. He explained that there is immediate pushback in the media whenever bactericides are involved. Jim will make his presentation at the next Committee meeting. Victoria stated that she was concerned about the appropriateness of the ask to the CPDPC, due to CDFA and the Committee not using antimicrobials. Growers represented by the CPDPC can choose to use antimicrobials registered for use. She explained that potential future bactericides unrelated to human antibiotics would be a softer ask for CPDPC outreach. It was suggested that there should be more education and outreach within the industry to get buy-in from the industry. Neil McRoberts noted that 50 percent of those polled were unlikely to use bactericides and only 10 percent stated that they were likely to use bactericides. Jim suggested that a laboratory exercise could be used to show that treatment of unaffected plants show lower infection rates. Dr. Melinda Klein stated that CRB is funding work to look at the role of antimicrobials in terms of slowing the rate of infection and how those compounds may modify the infection process. Victoria added that work funded by the Multiagency Cooperative on this issue is ongoing, including work to determine how antimicrobials affect environmental populations.

Keith stated that Etienne reported on potential reallocation of resources from HLB core areas to perimeters. He stated that when a find occurs, the perimeter is surveyed first and then worked backwards to the core. Victoria stated that Dr. Gottwald was asked to bias the survey by 20 percent to commercial citrus. She explained that they do not yet have information on whether more or less than 20 percent is appropriate, and suggested a round of the survey and then reassess. Neil stated that the risk-based survey was designed with both a residential and commercial version, and the program used the residential survey until now. He explained that DATOC is analyzing data from the square miles in the commercial survey, to brief the Science Subcommittee. Victoria stated that the commercial survey will be used to direct the commodity survey.

### **DATOC** Update

Neil stated that DATOC will report next month on reanalysis of the leaf cleaning grates. He explained that DATOC is looking at data sets by city to see if different densities of infection clusters allow definition of exposure at a property level. He suggested it may be possible through abatement to do all of a property's trees without requiring resampling. Neil stated that DATOC will report on the effects of changing the location of the risk-based survey. He stated that DATOC will take on Dave Bartels's ACP hotspot cluster analysis once the protocol is set up for analysis. He stated that DATOC would be producing time series plots of ACP trap counts and other indicators of ACP since the start of program. This will show long-term trends and how ACP populations flex with season and time. He noted that these maps will focus on trap counts but can be used for any data with ACP numbers.

OUTREACH SUBCOMMITTEE REPORT STRATEGIC PRIORITY 5 – Outreach and Education General Outreach Update Price Adams stated that Nuffer Smith Tucker (NST) has secured 290 news articles aimed at homeowners and industry. She noted that 69 percent of media coverage focused on Southern California, 25 percent on Northern California, four percent in Central Valley and one percent along the coast. She stated that Facebook and Twitter account for 636,000 impressions, primarily in paid Facebook ads. She noted that Facebook posts get 5.4 percent engagement rate and Twitter at one percent engagement rate, significantly above the industry average of 0.46 percent. She stated that web traffic has been increasing each month, with 32,000 unique visitors to CaliforniaCitrusThreat.org and 10,000 visitors to Citrusinsider.org since October 1, 2018. She explained that emails are seeing an approximately 45 percent open and nine percent click-through rate, compared to the industry standard rates of 23 percent open and two percent click-through.

Price stated that NST produced a new Public Service Announcement for TV and radio. She stated that there has been extensive media outreach in Riverside. NST produced a campaign including a press release, a PSA and billboards in Los Angeles, Fresno and San Diego. There was a push on agricultural media on voluntary best practices resulting in four stories, a page on Citrus Insider and training sessions to ensure Grower Liaisons understand the recommendations. She stated that NST secured an interview for Victoria with the AgriTalk radio podcast. NST staffed booths at the Southern California Association of Governments Conference and the California Contract Cities Association. She explained that billboards will be run throughout California through the summer and industry meetings through summer and fall on voluntary best practices. NST intends to staff booths at community events in HLB quarantine areas over the summer and at the Rare Fruit Growers Annual Meeting in Los Angeles.

## **CCM Report**

Casey Creamer stated that there was an outreach meeting in Westminster regarding the CCM specialty block grants for tree removal in the Los Angeles quarantine. He noted that there was cultural resistance at the outreach meeting to remove trees, but 29 trees were removed, and another round of removal will start soon. He stated that Assemblyman Tyler Diep is looking to help with outreach and PSAs. He explained that due to changes to the administration, particularly in DPR, outreach is required. CCM invited Deputy Director of California Environmental Protection Agency Val Dolcini and CDFA Undersecretary Jenny Lester Moffitt to tour an HLB detection area in Riverside, as well as the BSL-3 lab, biological control lab and a commercial operation in Riverside.

#### **CRB Report**

Melinda stated that CRB has completed their Grower Seminar series in Palm Desert, Santa Paula and Exeter. These seminars highlighted the voluntary treatment and voluntary grower plans. She noted that continuing the request for proposal process, there would be a board meeting in August 2018 in Bakersfield to review new and current research proposals. She thanked those lobbyists who removed the required one-to-one matching fund requirements to National Institute of Food and Agriculture grants.

#### **CLOSING COMMENTS & ADJOURNMENT**

The meeting was adjourned at 2:43 p.m. The next meeting will be held in Riverside, California on September 11, 2019 at 10:00 a.m.