CALIFORNIA CITRUS PEST AND DISEASE PREVENTION PROGRAM COMMITTEE MEETING

Meeting Minutes Wednesday, November 14, 2018

Opening:

The regular meeting of the California Citrus Pest and Disease Prevention Committee (CPDPC) was called to order at 10:00 a.m. on November 14, 2018 in Ventura, California by Committee Chairman Jim Gorden.

CPDPC Members Present:

Craig Armstrong*	Jim Gorden	Link Leavens	Etienne Rabe
Aaron Dillon**	Ted Grether	Mark McBroom*	Roger Smith
Bob Felts, Jr.	Nick Hill	George McEwen	Keith Watkins

CPDPC Members Absent:

Ed Civerolo	James McFarlane	Brian Specht
John Gless	Kevin Severns	_

CDFA Staff:

Jonathan Babineau	Sara Garcia-Figuera	Luci Kumagai*	Maegan Salinas
Peter Betschart*	Victoria Hornbaker	David Morgan*	Nawal Sharma
Cassandra Davis*	Gavin Iacono*	Lea Pereira*	
Tina Galindo	Sara Khalid	Magally Luque-Williams	

Guests:

Gerald Anchola	Holly Deniston	Leslie Leavens	Jason Sapp*
Price Adams	Brian Edmunds	Robert Ledington*	Bill Schneider*
Atrash Ameer*	Sara Garcia-Figuera	Stewart Lockwood	Jason Schwartze*
Kevin Ball	Sue Gless*	Tom Mayhew	Cressida Silvers
Jill Barnier*	Subhas Hajeri*	Tracy Moehnke*	Rayne Thompson*
Teri Blaser	Garff Hathcoal	Edwin Moscoso*	Ed Williams
Franco Bernardi	Alyssa Houtby	Gabe Olmos	Helene Wright
Erin Betts	Melinda Klein	Curtis Pate*	Judy Zaninovich*
Jerald Canchola	Ellen Kragh	Sylvie Robillard	Sandra Zwaal*
Casey Cramer	John Krist	Robert Roma*	

^{*} Participated via Webinar

Opening Comments:

Jim Gorden welcomed the Committee, staff, and members of the public participating in person and online and stated that there is a quorum for the meeting. Jim introduced the new Ventura County Agricultural Commissioner, Ed Williams. He acknowledged that the meeting was being held in compliance with the Bagley-Keene Open Meeting Act.

^{**} Participated via Webinar but not voting

COMMITTEE BUSINESS & UPDATES

Jim Gorden reviewed the consent agenda which contained the minutes from the Committee meeting that took place on September 12, 2018 and member term renewal for Jim Gorden and James McFarlane.

Motion: To approve the consent agenda.

First: Keith Watkins Second: Nick Hill

Motion Passes: All in favor

FINANCE SUBCOMMITTEE REPORT

Bob Felts, Jr. reminded the CPDPC that the expenditure tracking was transferred to the State FI\$CAL system in July, presenting challenges for the staff. He stated that Ray Leclerc was working on a program to code expenditures, that would allow Program staff to track expenditures. Ray explained that the program will be resetting codes, adding regional codes and making a more easily understood tracking system. Codes will be organized into regions instead of cities. Ray stated that the program was unsure how granular the codes should be, and he requested the Committee email suggestions. Ray provided a mockup of 48 codes, including diagnostics, pest exclusion for Asian citrus psyllid (ACP) and Huanglongbing (HLB), outreach, biocontrol and surveys, as well as other program activities. It was suggested that the codes should be changed so they are different from previous codes, to avoid confusion. It was suggested that the codes should allow for rational expansion as our work may change from region to region.

Bob stated that the revenues for fiscal year 2017/2018 are \$14,803,172 to date, which is approximately \$1,670,000 short of the projected revenues. He expects assessments will continue to be received for October, but that the final total will be approximately one million dollars short of the originally projected revenues.

Review 2017/2018 and 2018/2019 Budget Expenditures

Bob stated that through September 2018, the budget shows \$34,000,000 while fiscal year (FY) 2017-18 expenditures totaled \$31,100,000. He explained that the Program anticipates expending half of the \$7,600,000 of fourth quarter encumbrances, bringing the total to \$35,000,000 spent of a \$40,000,000 budget, or 84 percent.

Bob stated that the Citrus Health Response Program (CHRP) will deliver \$12,000,000 to \$14,000,000, the state will deliver \$12,500,000 in general funds, and assessments are projected at \$18,000,000 based on a crop of 200 million cartons. Bob specified that the \$12,500,00 in general funds are anticipated for FY 2018-19, with \$2,500,000 in ongoing funds and \$10,000,000 as a one-time augmentation to the budget.

Victoria presented a Fund Condition Statement, noting that this is a yearly statement produced at the end of the previous fiscal year, June 2018, but could be changed to a monthly or bi-monthly report. There would be a lag time as payments are processed and potential late revenues are added. The Fund Condition Statement normally only covers the Agriculture Fund proportion of the budget (assessments and expenditures related to citrus assessments), but she also added CHRP and general fund beginning balances. She explained that for the state FY 2017-18, CHRP was \$14,100,000, over the \$12,440,000 base funds, thanks to California Citrus Mutual (CCM). She noted that CHRP

and general funds do not roll over from one FY to another while agriculture funds roll over to the following year. She explained that the AB 281 fund balance (adjusted for late charges) was \$15,170,000 in FY 2017-18. The expected revenues for the state fiscal year FY 2017-18 should total \$16,740,000. Victoria expects the total reserve to be \$10,500,000.

It was asked if spending authority doubled due to pro rata doubling. Victoria stated that there is a two-year lag between increasing agriculture fund authority and an increase in the pro rata. Each agency is assessed a set fund, broken up special funded programs and authority.

Status for FY 2019/2020 Dedicated Resources

Ray stated that there was a motion to pursue dedicated resources for the Citrus program, and the California Department of Food and Agriculture (CDFA) was implementing that motion. The Committee requested an update on the progress in procuring dedicated resources for a Citrus Program. Ray explained that all deadlines were being met and there are plans for positions to move from Pest Detection/Emergency Projects and elsewhere to the Citrus Program. Victoria noted that should the dedicated resources be approved, it would have a July 1, 2019 start date.

EXECUTIVE SUBCOMMITTEE REPORT

Jim stated there was a meeting on November 2, 2018 with Secretary Ross. The purpose of the meeting was to exchange ideas, discuss recent topics, and recognize exemplary performance among lab staff and personnel including Lucita Kumagai and Cheryl Blomquist among other lab staff. Jim also presented a certificate of recognition to Nick Hill as chair of the Citrus Pest and Disease Prevention Committee and the Executive Committee over eight years of service and noted that Craig Armstrong and Kevin Severns will receive similar awards for their service on the Executive Committee.

OPERATIONS SUBCOMMITTEE REPORT

STRATEGIC PRIORITY 1 - Find and Eradicate HLB

HLB Survey Update

Tina Galindo stated that delimitation survey in Pico Rivera is 95 percent complete but added a new expansion area early in November 2018. The Rosemead area survey is 98 percent complete and has no expansions, and Whittier is 90 percent complete but has a new find. Tina explained her team is re-surveying San Gabriel to 200 meters now with a 400-meter re-survey to be completed after delimitations are done. She noted a new tree was found in the San Gabriel core, but it will not expand delimitation areas. Tina stated that Duarte is 21 percent complete and surveyors started work in the Lakewood area.

Tina explained that as new sites appear, her team performs intensive sampling on other trees on the find site and adjacent sites. She noted that there has not been an inconclusive result to resample since September. When asked how resampling works, Tina noted that following the initial leaf samples for find site trees, her team collects quadrant samples of 80-160 leaves for each tree on the property and adjacent properties. She added that this procedure was not in place during the initial sampling in San Gabriel and is not the procedure in all areas. When asked, Magally Luque-Williams noted that during delimitation surveys, staff look for symptomatic leaves, not new growth, and pull five leaves per quadrant equaling 20 leaves total. Victoria stated that quadrant

sampling requires taking 20 leaves from every quadrant of the tree compared to the pooled 20 leaves from the original sample.

Magally stated that risk-based surveys are completed in all counties except Los Angeles County and 42 miles on San Bernardino, due to Newcastle Disease. She noted that 48,000 sites have been visited, with 15,407 entomology samples and 6,565 plant samples taken. Cycle 2 has begun in San Diego, Riverside, San Bernardino, Imperial and Orange County, but data is not yet available.

Magally explained that delimitations in La Habra, Riverside and San Bernardino are complete. HLB delimitations are 49 percent complete in Anaheim with 233 positive trees, Fullerton is 96 percent complete with one tree, and Orange is 70 percent complete with 23 positive trees. Garden Grove is 17 percent complete but growing with 336 HLB-positive trees, Westminster is 18 percent complete with 15 trees, Santa Ana is at 27 percent and 36 trees, Yorba Linda is 99 percent complete with one tree and Tustin is 98 percent complete with five trees. She noted that Pico Rivera detections are growing with 100 HLB-positive trees. The Program has detected HLB on 704 properties and found a total of 938 HLB-positive trees and 199 ACP samples positive for CLas.

Magally stated that her team completed 335 quadrant samples in October, and 38 quadrant samples in November. She explained that Imperial County border treatments are 76 percent complete and San Diego fall border treatment are 100 percent complete.

Ray noted that there would be another survey taking place in commercial orchards, and the existing risk survey will be 25 percent bias towards commercial groves.

HLB Diagnostic Update

Luci stated that in October, CDFA tested 7,367 plant samples and 10 ACP samples, the Citrus Research Board (CRB) tested 4,560 ACP samples and University of Arizona tested 763 ACP samples for a total of 12,700 samples. Plant and ACP samples to date are up to 129,550 samples, on track to surpass last year's total with an expected total of 165,000 samples processed. Luci explained that 657 trees have been removed and 133 ACP samples taken from 468 HLB-positive sites in Orange County, 287 HLB-positive trees removed. 66 ACP samples were taken from 241 sites in Los Angeles County, three trees removed, and three ACP samples taken from four sites in Riverside and one ACP sample was taken from one site in San Bernardino.

When asked, Luci stated that CDFA is able to reach a maximum lab capacity of 2,800 plant samples processed per week for a total of 138,000 samples processed per year. Luci explained that plant samples are much more labor-intensive than ACP samples; removing leaf mid-ribs, chopping the sample, and freeze-drying tissue for 24 hours. Victoria noted that soon, ACP samples will be going from field to CRB without any CDFA lab involvement.

STRATEGIC PRIORITY 2 - Control ACP Movement and Enforce Regulations

Regulatory Activity Update

Nawal stated that all growers, packers and haulers have been informed of compliance regulations. He noted that there has been good attendance and discussion at packinghouse meetings. Nawal noted the counties enforce the compliance agreements under contract with CDFA. He noted that as of September 30, 2018, there are 7,000 growers under compliance, primarily in Central California. Nawal explained that 62 percent of growers, packers and transporters under compliance

are in Zone 2, 25 percent are in Zone 5, and 11 percent are in Zone 4. Nawal stated that many counties, particularly in Zone 4, have no transporter and packer inspections. He also stated that there is significant variation in enforcement. He suggested that the program has enough manpower to discuss these issues with county counterparts. Only two counties have significant Notice of Proposed Action (NOPA) violations. Nawal stated that he plans to share data with the Agricultural Commissioners.

It was noted that the ACP free declaration forms were revised to clarify the original intent of field cleaning to be Machine Field Cleaning.

Nawal discussed the movement of bulk citrus from the Riverside HLB quarantine from October 1, 2017 to September 30, 2018. He explained that there are 67 square miles of HLB quarantine in Riverside County and 33 square miles of HLB quarantine in San Bernardino County, encompassing 25-26 growers. In an HLB quarantine area, a grower moving product to a packinghouse within their quarantine area requires only one mitigation, either "field cleaning" or "spray and harvest." In an HLB quarantine area, a grower moving product to a packinghouse outside the HLB quarantine area requires a "wet wash" or by performing both "field cleaning" and "spray and harvest." Almost 1000 bins were moved outside the HLB quarantine areas to a packinghouse two miles outside the quarantine area and almost 500 bins were moved inside the HLB quarantine area. Ventura County is concerned and thinking about what happens if they come into that situation.

Link Leavens discussed the desire to combine ACP regional quarantine Zones 3 and 4 into one zone and it was noted that this item would be discussed under the Science Subcommittee.

STRATEGIC PRIORITY 3 – ACP Control/Suppression

Regional ACP Management

Biocontrol Update

Dr. David Morgan stated that the Biocontrol program has released over 12 million *Tamarixia*. He explained that CRB's field cage production is winding down, but greenhouse production will continue into the winter months. The program is ahead of previous years, and David expects to achieve nearly four million *Tamarixia* releases in 2018. He stated that the Biocontrol program is focusing releases of 2.5 million agents around HLB find sites, borders and transportation corridors. David explained that transect data showed that if 4,000 or more *Tamarixia* are released within one kilometer of a monitoring site in a previous month, it drives down ACP in the area significantly. David stated that the program can produce sufficient numbers to make this a viable approach.

It was asked how biocontrol measures efficacy, and the budget required per insect. David explained that *Tamarixia* costs less than 20 cents per insect which is considered expensive, and production increases will be dependent on funding. He stated that Dr. Neil McRoberts is producing an overall evaluation of components and David will produce charts tracking *Tamarixia* per month.

David discussed follow-up information on the *C*Las-positive ACP found in the Mount Rubidoux Biocontrol Facility. He explained that Luci and the CRB lab tested vegetation surrounding the lab, tested all insects and hundreds of plants involved and have found no further *C*Las infections. Local citrus has been treated to ensure they are not infested with ACP. Victoria stated that following the

incident she consulted with the United States Department of Agriculture (USDA) Science and Technology staff, and the USDA staff is confident this was a one-off anomaly. David will continue to work with CRB to regularly monitor the ACP colony, and is building up a new population using ACP from University of California Riverside. Victoria stated that there was a meeting to add new areas to biocontrol releases, and biocontrol will be performing releases in Maricopa area of Kern County and as a buffer around the 400-meter treatment area in Visalia.

Jim noted the Biocontrol Task Force will be meeting in early February in Riverside, seeking updates on all aspects of the program.

When asked about Visalia releases, David Morgan stated he planned 10,000-15,000 releases targeting find sites. Victoria noted that any find sites of breeding populations in Fresno had priority for *Tamarixia* agent releases. Victoria specified that *Tamarixia* releases will only occur on residential properties, not in the commercial groves.

Southern California Treatment Update

Tina stated that retreatments are completed in San Gabriel, La Puente, and Hacienda Heights, and treatments are completed in Santa Ana and Tustin. There are pending HLB treatments in Duarte, Lakewood, Orange, Tustin, Anaheim, Riverside, Pico Rivera, Whittier, San Bernardino, Garden Grove, Fullerton, Santa Ana and Rosemead. Area-wide treatments in San Diego, Imperial, Riverside, San Bernardino, Ventura and Santa Barbara are pending public meetings. Tina stated that her program has 12 dedicated trucks in Los Angeles County and 14 in Orange County and that each truck can treat between 17 and 35 sites per day.

ACP Detection/Treatment - Central Valley Update

Cassandra Davis listed ACP finds for 2017 and 2018. She stated that Fresno contained one find at a packing house. Kern County had 17 Pest Damage Reports (PDRs), 526 adult psyllids and 651 nymphs found, primarily in the Maricopa area. There were five no host properties within 800 meters of Maricopa-1 and treatment is complete. There was an additional detection in Maricopa (Maricopa-2) with treatment pending. One of the Maricopa-1 finds was at a property owned by a person that also owned several properties in Bakersfield. Surveys found one find site in Arvin with one psyllid found and two find sites with two psyllids found in rural Mettler, with one residence within 800 meters of one of the Mettler find sites which is treatment pending. Cassandra stated that two commercial finds were in a rural area of Mettler, but there were no residential find sites to treat as the detection was on a commercial property.

Cassandra stated that there was one commercial find in Santa Maria of San Luis Obispo County with no residences within 50 meters. Cassandra explained that her team surveyed the Nipomo area of San Luis Obispo and found no sign of psyllids. She stated that Tulare County has one new find north of the city of Tulare with one ACP that has not been officially identified yet. She noted four find sites in Northern Visalia with a total of 262 adult psyllids and 111 nymphs found. A public meeting is scheduled on December 3, 2018 to allow 400-meter treatment on those sites, which Victoria Hornbaker requested be moved earlier. 125 properties received an extended visual survey in North Visalia, and 85 properties were surveyed in Farmersville. A single ACP was found in Exeter, and 50-meter treatment is scheduled.

Area-Wide and US/Mexico Border Treatments

Ray Leclerc stated that Mexico has developed a new sampling plan on their side of border within a two-mile buffer zone. They do not collect plant samples, but will collect ACP for analysis. They have not detected any *C*Las-positive ACP on their side of the border. They treat up to 400 meters with soap and horticultural oils in urban areas. He stated the border agents on the US side were professional, skilled and proactive in searching for fruit.

Victoria stated that previously there was a meeting between CDFA's counterparts in Mexico and the San Diego Agricultural Commissioner to harmonize activities on both sides of the border, with the Imperial Agricultural Commissioner setting up an additional meeting in the future.

STRATEGIC PRIORITY 4 – Improve Data Technology, Analysis and Sharing Science and Technology Meeting Updates

Dr. Etienne Rabe stated that from a cost/benefit analysis, the subcommittee has issues arising with sharing information. He has requested a discussion take place on the subcommittee objectives and goals. Etienne explained the subcommittee's recommendation on area-wide buffer treatment regulations. Etienne noted that the timing and manpower requirements could complicate treatment, but the ideal treatment would be Merit and Tempo treatments in August and September and Tempo in January and February. He stated that Dr. Beth Grafton-Cardwell believed this to be the only way to get ahead of the issue.

Etienne stated among the Operations and Science Subcommittees there is a movement from Neil McRoberts to define exposure around a find site. He defined exposure as a tree being near enough to have a significant chance of HLB spreading from an HLB find site. They suggest that an 80-meter survey would find 80 percent of adjacent finds, and a 170-meter survey would find 95 percent. He noted that Dr. Setamou in Texas possessed data on commercial groves and was willing to collaborate with Dr. McRoberts. It was stated that positive trees and negative-tested trees can be adjacent, requiring frequent retests. It was suggested that this exposure theory may be recommended for residential areas but are more likely to harm commercial groves long-term. It was also asked how applicable Texas data is due to Texas not having a removal program.

Etienne stated that the subcommittee's stance on mitigations to remove ACP include spray-and-move and machine field cleaning. Hand field cleaning was not intended to be included as a mitigation measure and if growers want to use it, they will need to request review and approval from the County Agricultural Commissioner and CDFA. Victoria noted an advisory has been sent out to counties.

Etienne reported on performance standards for Evergreen registration. He explained that a Section 3 for oranges and mandarins is in place for Evergreen high-pressure spray, and a Section 18 is being applied for lemons and grapefruits and will be in place soon. It was noted that according to the EPA there are no problems expected, but that Evergreen must go through the registration process. Victoria thanked Lori Apodaca from California Citrus Mutual for getting the Standard Operating Procedures for post-harvest applications approved by the Department of Pesticide Regulation (DPR).

Etienne explained that Jim Cranney had meetings with the registrant regarding Ethyl formate and Spencer is designing new trials as well. The timeline continues to have the system in place in the second half of 2020. Etienne discussed how Sara Garcia-Figuera together with the Data Analysis

Tactical Operations Cell (DATOC) has been refining the qualitative risk matrix for fruit movement between zones presented on March 14 and May 2, 2018. A panel of stakeholders were selected and interviewed to assign a qualitative rating to travel between each zone. He noted that there was some disagreement among stakeholders on organic/abandoned/mismanaged citrus in Zone 7 and potential for control in Zone 3. He stated that Sara will present the new table of ratings and risk factors on December 6, 2018 to produce a recommendation to the full Committee in January 2019.

It was suggested that two zones be put together due to San Benito, Monterey, San Luis Obispo and Santa Barbara shipments primarily traveling south to Ventura County. Victoria stated that the Sara Garcia-Figuera model should provide data on travel between Zones 3 and 4 and this topic could be revisited then. She also noted that a protocol is being produced to rollback a more ACP-active county back to Zone 1.

STRATEGIC PRIORITY 5- Outreach and Education Outreach Subcommittee Updates NST End of the Year Report

Price Adams stated that Secretary Ross requested Nuffer Smith Tucker (NST) to amplify the story and successes of *Tamarixia radiata*. Price explained that NST hosted a media event at Cal Poly Pomona, receiving 600,000 media impressions across print, online and radio. She noted that NST performed outreach in Tulare and Kern counties regarding ACP breeding populations and in Lakewood and Duarte regarding HLB detections and partnered with ET-TV to promote media clips. NST attended the California Association of Pest Control Advisers (CAPCA), California Association of Nurseries and Garden Centers (CANGC), the CRB Annual conferences, packinghouse meetings in Ventura and performed outreach to gleaners. Price stated that Bob Atkins and Jason Schwartze partnered with the San Diego Agricultural Commissioner's office to send letters out to 4,200 Rancho Santa Fe residents and receive 200-plus new contacts. NST also reached out to the cities in the newly expanded quarantine zone: Duarte, Artesia, Huntington Beach, Lakewood, Lynwood, Seal Beach and Westminster.

Price explained that NST produced double the number of stories compared to last year. 2,200 broadcasts and 46,120 pieces of literature have been distributed, including new materials regarding tarping and Cambodian/Tagalog HLB inserts. Facebook and Twitter followers have increased by 20 percent. Price explained that the redesign of the mobile-friendly CitrusInsider.org website is in its last stages and should open to the public soon. NST is finalizing a report about HLB grower forums on what growers would voluntarily do if HLB is found in their area. NST has reached out to elected officials in every city where HLB has been detected, presented materials to six city councils and presented Citrus Hero awards recognizing government workers.

CCM Report

Joel Nelson stated that if the Federal budget is not passed in three weeks, CHRP will have allocations based on this year's budget. Joel noted that if the budget is passed, CDFA should expect a bump up from last year's figures. He stated that the Farm Bill is set to receive required funds, despite colleagues attempting to set up a similar program. The HLB Multi-Agency Coordination Group (MAC) program will be fully funded again this year. He noted there was potential cooperation opportunities between the Agriculture Research Service (ARS) and CRB regarding HLB.

CRB Report

Franco Bernardi stated that the CRB Jerry Dimitmen lab and Biocontrol lab have seen significant improvements and are fully functional. Dr. Melinda Klein stated that CRB currently has 59 active projects, 21 continuing/core projects, and 22 new projects in progress. CRB will be working with NST and Dan Willey on public outreach. She noted that CRB considers prophylactic and microbial projects of interest. There was an HLB MAC regulatory summit in Denver, Colorado, the goal of which was to speed up the breeding process of HLB-resistant varieties. Melinda explained that CRB will be conducting risk assessments for movement between budwood centers and permits for breeding material shipped between states. The International HLB Conference is scheduled for March 10-15, 2019 in Riverside, California.

CLOSING COMMENTS & ADJOURNMENT

The meeting was adjourned at 2:32 p.m. The next Committee meeting will be held in Visalia, California on January 9, 2018 at 10:00 a.m.