

Citrus Research Board
Citrus Pest and Disease Prevention Committee
Joint Operations Committee Meeting
Citrus Research Board Office
Conference Room
217 N. Encina Street
Visalia, Ca 93291
Minutes of Meeting
April 4, 2012

A Meeting of the Citrus Research Board/Citrus Pest and Disease Prevention Committee Joint Operations Committee was called to order by Chairman Dan Galbraith at the Citrus Research Board Office, Conference Room, Visalia, California. A quorum was established with the following in attendance:

Committee Members

Dan Galbraith, Chairman
Link Leavens, Vice Chairman*
Mark McBroom*
Etienne Rabe
Dan Dreyer
Jim Gorden
Kevin Severns
Kevin Olsen
Joe Barcinas*

CRB Staff

Ted Batkin
MaryLou Polek
Louise Fisher*
Cynthia LeVesque*
Brian Taylor
Rick Dunn
Brent Eickelberg
Fe Sylvester

CDFA Staff

Susan McCarthy
Art Gilbert,
Bob Luna
Debby Tanouye
Tina Galindo

Interested Parties

Anne Warring
Stephen Birdsall*
Sharon McNerney*

Ex-Officio

Earl Rutz*
Nick Hill

*Participated by Phone and/or WebEx

Call to Order

Chairman Galbraith welcomed all in attendance. Roll call was taken to confirm who were attending including those via audio conference and/or WebEx.

Review of Minutes

Chairman Galbraith asked if anyone had any questions, additions, edits or corrections to the last Special Operations Committee Meeting Minutes held on February 22, 2012. Rabe asked why is it that Hill is still listed as interested party, as he (Hill) is the chairman of CPDPC. Batkin answered that CRB meeting minutes format is still a work in progress. Rabe asked further if the minutes are in behalf of CRB or on behalf of both CRB and CPDPC. Batkin answered that these are joint minutes, for the CRB portion for the Marketing Branch as required by law, he (Batkin) has to certify and send them. CRB does not make two separate sets of minutes. When Batkin certifies the minutes, he is certifying on behalf of the actions of the CRB Ops Committee. For the CPDPC portion, these go to McCarthy and she does what she has to do through the department to execute whatever action steps are for CPDPC. McCarthy said that these are published on the CDFA website. Gordon made a clarification on the motion he made on page 7, that the motion was actually to recommend "that the" CPDPC trapping program transition to CDFA by April 1, 2012. Just change the word "for" to "that" on the wording of the motion. It would then read: Gordon moved to make a recommendation **that the** CPDPC trapping program to transition to CDFA by April 1, 2012.

Review of financial reports and approval of CRB action items and expenditures.

Fisher reported that CRB received the October, November, and December monies that were billed to CDFA on March 6, 2012. The January invoice was submitted on February 23rd and the February invoice was submitted on March 12, 2012, but no funds were received for either one of the invoices. It is about \$350,000 on the January/February invoices. Severns asked how much is the February invoice. Fisher answered it is \$162,500 and the January invoice was \$184,000. On the February invoice, one item Fisher was asked to address and that is the Visalia lab, why it was over-budget. Fisher explained that there was a little over \$10,000 in scientific equipment that was budgeted last fiscal year to get the lab ready in Visalia, but the invoice did not come in until this year. That is part of the \$23,000. There was \$10,000 budgeted for the Visalia lab for this year for supplies and then there was an unexpected expense for air conditioning, trying to get the temperature in the back room so it wasn't too hot for the workers. CRB is not far off if you disregard those two items. Severns asked regarding the structure of financials, does it allow for the CRB to accrue for the Visalia lab expense so it will not have a negative balance when the invoices come in. Fisher replied "No." Batkin added that CRB is audited based on accruals but it has to report on cash. Severns stated that in reality, the expense took place during last year but CRB has not received the paperwork until this year. Batkin clarified that CRB cannot carry last year's \$10,000 budget over to this year's budget. If the invoice came in within 30 days after the end of the fiscal year, the auditors would back it into the previous fiscal year and the lab expense invoice did not show up within that 30-day window.

Rabe asked about the repairs and maintenance done to the lab and he wanted clarification if that is a building expense. Batkin concurred that it was posted on the wrong category so it would be moved into the building category.

Budget Update:

a. CDFA Transition Budget Projection

Debby Tanouye

Tanouye reported that in the budget, there is one senior supervisor, Gilbert. There would be an office assistant for paperwork, timesheets, etc. The general expense for office and field supplies is \$5,000 per new employee and \$5,000 for employees that transferred. CDFA also has to charge for the PDR pads that would be used to trace samples submitted to the lab. On communications, there are 20 cell phones at \$50 and \$58 mifi per month for twelve months. Tanouye reported that CDFA is going to buy five new Nomads and five MiFi units that the CRB has. There is postage for the overnight mailing of samples and regular mail and payroll. There is a budget for travel for three employees. CDFA is going to have three rovers that will be stationed at Gilbert's office in Fresno in the event someone gets hurt or sick, and they will travel to any location where they may be down one trapper. The rovers would also be used for conferences or meetings that Gilbert or anyone in his department has to go to. The external consulting is basically the CASS contractors, and it also includes the four readers from CRB. There is one vehicle for field and three rental vehicles that are going to be assigned the contractors including the Placer County contract. Equipment is one computer, the five Nomads, a couple of microscopes and the magnifier lights. Other items of expense are the traps, trap-hangers, paperclips, zip lock bags, gloves, stripping boxes, etc.

Batkin reiterated that regarding the Nomads, the agreement was CRB would provide all the Nomads. Tanouye concurred, but the five additional Nomads CDFA is purchasing are for replacement in case of breakage. Batkin clarified that that is part of the contract (maintenance and replacement of Nomads). Tanouye agreed, and CDFA will take it out of their budget. Rabe asked about the rovers, on what would they be doing when they are not needed for emergency. Gilbert

answered that the rovers would be working on other projects and would be billed to other PCA codes, so if there is no emergency, the cost for the rovers would be lower, because CDFA will only bill CRB for the mileage that was used on the trapping program. Batkin stated CRB owns 23 vehicles, so CDFA's costs to the program are fuel and maintenance for the 23 vehicles.

b. CRB Transition Budget Projection

Louise Fisher

Fisher reported the projected amounts to transfer to CDFA for the field trapping and survey is \$811,905.50. In the past, the three lead technicians were part of the field department budget plus Brian. CRB would retain \$51,400 for Taylor, which means that would leave \$73,467 that would essentially move to CASS to cover Adrian Riofrio, Lora Marx, and Robert Stevens as lead trappers. For CASS staffing, there is \$629,416 available to transfer. Trap readers are \$104,513.78. Tanouye requested \$30,000 on the Placer County contract. There was \$3,423 that Placer County contractors did not send to CRB. It was December before CRB received the invoice. The \$760,505 is the best estimated amount that is available to transfer to CDFA, because CRB needs to retain the \$51,400 for Taylor.

c. Combined Budget Projection

Susan McCarthy

McCarthy stated that all the adjustments on the combined budgeted projection would be made and ready for the April 18, 2012 meeting.

Detection Update

a. CDFA

i. Trapping

Tina Galindo, Debby Tanouye*

Galindo stated that inside the blue line, CDFA is continuing to remove the traps and there are a hundred sites selected to monitor the ACP population. They are trying to spread the traps (one in a square mile within the grid CDFA selects) throughout the blue line. Some sites are in San Bernardino, Orange County, but mostly throughout Los Angeles County. She reported that CDFA is to collect the traps and samples in the one hundred heaviest sites to monitor the ACP population in that area. CDFA would monitor the traps, do visual surveys, and collect live insects. Polek asked how often and how many properties are they going to do these activities. Galindo answered it would be a hundred properties, a hundred traps, and a hundred sites. Polek stated that from a scientific point of view, that number of traps is not enough. Gorden stated that the number of traps was suggested by the CPDPC Science Committee, Gorden believes that the number issue is still a work in progress. He stated that the science committee would be dealing with sampling, and that issue of the number of traps would be coming back again. Polek pointed out that this issue will be discussed among others on Friday's (April 6, 2012) Science Committee conference call meeting. Galindo stated that that is going to be in addition to the Sentinel survey. Rabe clarified that the Sentinel Survey, is a visual inspection plus sampling, it has nothing to do with ACP, ACP sampling and HLB/ACP symptoms. Gorden asked if CRB has any projected cost to operate the Sentinel Survey. Polek answered that that would be discussed on Friday's meeting.

ii. HLB Survey

Susan McCarthy

Galindo reported that on March 22, 2012, CDFA was asked to return to Hacienda Heights where CRB tested an ACP sample positive for HLB on a lemon grafted with a pummelo tree. CDFA collected samples from the find site, treated it as well as all the adjacent properties right away, and completed an 800-meter visual survey of all the hosts in the area on March 23rd, 2012. On that day, they collected three nymphs and five adult ACPs from the property and they came back negative for HLB. They visited 1,100 properties, and are still trying to get the rest of the properties. The owner of the HLB positive tree has four citrus trees. Galindo projected photographs (collected on March 23) of the tree that tested positive for HLB. CDFA sent

professionals and translators to investigate the source of the tree.

LeVesque added that the positive sample was comprised of three adult ACPs collected in December 20th, 2011. McCarthy clarified that the ACP sample was run by CRB on March 22nd, 2012. Rabe asked for clarification, if the timeline from December to March is the norm for testing ACP and samples for HLB.

LeVesque stated that it is not. She explained that the Riverside lab received a large number of samples in November and December and they were down three persons. So they received four times the number of samples in November and then on the 30th of December, they received again a really huge amount of samples. LeVesque immediately hired two people in January and another in February.

Initially CDFA was sending the CRB lab large numbers of psyllid samples about once a month. This would cause a temporary backlog in sample processing so she requested that samples be sent weekly. This started in January so there was still a backlog from November and December. The first time that LeVesque was aware that CDFA was no longer treating in LA was in January. At that time she had both the backlog of samples and was receiving new samples weekly. She could not ignore the new samples, which may be coming from untreated sites. It was her decision to process some of the backlog samples and some of the new samples at the same time.

Rabe asked for clarification as to what is a large number of samples. LeVesque answered four hundred vials, and in each vial there can be, in many cases, hundreds of individual insects (as many as 600). They load five insects at a time into a well of a plate, so it takes a long time to process. The CRB lab is doing about 11-12 plates a week, so times 96. They are now keeping up with what they are receiving on a weekly basis. Severns and Rabe asked how the collection process works. Galindo and LeVesque explained the process in detail.

Galindo reported that the infected tree will be removed on Friday after Vidalakis checked and confirmed the variety and age of the tree. Barcinas asked what they treated the tree with. Galindo replied they used Imidacloprid, Merit@2F, and the Beta-Cyfluthrin for the foliar spray. Hill asked what CDFA is doing to make sure that the home-owner is not cutting pieces and grafting the tree for propagating elsewhere. McCarthy answered that they issued a hold on it, not to cut pieces from it – that is part of the investigation process. Rabe suggested that Mike Roose is the best in identifying the variety of the tree. McCarthy agreed and said that CDFA will arrange for Mike Roose, along with CDFA people to visit the Hacienda Heights property to classify the tree, and then the tree will be removed.

Chairman Galbraith asked what the strategy going forward is for the HLB infected area. Galindo answered that an 800-meter treatment will begin on Monday, and after treatment, they are going to put a hundred traps in the square mile, and then conduct visual surveys. Hill asked how often does CDFA go back and re-survey the trees. Galindo answered that they will collect a tissue sample from trees that have symptoms as they do the visual surveys.

Batkin said to let this process move forward, get as much as they can glean from the infected tree and move on in a systematic manner. CRB has started the next phase of their lives here with this discovery. CRB is no longer in plan B where they are just looking for psyllids around the state and treating it. They are now in plan C, when CRB has to go at it systematically, calm, and well-thought out. The disease does not move fast, as proven in Florida and other places. CRB has time to do it right. The infected tree should be removed as soon as possible. He said that Dr. Leavitt

has a plan to get as much of this plant materials preserved and into the right scientific hands as they can.

Severns suggested that if the tree cannot be removed soon, this should be communicated properly as to why. McCarthy concurred, but added that until there is an official confirmation from USDA, they can't do anything. She added while they are waiting for USDA confirmation, they are in consultation with the legal department on how to move forward. Tanouye stated that CDFA will make sure there is no re-sprouting from the infected tree.

b. CPDPP Transition Update

Art Gilbert

Gilbert reported that as of Monday, all but two people who could not show up for orientation in both Riverside and Visalia have been transferred over to CASS/CDFA employment and would start reporting to him instead of to Brian. A 19th trapper was hired on Monday and is being trained by Lora Marx to take over the area that was split up amongst other trappers. One trapper in Kern County has been out for six weeks and is projected not to come back for at least a couple of months. So Gilbert has taken one of his people from his office and he will be riding with Lora Marx on Thursday and Friday using the trapper truck and equipment out of Bakersfield and stationing it at his facility in Shafter. As a regulatory program, CASS needs to keep this closer to the two-week servicing interval. Right now, a lot of traps have gotten far behind, so the intent of having the 19th trapper into the program is to get all traps much closer to being on a schedule of regular two-week servicing interval.

c. Lab Operations

Cynthia LeVesque*

LeVesque reported that they tested 24,480 ACP that equates to 4,896 pooled samples, and 1,728 CDFA nursery plant samples. There was one ACP sample that tested positive for HLB Las. That sample consisted of three adult insects pooled as a single sample Ct values obtained were 26.6925 and 25.4857 and the WGLS CT was 25.4671, it tested positive with Hong Lin's nested primers and HRM, and it tested positive with both conventional Las primer sets, and it also tested negative for plasmid contamination using M13 f/r.

LeVesque and Madishetty attended the New Technologies Conference in February. They already set up 2012 standing orders for supplies. They attended a Luminex workshop to evaluate QuantGene Plex. They continue optimization of procedures- final evaluation of beads. They have evaluated high throughput instrumentation options. Goal for April 5 to May 2, 2012 is to develop high throughput versions of the CTAB and Trizol total nucleic acid, and Buffard RNA extraction procedures with vendors. Their current staff is three permanent full time, one lead trap reader, six part-time trap readers, and three California State University of San Bernardino interns.

Batkin asked what the current baseline is for staffing and if CRB needs an expansion of capabilities. McCarthy answered that they are having a meeting tomorrow to discuss the overall sampling plan, who can do what, how many people are certified to do these, and see how best to move forward. LeVesque stated that with current staffing levels, the CRB lab can test twelve hundred samples per week. Rabe asked what is the limiting factor – is it the personnel or the equipment. LeVesque answered that it is the time involved in loading samples into the plates. The CRB lab is modifying that procedure to speed up the plant samples, cutting the time in half from seven minutes to three minutes per samples, but there is no way to speed up loading the insect samples. Rabe asked if the loading is manual thing, it is not equipment limitation. LeVesque concurred.

Severns asked for clarification that we do not actually know for sure that there was one positive psyllid, they have a sample which was of three psyllids that was positive. LeVesque concurred. Polek clarified further that those were adult psyllids, at least one of them was positive, maybe two, maybe all three. It is also possible that those psyllids flew on that tree from some other positive tree somewhere, whereas if they were nymphs, then they can make a direct correlation between the tree and psyllid. Gorden asked for clarification that more samples can be processed if there are more people processing. LeVesque concurred and added that the PCR lab machines can be run around the clock, if necessary.

d. Data Management

Rick Dunn

Dunn reported he has three major tasks in addition to his daily: 1) Transition of the trapping program to CDFA, 2) Conversion of the field database (MS Access to MS SQL Server), and 3) Statewide citrus mapping project.

- 1) Transition of the trapping program to CDFA. With the transition, Dunn has been providing a lot of information to Gilbert and to Casey Estep's department in Sacramento. There are some aspects that are still in progress and these items are a) Prep new trap-site layers for Nomads and, b) Produce new map binders for the trappers. Additional items are dependent on further development of the database in house, and these are: a) Summary trapper statistics, b) Trap reader statistics, c) Active trap-site layer, daily and d) Cumulative data file daily.
- 2) For the database conversion project, (MS Access to MS SQL Server) the initial development is completed. Both databases are running in parallel, just in case. The principal components are fully functional and tested. Some additional developments are required in order to complete this transition. Dunn stated he would be bringing a proposal to the committee at the next meeting. Components of the new database already in use include: set up/log-in screens, chain of custody, time clock, quality control, and the trap editor. The scheduled imports are all working well. Components he will be talking about next meeting involve the data review and the scheduled export functions.
- 3) Statewide citrus mapping project. Over the last month, Dunn conducted seven interviews by phone and Webex with Ventura PCAs, PCOs, packing houses, and farm management companies. Using the Webex interface Dunn went through with them block by block and input their information for properties that they have direct knowledge of. The groves are digitized and some information was given to CRB by other sources like the Ag Commissioners and those are incorporated to the mapping project. APNs are associated with citrus blocks as is County Ag Commissioner Permit information. Some counties are "either or." For example, for San Bernardino County, CRB is heavily relying on the APN data. In Ventura County, CRB is heavily relying on the Ag Commissioner's data for contact information. Dunn stated the CRB maps has information about the citrus commodity, the pest control adviser's identity, the pest control operator's identity, the farm management's company's identity, and packing house identity. For some blocks, CRB is getting input in terms of whether the blocks are under conventional or organic management. The data collection is being done in concert with UC-Kearny's GIS staff. Most of the grove mapping (digitizing) status is very near completion. In Kern County it is well over 99%.

Leavens asked the status of the budget mapping project. Dunn replied that budget for the mapping project is good through the end of the year. The budget for the UC-Kearney contract

was for seven months of the specialist that works for CRB, assuming he is working full-time.

Treatment Update

a. Residential

Tina Galindo

Galindo stated that as reported earlier that the infected tree was treated with Imidacloprid, Merit®2F, and the Beta-Cyfluthrin for the foliar spray. The tree would be removed on Friday after Vidalakis checked and confirmed the variety and age of the tree. Taylor asked Galindo for a map of what areas have been included in the public meetings so he can relate it to commercial citrus. That would be useful information for CRB to know where CDFA is notifying growers/residential owners mandated to treat.

b. Commercial

Brian Taylor

Taylor reported one new property in Riverside that is a commercial grove that has ACPs. There are two commercial groves in Riverside that require follow up. Other than those three, CRB is up-to-date on commercial treatment. Hill stated that Sunkist has resolution where they are going to push onto the packinghouses "treatment required" to growers. A lot of the packinghouses have already passed the resolution. Also, Hill stated that CCM is speaking with individual citrus owners about the importance of treating.

c. Biocontrol

Brian Taylor

Gordon reported that task force is continuing small releases of the Tamarixia in a number of areas mostly within the blue line of the map. The scientist behind the release program found some evidence that it has been effective in two areas and one specimen examined had a wasp exit hole in the ACP nymph. Gordon also stated that his committee is going ahead with plans to create a rearing facility at Cal-Poly Pomona. Batkin followed-up with a statement that each one of the committees have done their job and the task force is executing just as authorized to move forward. CRB would have a combined report out by Monday that would list progress of biocontrol. Batkin reported that as a result of the task force work and the rearing sub-committee, the university put together a proposal for funding the biocontrol project. The proposal was submitted to the CRB, it was reviewed by the Pest Management Committee last week. They approved to move the project forward subject to identification of the funding. The funding for the rest of the fiscal year is \$101,517. There is a state SCRI specialty crops dollars that could be applied for biocontrol, and it would take six-months for approval. Batkin stated that Dr. Leavitt recommended that this initial funding be requested from the CPDPC so the CRB can execute this biocontrol project through this fiscal year. The proposal will be presented to the full CPDPC on April 18th, 2012. The committee recommended to the Secretary of Agriculture that the funds be channeled back through the CRB by the direction of CDFA's MOU. CRB would execute the contract with the university. The reasons funding is channeled through the CRB instead of CPDPC are 1) Expediency – CRB can execute the contract immediately, and 2) CRB has the ability to not pay overhead – if CPDPC directly contracts through the state with the university, there is 35% additional overhead that the university will charge to do the project. Batkin stated that the marketing program has an agreement with the university that the CRB does not have to pay overhead.

04.04.2012 Gordon moved to recommend that CPDPC fund the biocontrol project, authored by Richard Stouthamer for the remainder of this fiscal year (that is through October, 2012) in the amount of \$101,517. Dreyer seconded the motion.

Motion Passed Unanimously

Update on CDFA Trapping/Treatment Operations

**Tina Galindo, Debby Tanouye
and/or Susan McCarthy**

McCarthy stated there is a CPDPC meeting on April 18, 2012. Galbraith stated that the subject on trapping/treatment operations was covered earlier in Galindo's report under the heading "Detection update" and under sub-heading: "Trapping."

CPDPC Report

McCarthy has nothing yet to report.

Chairman Report

Chairman Galbraith has nothing to report.

Adjournment

The next meeting is scheduled for May 2, 2012 10:00 a.m., at the CRB Conference Room. Meeting was adjourned at 12:12 p.m.

Certification:

I, Ted A. Batkin, President of the Citrus Research Board, do hereby certify that, to the best of my knowledge, the foregoing is a true and correct copy of the Minutes of the Meeting of the Citrus Research Board Operations Committee held April 4, 2012.

4/17/12
Date:

Ted A. Batkin
Ted A. Batkin, President