

Citrus Research Board Office
CRB/CPDPC Joint Operations Committee Meeting
CRB Conference Room
217 N. Encina Street
Visalia, Ca 93291
Minutes of Meeting
June 6, 2012 10:00 a.m.

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:

Joint Committee Members

Dan Galbraith, Chairman CRB Ops
Link Leavens, Vice-chairman CRB Ops
Dan Dreyer
Kevin Severns
Jim Gorden
Joe Barcinas*

CRB Staff:

MaryLou Polek
Brian Taylor*
Rick Dunn
Cynthia LeVesque*
Emma Torres
Brent Eickelberg
Fe Sylvester

CDFA Staff:

Susan McCarthy
Art Gilbert
Debbie Tanouye
Tina Galindo
Melinda Mochel*

Ex-Officio

Earl Rutz – CRB Chairman
Nick Hill, CPDPC Chairman

Interested Parties

Anne Warring
Kris Lynn-Patterson
Dave Machlitt*

*Participated by phone and/or Webex.

Call to Order

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

Review of Minutes

Chairman Galbraith asked if anyone had any questions, additions, edits or corrections to the CPDPC and CRB Operations Joint Committee meeting on May 2, 2012. Galbraith pointed out a misspelling on one of the attendee names and this was corrected. There were no other changes.

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

a. Financial Report for CRB Operations

Chairman Galbraith reported on the CRB financials as Fisher was out of town. Regarding Visalia lab expenditures, all charges in the month of April were for supplies. Committee was reminded that it was previously reported that about \$10,000 charged to the Visalia lab Fiscal Year 2011-2012 is for equipment that should have been delivered and paid for in Fiscal Year 2012-2013. Charges to 6200571 – Riverside Phone include phone equipment and additional internet backup services. Riverside rent is tracking to be over-budget due to additional space contracted in December for trap reading lab which was not included in the original budget. The Data Management budget figures reflect reallocations approved at the last Joint Ops committee to fund additional SQL work necessary to automate reporting

b. Expenditures: AC Improvements and Hood Vent

In a previous meeting, Rabe had questioned some tenant improvements made to the Visalia lab that were charged to the CPDPC. The temperatures in the sample preparation area (back room) were unbearable for technicians when equipment was running so additional ducting had to be installed. Batkin agreed to remove those charges and the April financials reflect that action. LeVesque reported that the AC system at the UC-Riverside CRB laboratory has now been thoroughly cleaned and a routine maintenance has been set up. A HEPA filtration system is going to be installed at the cost of \$3,000.

Detection Update

a. Trapping Program Report

Art Gilbert

Gilbert reported that CDFA trapping in commercial citrus was progressing; it is just the logistics of keeping the trap servicing going on a two-week cycle. One trapper injured herself and another one resigned but a new rover trapper was just hired in Perris. The rover is handling about one week of trapping and then one week working for CDFA. It is planned for her to fill-in when somebody is on vacation. Right now, they can't have her fill-in so they may get a little behind two-week schedule.

There have been three ACP detections in CPDPC traps in Southern California, one in Orange County just outside the blue line. There is another ACP find in Riverside County that has not been confirmed. Galindo stated one of them is in a grove in Corona, Riverside County. Taylor is going to speak with owners.

Rutz reminded the group that CDFA's mission is to maintain the same volume of trap reading and replacement as before the transition. Gilbert answered "yes" and the labs are doing it faster with all the traps being brought in to Riverside and Visalia.

a. HLB Survey

Debbie Tanouye

Tanouye reported CDFA is moving traps in to urban settings when contracts are signed with the counties. This is throughout the state. Even counties that do not have citrus, CDFA asked them to piggy-back with their Med-fly traps. As an example, LA County does not have commercial citrus and yet that is where they have the biggest infestation of ACP. Prior to this, in counties that have citrus production, there was a three-mile buffer for trapping. But now that trapping has been going on for two years without any detections, at the request of the committee, they are now moving traps to the urban setting. Gorden asked what is the density of traps in the urban areas. Gilbert answered that it varies by county and amount of citrus production. Having the traps in the three-mile buffer was not the best way to put the traps out because there wasn't much to be gained. The psyllids are going to move with people, so they will be trapping where most people live, and it depends on the amount of citrus in the county. In Tulare, Fresno, and Kern counties for example, it should be sixteen traps per square mile. Lesser acreage counties like San Luis Obispo would be nine traps per square mile and counties with less acreage like Merced, Stanislaus, San Joaquin, and Monterey will have five traps per square mile. Each trap will be serviced once a month and moved every two months.

Galbraith reminded the committee about last year's ACP find in Kern County, they doubled their traps at Highway 5, Highway 99, Highway 58, and Garces Highway to make sure they have those arteries coming out of the LA area covered heavier. Gilbert stated the trap numbers in those areas are still the same.

Rutz asked if they can develop a grid chart that shows certain counties and densities, and as need be, the narrative down below for clarification of special reason for those. Tanouye answered that she can do that because they have the different contracts that they wrote for each of the counties. Rutz asked to email that to the committee. Tanouye agreed to send it out.

Taylor asked clarification that CDFA has traps in Los Angeles County. Tanouye answered "no" and added inside the blue line, they do not. In Hacienda Heights and any of the counties within that blue line, the traps have come out, and that includes San Bernardino and Riverside. Rutz asked clarification if there is sampling going on inside blue line to see if they find HLB anywhere. Tanouye stated they do random sampling of the area. Galindo stated they are just testing what might be found in the counties and they are waiting for Gottwald's Survey Protocol Project to do the LA County-wide survey. Rutz expressed concern that there is a potential pool of HLB developing out there where they are not trapping and some trapping is useful. McCarthy added they had a hundred traps in LA. She already sent all the information Gottwald needed to complete the survey protocol, and they may hear from him before the Science Sub-Committee Meeting on Monday afternoon.

CDFA is going to go ahead with the task force plan for the sampling around the find in Hacienda Heights. This is the enhanced survey plan that the committee is going to pay for. The committee approved \$400,000 to support that. Tanouye will have the budget for that for Monday's meeting. Rutz asked if after next week there would be sampling there. McCarthy said "yes" and added there would be survey, and collecting plant tissues and psyllids for HLB detection.

McCarthy stated that Gottwald has also been working on residential areas all across the ACP-infested areas. His data looks at populations and considers risk factors. He is taking a global approach in coming up with a plan for high-risk survey, looking at places where CDFA should go first. Polek added that for each square mile, they look at how much citrus is there, they targeted Asian populations and where ACP has been detected and how many times in those high-population areas. So each square mile has been assigned a risk factor. What is going to happen on Monday is they will decide on the sampling intensity for that area for that particular risk factor.

Gorden said it is his understanding that Gottwald included the Hacienda Heights area in the Survey Protocol. Polek clarified that this area is included within Gottwald's survey plan but the area will still be surveyed according to the Science Committee's recommendation which will be more intense than Gottwald's protocol. She added that his protocol is totally flexible and the data collected during each survey cycle will be added rendering it more accurate.

Treatment Update

a. Residential

Tina Galindo

Galindo reported they are doing the survey in Hacienda Heights, which includes surveying the three zones that the Science Committee devised the protocol for. CDFA completed the 800-

meters zone at the end of April. They are currently working on re-testing all of the plants inside the 400-meter area and then they will be working in zone three, which is survey door-to-door in the 800-1,200 meter area. In the 400-meter area, they are sending plant samples for all hosts. They have not found any ACP yet. In the 800-1,200 meter area, they are finding ACP, and collected 273 samples and submitted 27 plant samples from that zone (3). They have completed the transect survey going out to a ten-mile radius. There have been 812 ACP samples submitted along with 96 plant samples.

Polek asked if CDFA is now testing all the psyllids that are collected. She also asked what the number of psyllids is in a pooled sample. McCarthy answered she does not know, but she will find out. LeVesque stated she has a conference call with Lucita Kumagai every week and Kumagai told her the CDFA lab was doing the testing for the psyllids in those areas and that CRB lab was not going to be getting any of those samples (from Hacienda Heights). McCarthy replied that she spoke to Kumagai's boss, who told her that CDFA was keeping up with the psyllids that are being submitted and did not need to send them to CRB lab. Leavens stated that there were 1,200 psyllids that were sent in and Polek's question is applicable – are these pooled or sampled individually. Gorden agreed with Leavens. LeVesque stated she was told that CDFA pools 25 psyllids per sample.

Galindo reported that there are three areas in Hemet where they should be completing the treatment next Tuesday. They also have three areas in Lake Elsinore that are completed. Menifee was completed in April, and there are three areas in Murrietta that were completed in early May. A portion of Romoland was completed in May. It will be a few more weeks to complete the rest of that area. Winchester's treatment was completed in April.

Galindo said they will be having a public meeting tonight in Orange County so starting next week they will have five areas under treatment in Orange County – San Clemente to San Juan Capistrano, Mission Viejo, Lake Forest, Madera Ranch, and Irvine. Right now, they have five areas under treatment in Imperial County, which are all in Salton Beach, Salton City, and Desert Shores. They have a new detection in Niland – it only had five properties and they completed that treatment. They completed treatment in Seeley.

Rutz asked if CDFA is at maximum number of treatment crews. Galindo answered they just hired 12 more personnel that are starting next week. Gorden asked what the estimated time to finish treating Riverside County is. Galindo answered it took them about four months to finish 11,000 properties, so she estimates eight months to a year because everything is so close together. Tanouye stated that that is CDFA sent out 100,000 notifications. Figuring that not all of them will have citrus and with the hiring of new personnel, the process would accelerate.

Taylor stated that there are some areas on the map which are outside the current treatment area and that have not been included in any other treatment; he asked if they are being treated or are they going to have public meetings for those. Galindo answered that they still need to have public meetings. Taylor asked if the area east of Lake Matthews and Mead Valley are being scheduled. Tanouye answered "yes."

McCarthy reported on CDFA treatment expenditures; where the money is going to the different areas and how much has been spent so far. The new items show the percent spent from October through March, the percent spent in each area in the last two months and then the total spent per area for the year to date. Twenty-six percent of the treatment budget has been spent in Riverside County so far and CDFA is just now getting to the heavy treatment area part of Riverside County. Polek stated there is more at stake in Riverside County with the Clonal Protection Program, the Citrus Variety Collection, USDA Germplasm Repository, and Agricultural Operations being there.

Rutz discussed the importance for all groves, including non-commercial, to be treated. McCarthy stated that the problem she sees is that even if the groves are commercial, CDFA does not have the power to make them treat if it is ACP only, and that includes the abatement process because it is a voluntary program under ACP quarantine. HLB quarantine is a mandatory program. Severns asked why ACP treatment is voluntary. McCarthy explained that it is because CDFA is not pursuing eradication of psyllids. She states she understands Rutz point, but she also agrees with Hill that they have to be very careful because these people who are selling their fruit and CDFA is going to start treating, and where they draw the line. Leavens stated he supports Rutz concept, but it is a “Pandora’s Box;” because once CDFA starts treating commercial or quasi-commercial groves or these kinds of things with CPDPC money, they open the door for anybody that wants to have treatment who does not want to pay for it. Rutz stated that there are two ongoing “Pandora’s Boxes,” one is dipping into the CPDPC money; the other is psyllids in the field not being treated especially if they miss an ACP detection for some length of time.

Dreyer suggested flyers could be dumped from helicopters informing owners that CDFA is serious about controlling the ACP. McCarthy stated that “Outreach” is one way to go.

b. Commercial

Brian Taylor

Taylor reported that he and Galindo have been struggling with commercial and non-commercial groves. He showed slides of maps identifying which are commercial groves. Most of the treatments in the Riverside areas occur in areas 10, 11, and 13 with a little bit falling into 7. He referred to the Corona ACP find; there is a big patch of citrus just out of area 6 – that is Eagle Valley. There are lots of citrus trees there but they are mostly dead. There are three growers that are still operating there and they are in the process of contacting them for treatment. That was a single-trap find site, with four psyllids in the trap. The next slide showed they were putting all the find sites in the last three years on the map and then drawing 800-meter circles around them. Incorporating all of those areas more or less into large treatment zones makes sense because there is no point in drawing 800-meter circles. Area 10 is questionable, as there are a lot of commercial citrus trees there, a lot of them are small 2, 3, 4, 5 acres and people put residences on them. CDFA had their public meetings in these areas. A lot of the growers had questions as to whether or not they are commercial because they don’t sell directly to packinghouses. They sometimes have intermediary management companies who come and maintain the trees, harvest and sell them, and then charge the homeowners association for maintaining the trees, so these companies make all the profits.

Taylor said CPDPC will be having a public meeting this Friday primarily to target those growers that are in Area 10. CPDPC’s recommendation to the growers will be to go to an area-wide treatment as much as possible. A lot of them are going to be resistant and a lot of them are not

within the 800-meter circle. CPDPC's struggle is to convince the owners their need to do treatment and do it on a consistent basis so that the psyllids will not spread. Leavens suggested whatever the percentage of the acreage might be susceptible and opportune to be removed that maybe CDFA could help owners with tree removal. Taylor said that there are some people willing to do that. Some people have been paid to maintain the citrus trees by the city as a heritage as well as trees that are planted along the medians that belong to the city. CPDPC may have to speak to the city officials in deciding what they want to do. They need to convince them to treat. Taylor stated Alan Washburn and Dwight Holcomb have been invaluable in cooperating and going out and talking to the owners and eventually agreeing on the price of treatment. Tanouye reported that there are no organic operations in the area. Taylor disagreed; there is one fairly large organic grower in the area and they don't fall within the 800-meter radius.

Chairman Galbraith raised the need for a definition of what a commercial grove is. Hill stated that getting the definition of a commercial grove might give the Ag Commissioner some options and more power if growers were selling through a fruit stand and if they are doing so under the table. McCarthy stated that even once they get that and tell a grower that he is commercial, if they want to treat, CDFA cannot mandate them to treat.

Gilbert stated that six million dollars is a lot of money to spend on treatment so far. He asked that other than just protecting the research area at Riverside, why not give up on all the spraying and just direct the money for HLB survey, and then they have their power, they have their HLB quarantine, and counties can do something about abating the orchards. Tanouye answered that if the growers are treating, it gives CDFA more authority with the public saying to them that CDFA is protecting citrus, otherwise growers would not give their consent. So it is better being out there on a limb. Severns stated that it is the disease they are really worried about. Dreyer agreed but stated that the insects are the vectors of the disease. Hill stated that the insects could always get out of hand unless they treat regularly. Also they are running up against the laws and regulations about being able to abate or eradicate in somebody's property and CDFA does not have that authority. Rutz suggested if they could put more funds in raising *Tamarixia* to overwhelm ACP and suppress them.

Gorden asked if rather than having crews treat a little bit on all areas, push from the south, say areas 13, 12, 11, 10 versus the opposite direction. Tanouye answered that CDFA had to break it up into little areas in order to have the public meetings. Getting 10,000 people to come into these meetings, there are not enough venues large enough to hold that many people so they broke it into 13 areas and get public meetings. After the public meetings, they go out within 48 hours treating those areas.

c. Blue Line Area Discussion

Tina Galindo

Galindo presented that when they started treatment in the county after the blue line was established, they decided they start treating in all the outlying areas along the freeway in the southern part of Riverside County. Since February, they have been treating and even the outlying areas are complete in 11,000 properties in the heavily infested area. The dates shown on the map are the dates of the last psyllid detection in those boundaries. They finished treating in Yucaipa, but were still finishing off Redland, and have a week to go in Hemet, but overall, those outlying areas are complete. They are now working on the 13 areas that they have been having public

meetings for since May 2012 and they started treating around mid-May, focusing in on close to 100,000 properties. Galbraith asked about the area between the blue line and the freeway. Galindo stated they just started treating those in mid-May.

Galindo reported that working in those areas, the treatment crews fill out a grove sheet when they come across a grove in their block. They will not treat the grove until Galindo goes through the county to find out if it is commercial or not. CDFA looks to see if they have a 1) pesticide permit, 2) if they are certified organic, or 3) producer's permit to sell at a farmers' market. But if they don't have anything on them, then they have to take the owners' word to tell them that they are not commercial, CDFA will treat it. There had been a couple groves that Taylor has helped CDFA with where the owners told them they did not sell anything only to find out they are selling to a fruit stand. So it is going to take a lot of investigating with Taylor's help because there are now a lot of groves in new areas. CDFA is not equipped to treat 40-acres of citrus, but they can contract out for that work. Most of grove owners are forthcoming with the information. Hill opened a discussion and agreed that they should find out who would be paying for non-commercial citrus treatment.

Galbraith suggested that CDFA start treating at around the freeway and push towards the blue line to drive the pest to the infested areas to contain the insects rather than starting at the blue line working their way out. He asked how wide an area they cover. Galindo answered they have crews in all 13 areas. Hill suggested the committee make a recommendation to be discussed by CPDPC next week regarding re-deployment. Taylor commented treating citrus in smaller areas and then moving on is more efficient and better biologically.

06.06.2012-2 Dreyer moved and Severns seconded to consider re-deploying the treatment in the 13 areas in Riverside County to concentrate and double up inwards the blue line starting southeast.

Motion passed unanimously.

Laboratory Activities

a. Riverside Laboratory Activities

Cynthia LeVesque

LeVesque reported that the CRB Lab analyzed 564 CDFA ACP samples, 993 CDFA nursery plant samples, and 480 Variety Collection plant samples. These were extracted for Las, Lam-Laf and WGLS/COX. Everything was negative for HLB. Their current staff is 3 full-time, 1 lead trap reader, 6 part time trap readers, 3 CSUSB interns. They had a contamination incident; they started to see CT values in the 34-38 range in No Template Controls for both Las and Lam-Laf and Q-PCR reactions.. LeVesque presented the possible sources of contamination would be forward and reverse primers since it was affecting both of the assays. They first tried changing that primer out, and when that did not work, they changed all the primers. It still did not make any difference. They then decided to check the water, and obtained bottled water; but that still did not make any difference. It was finally determined the cause was an air-borne contaminant. They also found a leak that went to the reception area from the air conditioner. A routine maintenance has been set up and the HEPA filtration system is going to be installed at the cost of \$3,000. They completed their high through put instrumentation options. They are still finishing up the draft for the budget.

They had a visit by Lucita Kumagai and Cheryl Bloomquist, who are the personnel from the CDFA Laboratory on May 9-10, 2012. They observed how things are being done in the CRB Laboratory in comparison to how they are doing things in Sacramento. The plan is for CRB Lab personnel to visit the CDFA Laboratory. CDFA Lab is in the process of installing a robot for doing their extractions and is also setting up a high through put Q-PCR instrument comparable to what CRB Lab is using.

They are in the process of doing a study to correlate the CT values with conventional PCR. They want to determine at what CT value they can absolutely be sure that they can see something on a conventional PCR using standards they have in an ACP DNA background. They are working on the Trizol and Hailang Jin's procedures.

b. Sacramento Laboratory Activities

Susan McCarthy

McCarthy reported they have a new robotic system into the high through put system and can handle lots of samples. Polek suggested that CDFA lab personnel do a slide like LeVesque does that has statistics of what they doing. McCarthy said she would request this. LeVesque stated that Kumagai has weekly reports on CDFA lab that can be sent out to CRB ops. Galbraith said that it is a great idea.

Data Management Report

Rick Dunn*

Dunn reported that the two SQL database developments entitled "Trap Reader Statistics and Quality Control Report" and the "Trapper Activity Report" contracted out to Mark Worsnop are essentially finished. Dunn will get his first look tomorrow and anticipates these will need tweaking.

Dunn then began a description of the ongoing Statewide Citrus Layer project. Dunn said that one method of data acquisition is going to aerial imagery and digitizing the boundaries of blocks. The weakness of it this is that from an airplane, it is impossible to know what the commodity is. So that necessitates the "ground truthing" where crews are assigned to go out to specific locations, determine if this is actually citrus, if the digitized border is relatively accurate, identify the commodity, and gather any other information CRB might need. In September 2011, the CRB board approved \$47,000 in support of the UCKAC mapping effort. The UCKAC GIS Lab is also leveraging additional funding sources. They anticipate completion of the basic map layer by the end of FY 2011 – 2012. Another major component of the GIS system is the attribution of information to the digitized polygons. He is getting help from Travis White, a CASS employee who has since resigned. White worked one to two days a week ground truthing, preparing ground truthing assignments and collecting data. Kris Lynn-Patterson's GIS (Geographic Information System) Laboratory at UC Kearney is working with Dunn on this project. This layer will be used by researchers, treatment coordinators, and regulators tasked with combating the spread of Asian Citrus Psyllid and the Huanglongbing virus that causes greening disease in California citrus.

Dunn invited Lynn Patterson, and she brought in a printed map. She reiterated that the citrus layer project has multiple components including data acquisition, ground truthing, and grower interviews. Data acquisition involves going to outside sources that already have compiled GIS information that they can incorporate to the layer. They are also utilizing information from

trappers that have placed traps in known groves and are identifying groves that are being planted or removed. Lynn-Patterson stated that the map that she brought is a graphic showing the imagery that is being used to delineate the boundaries of the fields and it depicts the polygons that have been drawn. She believes they are on the home stretch except for ground truthing and attribution. They have the reason, the money, and the people to finish the polygon layer. It is a moving target, they will never actually be done mapping citrus. They are not going to get 100% because it changes every year. Dunn has learned that CDFA has a parallel mapping project in progress. He stated CRB and CDFA personnel have begun coordinating their efforts to avoid overlap. Both CDFA and CRB were scrambling last week to provide information to Tim Gottwald for his Survey Protocol Project. Galbraith suggested adding the CPDPP logo on the maps generated. Dunn agreed and would like to include the CDFA logo as well if that is permitted.

Dunn presented a table summarizing some of their data sources. He has added information from four or five additional small counties that came from their Ag Commissioners. The % mapping status indicated there, was simply having polygons representing citrus in the individual counties. Not necessarily high quality, not necessarily accurate at this time. That will be improved with ground truthing. Last time, there were questions about the 2009 acreage estimate on the Attribution Status chart that he was using. The updated chart's acres actually reflect the polygons that we have incorporated into our layer, some 250,000 acres right now. There were 15,000 polygons included in this layer. Estimated percentage of citrus mapped in each of the counties listed is about 80% right now. The percentage of commodities identified has gone down from the previous version of this chart. All the blocks listed in the chart are citrus, but many have not yet had the commodity confirmed.

The assigned GID is CRB's unique identifier for each polygon. CRB has SSI pesticide permit information on 23% of these and APN information on 42%. In Ventura County, the APN identifier that they are using has a different standard. The attribution in terms of identifying a contact, the PCA, the PCO, the farm management company, the packing house, whether it is bearing or non-bearing, organic or non-organic; is work still in its infancy requiring time.

Polek asked about the estimated number of acres and polygon, and looking at Kern County and there are 64,000 acres but only 874 polygons, whereas in Riverside that has less than 20,000 acres but over a thousand polygons; is that because Riverside has a lot of small parcels of acreage so the number of polygons is greater? Dunn replied that that's how he interprets it. There is also the possibility that the digitizing entity subdivided what might otherwise have been grouped as a large citrus block, maybe they saw roads that clearly define separate blocks and they split those up.

a. Proposal to Accelerate Citrus Layer Development

Dunn reported about two months ago, Hill requested he investigate the possibility of accelerating the process of gathering attributes and getting the Citrus Mapped. He went to Lynn-Patterson and she came up with a plan to bring student interns into her lab to work on gathering information.

Dunn reported that the current situation with detection of HLB in a backyard tree, and geometrically increasing ACP populations has added great urgency to all detection and suppression efforts. The citrus map layer is a key component in these efforts. In addition to its usefulness for simply locating affected and threatened citrus groves it can, with sufficient

attribution, be a great tool for immediate identification of the growers involved and their agents. As the project progressed, collecting attribute information has proven to be a very time consuming element. It has been proposed that they make use of temporary student interns to accelerate this process. Today, the UCKAC GIS Lab is staffed by three full time experts. The addition of student help, it will allow full-time staff to concentrate on the more technical aspects and shorten the time required for completion of the layer. The infrastructure (office space, computers, and furnishings) required to accommodate up to two student interns is already in place, at no cost to CRB.

Dunn stated that CRB has placed a real emphasis on collecting contact information for PCOs, PCAs, and grove owners. He does not believe this is a priority of the CDFA's mapping effort. He proposed funding either a single full time intern for three months or some combination of part-time help to an equivalent of total 516 hours. At \$12 an hour, they came up with a figure of approximately \$6,192 and there is no money to be reallocated within the Data Management budget.

Chairman Galbraith stated he spoke with Batkin about Dunn's proposal to hire interns. He stated that Batkin said they would not have to augment the budget as it is now, and that they could find funds within the existing budget after the trapping transition to CDFA. He stated that Batkin would like the approval of CPDPC to fund this proposal.

06.06.2012-2 Gorden moved and Severns seconded to recommend to CPDPC the funding \$6,192 to hire a single full time student intern (or the equivalent part time help) for three months or 516 hours total, at \$12 per hour to work at UCKAC GIS Lab.

Motion passed unanimously.

Bio-Control Task Force Report

Brian Taylor*

Taylor stated he spoke earlier this week to David Morgan, who has taken over the release of the *Tamarixia* within the blue line in Los Angeles County. He said that Morgan gave an update that the UC-Riverside Laboratory is still in the process of building up *Tamarixia* population – they are producing about 500-1,000 parasites per week at this point. The goal is to get them up to 5,000 per week and at that point, UC will then transfer the technology and the expansion over to Morgan and at the same time he will have his rearing facility up and running in Pomona. Out of those 500-1,000 parasites produced, about half are still going back to production to increase the colony and about half are being released into the field. Morgan's group has released about 2,400 parasites at seven new release sites in addition to the four sites that have been released earlier by the Hoddles. All of those four previous sites have now shown evidence of successful parasitism. The Hoddles will be doing some studies to make sure that the parasitoids that have emerged are the same ones released. Taylor said he would talk to Batkin to get the status on the Cal-Poly, Pomona rearing facility. The *Tamarixia* wasps are spreading; they moved to about 100 yards from the original release site at one location. Rutz asked how they know these are the original wasps released. Polek answered that that is Stouthamer's project using bio markers to verify that what they are finding in the fields are what were released.

Stem and Leaf Mandarin Sub-Committee Report

Dan Galbraith

Chairman Galbraith reported that the stem and leaf mandarin was brought up last month and there seemed to be enough interest that they went ahead and organized a sub-committee. Leavens was assigned to be the chairman of the sub-committee. Since the formation of the Stem and Leaf Mandarin Sub-Committee, new information was brought forth by McCarthy. The major concern of this was having material that originated from non-quarantine areas being shipped to quarantine areas for distribution and not knowing exactly where everything goes. The material might end up back in the non-quarantine areas and this could be a problem.

McCarthy reported that any citrus fruit with attached leaf and stems are not allowed to move outside the ACP quarantine area. Citrus fruits in bulk containers in ACP quarantine areas can move under terms of a special permit that it has to be subjected to a process to wash and/or remove leaves and stem debris. Within the HLB quarantine areas, they cannot move fruit with stems outside the quarantine areas. They can move inside the ACP quarantine fruits with stems and leaves attached, but they cannot leave the quarantine area.

McCarthy said that early on there were reports of problems with violations of this rule in Tulare County. She sent this information to Kinoshita, and these problems have quieted down. Dreyer stated he thought the reason the problem have quieted down is the season is over. McCarthy stated that it could be word got out that retailers/growers are not allowed to do that (moving fruits around non-quarantine areas). Galbraith asked if there is any way of following up on whether or not there is movement of stem and leaf fruits to non-quarantine areas. McCarthy said she did not know. Severns said that most of the stem and leaf mandarins are being sold by peddlers in farmers' market that come below the radar screen. Polek added the fruits can be bought at Trader Joe's, and they are now national.

Chairman Galbraith asked if there is a clear definition of what constitutes a bulk container. McCarthy answered she would ask Interior Pest Exclusion. Severns stated that he does not think there is a quick definition of what a bulk container is. Melinda Mochel introduced herself as working at the CDFA's Interior Pest Exclusion Program and she is working on the Emergency Quarantine Response Program. She is involved in the compliance agreements for all of ACP and HLB operations of CDFA as far as regulatory goes. As far as specific definition of bulk container, there's no real specific definition for grove in regard to citrus. What they do have in regards to the movement of "bulk citrus" is that all citrus moving out of the quarantine area needs to be subject to a field cleaning process before it can move out of the quarantine area. If it is moving out of the ACP quarantine area for a final distribution, then the field cleaning has to be to the extent to where it is "no leaf and no stem." If it is done under a permit, which is QC Permit 1255, then the fruit can leave the field, however it does still have to be subject to some degree of cleaning and most of the leaves and stem materials has to be removed from the fruit before it can move under permit to a processor/packer outside the quarantine area. And then when that processor/packer outside the quarantine area receives that fruit, their receiving County Ag Commissioner can make the determination as far as what is considered inappropriate amount of leaf and stem material. The receiver outside the quarantine area is going to be under compliance agreement as well.

Mochel reported that as far as regulating movement from fruit once it leaves the LA County market, she does not know how CDFA could track that. They are not regulating movement within

the ACP quarantine areas, so it makes it a big challenge. As far as moving it from, CDFA has all of their packers and producers under quarantine compliance.

Leavens stated that everything from Santa Barbara County north along the coast is subject to the Apple Moth Quarantine and that requires no stem or leaf in any packed citrus – how does that overlap that with their ACP Quarantine. Mochel answered that the Apple Moth Quarantine is in parallel to the ACP Quarantine. However, she stated, that the Apple Moth Quarantine is requiring all the fruit to be cleaned and washed to the extent that ACP Quarantine does. Leavens stated his concern that they have mandarins on hillsides in a lot of places besides the Central Valley that are inside the quarantine areas and once the stem-and-leaf fruits gets into the distribution center, it is going to get into cartons to whoever, and CDFA completely lose any kind of possible control and it will be in places that could easily come from areas that are ACP and potentially HLB contaminated. Galbraith added that stem-and-leaf mandarins are high priced fruits so there is a lot of incentive to move them.

Mochel asked if they are concerned about fruit ending up in grocery store retailer within ACP quarantine area and then having it move out. Leavens stated that the fruit would wind up in a distribution center. The big supermarket chains have distribution centers and if the fruit has not gone through a cleaning and waxing process because they have stems and leaves on them, then it gets shipped into the distribution centers and CDFA has no way of tracking it. So if it is not handled at the point of harvesting, it likely will lose all of potential tracking. Mochel answered that if at the point of harvesting, the growers in ACP quarantine areas are under compliance that they cannot let their fruit go and leave that quarantine area until they are without any leaf or stem. There is a field cleaning forms that they have to fill out. That form accompanies the shipment. They are required to have a transporter haul it from the grove where it is harvested. The transporters have to be under compliance. So the growers in the ACP quarantine area are under compliance as well as any kind of a packing house outside the quarantine area, they would be under compliance too. So the fruit has to go to a packer before it goes to a distribution center.

Leavens stated that none of the fruits are washed to his understanding. Severns stated that for the most part, he has seen field packing of stem-and-leaf mandarin in Fresno County. Mochel stated that if that is the case, these growers are all in violation and CDFA will take action on those growers. Discussion was made on the potential spread of ACP to non-quarantine areas by stem and leaf mandarins and how it could get out of hand. Hill suggested taking the stem and leaf to CCM's Joel Nelsen, because they lobby in DC to get legislators to get regulatory process to stop this practice as soon as possible because there is enough of this product moving under the radar. Leavens suggested and Galbraith agreed that they have to get prepared for next season to deal with the stem-and-leaf problem. Leavens stated he will call Nelsen to discuss this and put the committee together.

Rutz raised the concern of the Federal Regulations that zero stem-and-leaf is defined as 5-7 leaves or stems per container. That is Federal, so it supersedes State, so the ACP quarantine regulation on stem-and-leaf mandarins is almost unenforceable. Mochel clarified Federal Regulations enforces inter-state, which is state to state. CDFA has State Interior Quarantine which as far as intra-state movement, so any kind of movement within California, they can be more restrictive than the Federal Regulations requires. So something coming in from Mexico into California

would be something that would have to abide by the federal regulations. But once in California and moving within California, then it would have to be abiding by CDFA's State Interior Quarantine, which they do have the zero tolerance, and that is the purpose of having the QC 1255 Permit. The Federal Quarantine has a minimal amount of leaves being tolerable, and it is 5-7 per bin.

Hill asked as the leaves start to desiccate once they are picked, at one point can the does an ACP no longer feed on the leaf and HLB virus survive on the stem and/or leaf and therefore spread the virus. Polek answered despite the stem and the leaves gone, the psyllid will stay on the fruit if they start off with stem and leaf – it increases the probability of psyllids being in that shipment. Even when the leaf dehydrates, the stem holds moisture for quite a while, but the psyllid would still be on the fruit. And when you have a bulk shipment, the leaves are not just on top, they are in with the fruit and they tend to stay fresher longer.

CPDPC Report

Susan McCarthy

McCarthy stated that other than there is a CPDPC meeting in June 13, 2012 Ventura and Science Subcommittee Meeting on June 11 at 3:00 p.m., she has nothing more to report.

Chairman Report

Dan Galbraith

Chairman Galbraith has nothing to report.

Adjournment - Galbraith

Meeting was adjourned at 12:32 p.m. Next meeting will be held at the CRB Conference Room in Visalia on July 11, 2012 at 10:00 a.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 CRB/CPDPC Joint Operations Committee Meeting held in June 6, 2012.

6/29/12
Date:

Ted A. Batkin
Ted A. Batkin, President