Citrus Pest and Disease Prevention Committee (CPDPC) Science and Technology Subcommittee Meeting

Meeting Minutes November 26, 2024

There was a quorum of the Science Subcommittee, and the following were in attendance:

Science Subcommittee Members Present:

Aaron Dillon	*Mark McBroom	Dr. Etienne Rabe
Dr. Subhas Hajeri	Dr. Ivan Milosavljevic	*Dr. Ram Uckoo

Dr. Melinda Klein

CDFA Staff:

Okasaki
Phong
Vatmore
P

Anmol Joshi

Other Attendees:

Price Adams	Jim Gorden	Grace Radabaugh
Dr. Alejandro Alaniz	Jonathan Kaplan	Dr. Poulamis Sarkar
Dr. Bodil Cass	Dr. Laura Leger	Cressida Silvers
Dr. Rob Clark	Jessica Leslie	Keith Watkins
Natalie DeAngelo	Marcy Martin	Judy Zaninovich
Dr. Saurabh Gautam	Dr. Neil McRoberts	Sandra Zwaal
Dr. Dhirei Couters	Mia Narra-ia	

Dr. Dhiraj Gautam Mia Neunzig

All attendees participated via webinar

Opening Comments

Chair, Dr. Etienne Rabe called the meeting to order at 10:02 am.

Review and Discuss the Draft Technical Review Team (TRT) Response to Questions Posed by the Science Subcommittee

Dr. Rabe led the Subcommittee in discussion regarding TRT answers to questions formulated by the Subcommittee at the last meeting (see the attached document containing the Science Subcommittee's questions and the TRT's responses).

TRT Report Questions 1, 4, 5, and 9:

The TRT recommended formulating a working group to identify possibilities for reallocating resources and survey work away from urban areas to focus on areas adjacent to commercial citrus. Dr. Rob Clark emphasized that the TRT's

^{*}Committee members unable to have their cameras on due to connectivity issues.

recommendation was to reallocate resources, and not to stop activities or remove resources from large areas.

Action Item:

Convene a working group that analyzes the best way to reallocate resources from urban areas to commercial citrus and areas adjacent to commercial citrus. Specifically, the group will make recommendations on:

- A. The activity level to retain in the hotspot area(s)/SoCal residential region. The Subcommittee requested that a "current" hotspot be compared to conditions 5 years ago to gauge the program's effect over time.
- B. Principles governing how to move to the edges of hotspots. Resources to move to the edge of hotspot areas to establish a modified containment strategy.
- C. Recommending program roles for the California Department of Food and Agriculture (CDFA), Pest Control Districts (PCDs), and County Ag Commissioners.
- D. Increasing Asian citrus psyllid (ACP) and plant testing closer to commercial citrus.
- E. The impact of changes made in Fall 2023 to the multi-pest and delimitation survey methodologies.
- F. Recommending survey methodologies for commercial citrus: Developing an approach for increasing ACP monitoring and huanglongbing (HLB) surveys in the commercial citrus survey; expanding upon the recommendations provided in the TRT Report for Question 9.

TRT Report Question 2:

The TRT recommended the California Department of Food and Agriculture (CDFA) reconvene the PCD Task Force Committee to address the question of what CDFA activities can move to the PCDs, as PCDs are managed by growers or have grower oversight. Dr. Neil McRoberts and Dr. Subhas Hajeri suggested that new members from regions that were previously underrepresented be invited to join the PCD Task Force Committee.

Action Item:

Reconvene CDFA's PCD Task Force Committee to evaluate what activity to transfer from CDFA to regional entities and conduct the corresponding cost analysis. If this strategy is employed, it should be an incremental process, and an initial "test case" should be done to better understand impacts.

TRT Report Questions 3, 12, 14, and 15:

Dr. Melinda Klein presented a table created by the TRT and Dr. McRoberts, highlighting suggested activities tailored to the different growing regions. Examples include creating local growing committees for each region consisting of representatives from the CPDPC, Grower Liaisons, County Agricultural Commissioner's Offices, PCDs, and local growers. Dr. Ivan Milosavljevic commented that one of the suggested activities, stopping *Tamarixia radiata* releases in the desert growing regions, would not be

beneficial as releases have shown to be effective in drier areas like Texas and Arizona. Dr. David Morgan suggested restricting *Tamarixia* releases to certain times of the year in those regions. Dr. Rabe, Dr. Klein and Dr. McRoberts highlighted the need for grower involvement in making decisions regarding activities for each specific region.

Action Item:

Convene a working group consisting of Dr. Rabe, Dr. McRoberts, Dr. Klein, and Keith Okasaki to recommend region-specific pests and disease management activities. The group will build off the "Commercial Citrus Regional Management" document the Technical Review Team provided. This group will also address what the expected impacts are if we are to reduce program activities in areas where commercial citrus does not exist.

TRT Report Question 6:

The TRT report indicated that the definition of an HLB hotspot should be supported by statistical modeling and by the positivity rate (%) of *Candidatus* Liberibacter asiaticus positive (*C*Las+) plants at the Section, Township, Range (STR) level.

Action Item:

Convene a working group consisting of Dr. Matt Daugherty, Dr. McRoberts, Dr. Clark, and David Phong to identify criteria for defining hotspots within which the current response protocols are no longer effective.

TRT Report Question 7:

The TRT agreed that there should be better coordination between *Tamarixia* releases to avoid overlapping spatially or temporally. Dr. Milosavljevic asserted that *Tamarixia* is less effective in areas where treatment occurs, and there should be better coordination between releases and treatment activities.

Action Item:

Dr. Morgan already coordinates *Tamaraxia* releases to avoid pesticide treatment areas and will continue to improve the coordination effort using CDFA's pesticide treatment records.

TRT Report Question 8:

Dr. Clark and Dr. Klein indicated that data shows tree removal to be effective, as discussed by the TRT (underlying data to be provided). Dr. McRoberts indicated that if the CLas positivity rates are low in ACP and plants, rates may be maintained with effective tree removal and vector control.

Action Item:

CPCPC to debate the importance of multi-pest survey and tree removal. The TRT and the Science Subcommittee have a range of opinions on this question.

TRT Report Questions 10 and 11:

The TRT expressed concern regarding refusal rates in Commodity Survey in certain growing regions, specifically Ventura County. It was suggested that refusal rates may skew the program's ability to calculate accurate infection rates. Dr. Klein added that more outreach in these areas could be an additional approach to decreasing commodity survey refusals. In 2023, Ventura County had an 18 percent commodity survey refusal rate.

Action Item:

CPDPC to debate the impact of refusals on the program's effectiveness in surveying for and eradicating HLB. The TRT does not see refusal as a major issue for treatment and multi-pest surveys. However, in the case of commodity surveys, a higher refusal rate in certain regions (i.e., Ventura County) could skew results and become a less effective exercise.

TRT Report Question 13:

The TRT agreed that there is no clear evidence/rationale for implementing a 5-mile radius in response to HLB detections.

Action Item:

Request the United States Department of Agriculture (USDA) provide rationale/support for implementing the 5-mile radius (Question 13 a and b). Convene a group to discuss with regulatory agencies the issues with regulated entities (growers, nurseries, etc.) and how they can be part of developing quarantine boundaries.

TRT Report Question 17:

The TRT asserted that there is already a substantial body of analysis regarding the relationship between climate trends and ACP/HLB control. California benefits from having a less favorable climate for ACP and CLas relative to other growing regions.

Action Item:

Dr. McRoberts to create a short paper for the CPDPC summarizing what is known about the effect of climate in general on ACP/HLB incidence and specifically as it relates to California's climate/climatic zones (Question 17).

TRT Report Longer-Term Question 1:

The TRT agreed that a discussion with USDA needs to take place to determine the criteria for exiting the ACP quarantine. The TRT suggested that quarantine removal should be considered when no psyllid is detected within the period covering two generations. Keith Okasaki noted that CDFA has submitted multiple packages to USDA showing evidence and support for removing areas from the ACP quarantine, all of which have been rejected.

Action Item:

CPDPC to discuss how long an area previously under ACP quarantine needs to be ACP-free to warrant removal of the quarantine. CDFA can submit another proposal to the USDA to remove regions from the ACP quarantine.

TRT Report Longer-Term Question 2:

Learning from the Tree Removal Program in Texas, the TRT Report identified the following two lessons:

- 1. Tree removal needs to be coupled with psyllid management for the greatest impact.
- 2. The number of commercial finds near residential areas suggests better coordination of management between residential and commercial production areas is required.

The number of commercial ACP/HLB finds near residential areas in Texas suggests that continuing coordinated management between commercial and residential interface is imperative to protecting commercial citrus.

Action Item:

Discuss at the full CPDPC meeting the lessons learned from the Texas Tree Removal Program.

Other Items and Adjournment

The meeting was adjourned at 12:00 pm.