ALLIANCE OF PEST CONTROL DISTRICTS (APCD)

TECHNICAL ADVISORY COMMITTEE (TAC)

MEETING MINUTES

Date: Tuesday, March 31, 2026
Time: 9:00 A.M. – 12:59 P.M. (PST)
Location: APCD Conference Room, 22847 Road 140, Tulare, CA 93274 (in-person) with Zoom option.

TAC Members present:
Dr. Georgios Vidalakis (Chair), Jim Gorden, Dr. Ray Yokomi, Dr. MaryLou Polek, Dr. Bodil Cass*, Dr. Sandipa Gautam*, Dr. Neil McRoberts*, Dr. Weiqi Luo*, Dr. Robert Krueger, Dr. Jonathan Kaplan*, Claudia Vazquez*, Christopher Greer, Cerise Montanio*.

APCD Staff: Dr. Subhas Hajeri, Dr. Saurabh Gautam*, Mia Neunzig, Tony Patino, Ron Carter, Jose Pena, Kevin Howerton, and Tina Acevedo*.

Grower Liaison: Judy Zaninovich.

CDFA Outreach: Dahmoon Maeesomy*

Growers: John N Fisher IV, Milo Gorden, and Jeff Steen.

**Attended the meeting virtually.*

1. CALL TO ORDER, WELCOME, AND INTRODUCTIONS

The meeting was called to order at 9:00 A.M. by Chair Dr. Georgios Vidalakis. Introductions were made, including new members, Dr. Jonathan Kaplan and Dr. Bodil Cass.

2. APPROVAL OF MINUTES

The committee reviewed the minutes from the two previous TAC meetings held in 2023 (January 11 for TCPCD and January 24 for CCTEA). Discussion focused on earlier recommendations to shift from single-pest programs (CTV for TCPCD and ACP/HLB for APCD) to a broader, multi-pest survey and detection program to improve return on investment for growers.

Motion: To approve the minutes of the TAC meetings from January 11, 2023 (for TCPCD) and January 24, 2023 (for CCTEA).
First: MaryLou Polek
Second: Ray Yokomi
Motion Carries: The TAC unanimously approved the minutes of both meetings.

3. PEST CONTROL DISTRICT EXPANSION STRATEGIES

The discussion centered on efforts to re-integrate the West Fresno Pest Control District into the program, with Mr. Milo Gorden leading outreach efforts and making progress toward this goal. Concerns were raised about coverage gaps in Kings and Madera Counties, where no pest control districts currently exist,

with participants discussing potential solutions including establishing new PCDs, expanding existing ones, or implementing cooperative agreements. The group also noted that while ACP detections have occurred in these counties, they have primarily been in residential areas rather than commercial operations.

The group discussed challenges and potential strategies for expanding pest control districts, including analyzing assessment rates across different counties and conducting targeted surveys of growers to understand their perspectives. TAC emphasized the need for comprehensive outreach efforts to inform growers about program benefits and value, suggesting coordination between multiple industry groups, including CCM, CRB, and CPDPC. The discussion highlighted the importance of demonstrating clear value to growers who are facing financial pressures from both disease management and water district requirements, with participants agreeing that better coordination and communication strategies are needed to engage the industry effectively.

4. APCD OUTREACH STRATEGY PLANNING

The TAC reviewed current and future outreach strategies, including immediate needs and long-term staffing solutions. Potential grant opportunities were explored, such as specialty crop block grants and multi-state funding, with Mr. Maeesomy recommending collaboration with agencies in Florida and Texas. Dr. Hajeri summarized recent activities, including workshops, conferences, and monthly grower updates. Drs. Vidalakis and McRoberts stressed the importance of securing long-term extension positions, potentially through industry co-funding. Dr. Kaplan noted that while 2027 grant proposals are feasible, interim resources will be required to maintain momentum.

5. MAPPING DATA INTEGRATION DISCUSSION

The committee examined mapping and data collection efforts across the four pest control districts, which collectively cover approximately 225,000 acres and 35–40 million trees. Discrepancies between GIS data and county assessor records were identified, and the group agreed on the need for improved reconciliation methods. Participants discussed opportunities to integrate mapping systems used by pest control districts, agricultural commissioners, and assessors. The development of a unified data portal was proposed to enhance information sharing and accuracy. Collaboration with entities such as LandIQ and Groundwater Sustainability Agencies (GSAs) was encouraged to leverage modern technology and improve data quality.

6. ACP TRAPPING PROGRAM REVIEW

TAC reviewed the risk-based site selection criteria and trapping strategies, including seasonal trapping (April-November), off-season monitoring, and non-citrus site trapping. ACP trapping efficiency has improved: trappers now service an average of 62 sites per day per trapper (previously 36, when trapping began in the fall of 2023). Seasonal patterns show higher detection rates in the fall months.

The TAC discussed ACP trapping density, timing, and placement. Dr. McRoberts shared that historical ACP finds show a predictable seasonal pattern, with most detections occurring from late October through December. The program has successfully detected ACPs at various locations, including Highway 126, I-5 northbound weigh stations, and the Tejon Outlet Mall parking lot. Detections at commercial

citrus sites in Kern County led to visual inspection and tap sampling (with sticky traps held below foliage to catch dislodged psyllids and other insects. Finding additional ACPs via tap sampling triggered a weekly delimitation trap survey for 8 weeks.

TAC Decision: Maintain seasonal trapping (April–November) with reduced off-season intensity; reallocate traps from low-risk zones to high-risk transport corridors and packing houses based on historical data.

7. ACP TRAPPING METHOD IMPROVEMENTS

The TAC discussed improvements to ACP trapping methods, focusing on reducing the amount of glue from 6 to 3 grams, which significantly improved insect collection and DNA extraction. They compared traps hung on metal poles or bamboo stakes with those hung on tree canopies, finding that both methods were equally effective. The group also examined the effectiveness of the AlphaSense lure, though early results were inconclusive and required more data collection across different locations. Dr. Saurabh Gautam presented proposals for DNA metabarcoding and AI-assisted trap screening to improve insect identification, which are awaiting funding decisions.

TAC Decision: The TAC agreed to continue and expand experiments on ACP lures using an improved experimental design. TAC suggested implementing a paired block design for future experiments to better control for variables and consult with Drs. Luo & Cass for the optimal experimental setup. TAC suggested continuing the development and testing of AI-assisted trap screening and metabarcoding approaches for trap analysis, and sharing results with the committee as data becomes available.

8. ACP/HLB DNA DETECTION RESULTS ANALYSIS

The TAC discussed HLB DNA detection results from ACP samples collected from traps over multiple weeks in summer, fall, and winter months. The discussion also touched on previous research from other labs (CRB, Mike Irey, and Mamoudou Setamau) regarding bacterial DNA survival in psyllid samples collected from traps. The improved longevity and stability of the DNA from ACP and "*Ca*. L. asiaticus" was attributed to a combination of traps with less sticky glue and Tony Patino's improved HistoClear Protocol in carefully removing ACP from the trap and glue. Clean ACP improved the quality of DNA extracted, potentially reducing PCR inhibitors.

TAC Decision: The demonstrated viability of ACP/HLB DNA over multiple weeks provides operational flexibility for the trapping program. The APCD team was encouraged to pursue a peer-reviewed publication. Dr. Vidalakis recommended applying MIQE guidelines, including the use of standard curves and multiple replicates, to assess potential DNA degradation or inhibitor effects. He offered to validate the trap-based DNA test in Riverside to ensure reproducibility across laboratories.

9. MULTIPLE CITRUS PEST AND DISEASE MONITORING

Dr. Hajeri outlined current inspection methods (visual surveys and trapping) and highlighted the challenge of optimizing limited resources across multiple pests and diseases. The committee endorsed

moving from a single-pest (ACP/HLB) focus to a comprehensive, science-based multi-pest protocol that includes CTV, CVC, citrus leprosis, and other threats.

TAC Decision:

(i) Adopt a vector-first approach, using ACP, leafhoppers, and sharpshooters as primary sentinel species for early detection, integrated with Dr. Luo's Census Travel Model for survey prioritization. RNA/DNA extracted from potential vectors would be tested for target disease pathogens identified for Multi-Pest Inspection.

(ii) Apply risk-based prioritization due to resource constraints. The group identified CVC as a greater near-term threat than ACP/HLB, given its rapid local spread via sharpshooters.

(iii) Form a focused subgroup of entomologists, pathologists, and epidemiologists to finalize protocols, including seasonal sampling calendars, updated qPCR primers, MIQE-compliant validation, and safe-handling procedures.

ANNOUNCEMENTS

There were no announcements.

CLOSING COMMENTS AND ADJOURNMENT

The meeting adjourned at approximately 1:00 P.M. The Chair thanked participants for the productive discussions. The next TAC meeting will focus on final approval of the multi-pest operational plan.

HIGHLIGHTED ACTION ITEMS

The following actions were assigned during the meeting (priority based on discussion emphasis):

Item	Owner(s)	Action	Deliverable	Priority
1	Jonathan Kaplan, Subhas Hajeri	Analyze assessment and productivity data across PCDs	White paper on ROI and grower contributions	Medium
2	APCD Outreach Team	Launch coordinated outreach campaign	Multi-channel plan with CCM, CRB, and CDFA.	High
3	Neil McRoberts, Jonathan Kaplan, Alliance Outreach Team	Explore grant opportunities	List of grants and proposal timeline (incl. Specialty Crop Block, PPA7721)	Medium-High
4	Saurabh Gautam	Expand ACP lure experiments	Paired-block design trials (consult Drs. Luo & Cass)	High

5	Alliance lab and Vidalakis Lab	Obtain and compare DNA extraction protocols	Reproducibility & validation by other labs.	High
6	APCD Lab (Dhiraj Gautam, Tony Patino, & Subhas Hajeri)	Design MIQE-compliant validation experiments	Documented SOPs for trap-based detection	High
7	Saurabh Gautam, Subhas Hajeri, Dhiraj Gautam	Advance AI-assisted trap screening and metabarcoding	Progress report to TAC	Medium-High
8	Technical Advisory Committee (subgroup)	Finalize multi-pest survey protocols	Risk-prioritized operational plan	Highest
9	Subhas Hajeri, Saurabh Gautam	Integrate Census Travel Model (Weiqi Luo)	Prioritized survey location map	High
10	Alliance Lab & Vidalakis Lab	Update vector/pathogen testing protocols	Revised SOPs and lab coordination	High