## **CONSENT AGENDA**

1. MINUTES APPROVAL: Minutes from April 13, 2022, meeting

## Meeting Minutes Wednesday, April 13, 2022

## **Committee Members Present:**

Franco Bernardi John C. Gless Dr. Etienne Rabe
Brad Carmen Nick Hill Gregorio Rundini
Aaron Dillon Mark McBroom Roger Smith
Bob Felts Jr. Jared Plumlee Keith Watkins

John Gless

#### **Committee Members Absent:**

Craig Armstrong Jim Gorden

## California Department of Food and Agriculture (CDFA) Staff:

Kelley Aubushon Mathew Jian Dr. David Morgan Carl Baum Anmol Joshi Alex Muñiz-Chavez Fernando Berber Marina Kaiser Keith Okasaki Karina Chu Sara Khalid Briana Russell Kiana Dao Sarah Kraft Heather Scheck Paul Figueroa Luci Kumagai Michael Soltero Alisha Garcia Betty Lee ThuyVy Truong David Gutierrez Daniel Lee Amelia Wright Victoria Hornbaker Zachary McCormack Jason Wu

**Guests:** 

Laura Irons

Teri Blaser Maureen McGuire Cressida Silvers
Ed Civerolo Helen McGrath Helene Wright
Natalie DeAngelo Dr. Neil McRoberts Qijun Xiang
Rick Dunn Kevin Nye Judy Zaninovich
Lisa Finke Margaret O'Neill Sandra Zwaal

Jana Miscevic

Magally Luque-Williams Curtis Pate

## **Opening Comments**

The committee meeting was called to order at 9:01 a.m. via webinar. Mark McBroom welcomed the committee, staff, and members of the public participating online. There was a quorum for the meeting.

## **Public Comments**

Aaron Dillon commented that Bill AB-2146, which aims to limit all non-agricultural uses of neonicotinoid pesticides, is currently moving through the California State Legislature and if approved will take effect on January 1, 2024.

## APPROVAL OF CONSENT AGENDA ITEMS

The Consent agenda contained minutes from January 12, 2022 Committee meeting.

**Motion:** To approve the consent agenda as presented.

First: John Gless

Second: Mark McBroom

**Motion Carries:** The motion passed unanimously.

#### FINANCE SUBCOMMITTEE REPORT

## Review 2020/2021 Budget Expenditures and Revenue

Bob Felts Jr. reported a total year-to-date expenditure of \$29,512,516 for Fiscal Year (FY) 2020-21 after an adjustment which removed money expended towards sweet orange scab (SOS) operations. There are no post audits or further adjustments anticipated.

Bob reported that revenue received to date totaled \$15,547,655 for 194,345,687 total cartons compared with a projected total of \$16,208,000 for 202,600,000 total cartons at \$0.08 per carton.

## Review 2021/2022 Budget Expenditures and Revenue

Bob reported that expenditures totaled approximately \$3,200,000 in February, approximately \$3,250,000 in March, and \$4,197,325 in April, yielding a total year-to-date expenditure of \$16,460,119 for FY 2021-22. He reported that the higher total of expenditures is due to expedient reporting of invoices in Fi\$Cal.

Bob reported that revenue totaled approximately \$1,640,000 in February, approximately \$2,260,000 in March, and \$1,795,114 in April, for a total year-to-date of \$5,696,645 in revenue for FY 2021-22. Projected revenue is approximately \$12,500,000 based on the projection of 179,000,000 cartons at \$0.07 per carton. This will be short of projected revenue due to a shortened crop season for mandarins and navels.

## 2022/2023 Budget Review and Approval

Bob presented the FY 2022-23 proposed budget. He reported a total estimated budget of \$44,362,316 with a \$1,000,000 estimated increase in contracts, \$650,000 increase in the operation and maintenance of equipment, \$250,000 increase in personnel services, and a \$2,200,000 decrease in total indirect compared with the prior year. Victoria Hornbaker reminded the Committee that the budget would span from July 1, 2022 through June 30, 2023 in order to align with the state FY.

**Motion:** To approve the FY 2022-23 proposed budget.

First: Bob Felts Jr. Second: Nick Hill

**Motion Carries:** The motion passed unanimously.

Bob reported that he estimates, based on 17-18 percent of the budget being spent on expenditures in the final quarter of prior years and considering the shortened year, that total expenditures should come to approximately \$25,000,000 for the year. He also stated that the carry-forward surplus from the prior year is \$28,000,000 and that there are plans to revisit the fund condition statement.

## EXECUTIVE COMMITTEE REPORT

**Program Environmental Impact Report (PEIR) Update** 

Victoria reported that the Third District Court of Appeals has remanded the decision back to the trial court and that CDFA is awaiting a revised writ that will provide direction on which activities will need to cease operating under the PEIR. Victoria explained that current Citrus Pest and Disease Prevention Division activities may proceed under alternative California Environmental Quality Act compliance. She added that CDFA is hiring a consultant to revise the PEIR and is currently seeking funding alternatives for the contract.

## **Filling Committee Vacancies**

David Gutierrez reported that one candidate has submitted his name for election to fill the Fresno area grower member vacancy. His resume was submitted to the Committee for review.

**Motion:** To elect Rod Radtke to fill the Fresno area grower member vacancy on the Citrus Pest and Disease Prevention Committee.

**First:** Jared Plumlee **Second:** Roger Smith

**Motion Carries:** The motion passed with 11 yays (Franco Bernardi, Aaron Dillon, Bob Felts Jr., John Gless, John C. Gless, Nick Hill, Mark McBroom, Jared Plumlee, Gregorio Rundini, Roger Smith, and Keith Watkins) and 2 abstentions (Brad Carmen and Dr. Etienne Rabe).

## **Science Advisory Panel Update**

Victoria reported that the first virtual meeting with the science advisory panelists went very well and that the upcoming in-person meeting will be starting on April 20, 2022. Harold Browning of Premier Citrus in Florida and Dr. Beth Grafton-Cardwell of University of California (UC) Riverside (retired) as the co-chairs have been preparing for the meeting and are working to synthesize the questions from the Committee into an agenda. The panelists include Dr. Mamadou Sétamou of Texas A&M University Kingsville, Dr. Bob Shatters from United States Department of Agriculture (USDA) Agricultural Research Service in Florida, Don Seaver from USDA Science and Technology, Dave Bartels of USDA Field Operations, Rodrigo Almeida from UC Berkeley, and Georgios Vidalakis from the California Citrus Clonal Protection Program.

## **Citrus Canker Update**

Victoria reported that in February 2022, USDA determined that citrus canker (CC) was found at a nursery in South Carolina and had been selling nursery stock to multiple states including California. USDA issued a recall to citrus producing and adjacent states. Nursery stock was shipped to four locations in California. Keith Okasaki and staff from Southern and Central Districts verified that 3 of the 4 locations received nursery stock. The nursery stock was collected and destroyed and a 1-mile survey was implemented around each location to verify that CC is not present. While Nevada has been working through the recall, they have notified CDFA of two potential locations where nursery stock may have been diverted from Nevada into California. Staff verified that one of these did not occur, but one was sent to a California address. The nursery stock was collected and destroyed, and maps are being prepared to implement a 1-mile survey around this site. Staff are also working with neighboring states to fully implement the recall. Some neighboring states have received nursery stock at hundreds of locations, making the process slower for those states.

## OPERATIONS SUBCOMMITTEE REPORT

## **Laboratory Update**

Lucita Kumagai presented the laboratory update for the huanglongbing (HLB) testing program from the Plant Pest Diagnostics Center. She reported that the monthly total of plant samples received for 2022 have averaged 6,000, which is a 54 percent increase for the same period from the prior year. Asian citrus psyllid (ACP) samples averaged at 2,400 samples per month. For 2022, the combined plant and ACP total samples received was 25,181 at an increase of 7000 samples compared to the same period from the prior year. The tally of positive detections

reflected 3,184 residential trees, 2,227 sites, and 404 ACP positive samples. Most of the detections were from Orange County. 96 percent of the positive samples were detected during the HLB response survey. The tally of positive trees by city for 2022 showed 335 trees reported with 152 of the trees from Anaheim, 11 from Garden Grove, 21 from Santa Ana, 63 from Westminster, 2 from Orange, 5 from San Gabriel, 7 from Duarte, 7 from Montebello, 13 from La Miranda, 13 from Paramount, 4 from Downey, 1 from Carson, 4 from Riverside, and 33 from Ontario.

## **HLB Risk Survey**

Daniel Lee presented data for 2021 risk survey cycle 2. Cycle 2 2021 began in November 2021 and is 58 percent complete in 15 of the 37 allocated counties with 30,917 properties visited. 13,716 properties were sampled generating 5,417 entomology and 10,174 plant samples. In Northern California, 5 staff members from 2 offices have completed risk survey for 46 percent of 147 assigned grids with risk survey completed in 8 counties. In Central California, 19 staff members from 4 offices have completed risk survey for 90 percent of the 460 assigned grids with risk survey completed in 6 counties. In Southern California, 25 staff members from 7 offices have completed risk survey for 45 percent of 995 assigned grids with risk survey completed in Imperial County. Risk survey including properties surveyed, ACP samples collected, and plant samples collected for the first 3 months of 2022 are in line with trends from the prior year. Risk survey activities are highest in January, but slowdown in February and March due to staff redirecting toward area-wide treatment and other pest survey activities.

## **CDFA Operational Update**

David Gutierrez presented the operational update including HLB delimitation survey and treatment areas for the Southern, Central, and Northern Districts. In Orange County, delimitation survey was conducted in Westminster, Anaheim, Orange, and Santa Ana. Treatments were conducted in Westminster, Anaheim, Santa Ana, Orange, and Garden Grove. In Los Angeles County, delimitation survey was conducted in La Mirada, Paramount, Duarte, San Gabriel, and Montebello and treatments were conducted in La Miranda, Paramount, Duarte, and Montebello. The first HLB positive tree was detected in Carson on March 18, 2022. In San Bernardino County, survey and treatments were conducted in Ontario and Rancho Cucamonga. In Riverside County, delimitation survey and treatments were conducted in Riverside and Jurupa Valley. In Southern District, 321 HLB positive trees were removed from January through March with 109 additional trees pending removal. Residential buffer treatments have been completed in Santa Barbara, Ventura, San Diego border buffer, Imperial border buffer, San Bernardino, Hemet, UC Riverside, Coachella, and Imperial. In Central District, as of April 4, 2022, there have been no new ACP detections. ACP detection trapping is ongoing in Fresno and Madera Counties with ACP delimitation trapping ongoing in Kern, San Luis Obispo, and Tulare Counties. ACP treatment for Santa Barbara County began in Santa Maria on February 9 and completed on February 25. In Monterey County, a 50-meter ACP treatment was completed on February 28 with no new detections. Staff are transitioning to the commodity survey for the Spring 2022 survey period as risk survey is completed. In Northern District, Winter ACP trapping activities will conclude in April with quality control inspections of the county trappers now complete. Trapping is still ongoing in Placer, San Joaquin, and Stanislaus Counties. ACP delimitation trapping is ongoing in Alameda County with no subsequent detections and 127 traps serviced monthly. Delimitation trapping is also ongoing in Santa Clara County with detections ongoing and traps serviced monthly. A new San Jose delimitation area was established in 4 square miles. Biocontrol releases are continuing in San Jose, Santa Clara County, with an average of 7,000 *Tamarixia* released monthly.

## **CDFA Regulatory and County Agreement Update**

Keith Okasaki presented the county monthly activity report for July 2021 through February 2022. He reported that county regulatory contracts have been invoiced at 55 percent of the budget at 8 months into the 15-month agreement. While some county invoices have yet to be submitted,

spending activity tends to slow down during the summer months. He is also speaking with the counties that are trending toward overspending their budget.

## **Grate Cleaning & Fruit Seller Working Group**

Keith reported that after the previous meeting, a grate cleaning and fruit seller working group was formed. That working group has met twice and consists of John C. Gless, Keith Watkins, and a few County Agricultural Commissioner Deputies. An informational document is being created for distribution by the packing houses to fruit peddlers, outlining safeguarding requirements. Grate cleaning inspections will focus on stem and leaf counts as well as ensuring fruit is shipped free of ACP. After meeting with the counties who have grate cleaners or who receive grate-cleaned fruit, it was agreed that enforcement should be increased with quicker adverse action and a lower tolerance level for non-compliance. Proposed rule changes for HLB "fruit sellers" applies to those growing within an HLB quarantine who have 1 acre or more of trees (100 trees per acre) grown with the intent of harvesting the fruit for sale. The proposition is to provide performance standard options to mitigate the pest risk similar to growers moving to packing houses.

## **Discuss Clean Nursery Stock Program**

Keith reported that the Citrus Nursery Stock Pest Cleanliness Program (CNSPCP) is currently administered by Plant Health Division's Nursery Services Program. It was agreed that it would be best for the Citrus Pest and Disease Prevention Division (CPDPD) to take over administration of this program. The CNSPCP is established in Title 3 California Code of Regulations § 3701 and is mandatory for all California citrus nursery stock producers. All source trees for citrus propagative materials must meet the testing and maintenance requirements for this program. The program includes 26 current participating nurseries in Butte, Fresno, Kern, Madera, Riverside, San Diego, San Luis Obispo, Santa Cruz, Stanislaus, Tulare, Ventura, and Yuba Counties. The nurseries in this program pay an annual assessment fee to CDFA to have their mother, increase, and seed trees to be registered and tested. There is a testing schedule for each type of tree based on the number of years in the program which tests for several citrus diseases. Mother and increase trees are maintained within an approved insect-resistant structure and tested annually for the first 3 years and then every 3 years. Seed trees are tested every 6 years. The program is funded by annual assessment fees and should have minimal to no financial impact on CPDPD. CPDPD staff are already conducting monthly inspections for several participants. Working with nurseries and USDA, the trapping component inside screen houses was also eliminated. Program field activities occur once annually and can be administered in Sacramento.

## **Grower Liaison Update**

Sara Khalid presented the Grower Liaison updates. In the Central District, there have been no new ACP finds in Fresno, Madera, and Northern Tulare Counties. Teri Blaser and Jessica Leslie are continuing to update and reach out to Psyllid Management Area team leaders. The last residential trap find was in the City of Tulare. There have been no new trap finds in the area and all treatments have been completed. In Kern County, there are no new ACP detections to date for 2022. Judy Zaninovich continues to urge growers and pest control advisers to remain vigilant, consider adding an ACP-effective material in their Spring foliar treatments, and highlight the importance of their participation in keeping ACP numbers low. In Santa Barbara County, Winter and Fall treatments have been concluded and the next area-wide treatment window is September 2022. Cressida Silvers is continuing to update 2022 permit data from the county. In Ventura County, Cressida and Sandra Zwaal are scheduled to meet the new Farm Bureau CEO and new ACP Task Force leadership to assist with the transition and are in the process of following up and collecting pesticide use reports through mid-April before the uncoordinated ACP treatment period begins. The Ventura County Winter ACP area-wide treatments have concluded. For San Luis Obispo County, there have been no new ACP detections in the county. Grower treatment for the most recent detection was completed on January 13, 2022. In the

Southern District, HLB positive residential finds continue in Ontario, San Bernardino County. Growers in the Redlands are encouraged to be diligent with their ACP area-wide treatments. The new 2022 ACP area-wide treatment schedule has been finalized and distributed to the growers in the monthly Grower Liaison update eblast. A grower meeting with seven presentations from the local citrus community was held in early March to encourage grower participation and engagement. The San Bernardino ACP Task Force is scheduled to resume in April to continue grower discussions. The San Bernardino Master Gardeners presented in Ontario. Both Sandra and Tom Mullen are collaborating and coordinating a field day for growers, which is expected to occur in May. In San Diego County, Sandra is coordinating a grower meeting in Valley Center and Fallbrook to take place in April, a field day event for May, and will also be presenting an ACP/HLB presentation to the San Diego Farm Bureau members in May. The San Diego citrus layer continues to be updated by Sandra. ACP detection dogs, traps, and CDFA scouting crews have not detected any activity in Imperial County this past month. Non-coordinated treatment for non-ACP pests has been ongoing. Growers have been encouraged to spray perimeters and use materials that are also effective against ACP

## **Biocontrol Update**

Dr. David Morgan presented the ACP biocontrol update for April 2022. He reported that plant production for citrus and curry leaf plants used in rearing *Tamarixia* is going well. Citrus Research Board (CRB) has taken over maintenance of the *Tamarixia* iso-lines. CRB and CDFA will be producing *Tamarixia* for release going forward. 660,000 insects have been released this year, which is at an increase compared to the prior year and is on track to exceed the projected 4,000,000 releases for 2022. 73 percent of insects have been released around HLB-find areas with additional releases around trade routes and spot-releases around Kern. Insects are continuing to be provided for releases in Arizona. Citrus flushed earlier this year in comparison to prior years with peak flushing in February rather than March. This does not seem to have affected ACP numbers in area-wide treatment areas.

## SCIENCE SUBCOMMITTEE REPORT Ethyl Formate Registration Update

Dr. Etienne Rabe explained the three potential uses of ethyl formate: to move fruit from HLB quarantine areas and especially commercial orchards, as a spray and move alternative to fumigate bins on trucks, and as a fumigation for exports. He reported that Jim Cranney advised the Science Subcommittee regarding administrative issues with the U.S. Environmental Protection Agency (EPA) review of ethyl formate. The registrant received a deficiency letter from EPA regarding a positive cancer result in an in vitro and inhalation study. Jim believes the registrant and Spencer Walsh will be able to suitably respond to the letter. If EPA does not accept the response, there are likely to be more studies required, which will further delay registration. In the meantime, Jim is organizing industry meetings to gauge interest.

## **Neonicotinoid Risk Mitigation Update**

Etienne reported that progress is being made with a revised draft released that includes an exemption for use on any quarantine pests. The rate at which neonicotinoids may be used has been raised to the levels where bees would not be affected, but not to the maximum levels.

## Sweet Orange Scab (SOS) Biology and Regulation Update

Amelia Wright reported that SOS regulatory staff have assembled a regulatory packet and are awaiting a meeting with the Cross-Functional Working Group regarding the quarantine area that will need to be observed.

## **Data Analysis Tactical Operations Center (DATOC) Update**

Etienne reported that the DATOC team has been assembling data for the upcoming Science

## **OUTREACH SUBCOMITTEE REPORT**

Natalie DeAngelo reported that to connect with homeowners during National Garden Month, Nuffer Smith Tucker (NST) has developed an integrated outreach campaign encouraging California residents to implement gardening best practices through targeted media outreach, advertising strategies, social media influencer partnerships, and elected official content distribution. NST has also developed a statewide paid and earned outreach strategy focusing on these techniques, similar to the Don't Move Citrus campaign. A press release was drafted for National Garden Month and distributed over the California state newswire which has secured a pickup of 323 publications. An English and Spanish audio news release is also being coordinated. NST also attended the Highland Citrus Festival and will have a booth at the National Orange Show. Regarding recent media coverage and outreach, NST's Asian American outreach partner drafted a Lunar New Year social media campaign to increase awareness of ACP and HLB among Chinese and Vietnamese audiences which garnered over 16,000 engagements. Additional outreach included press work in the Imperial Valley, targeted social media ads about citrus canker survey, door hangers, and Instagram outreach. Industry outreach activities included California Citrus Mutual's Citrus Showcase, highlighting program partnerships in the Citrus Pest and Disease Prevention Program (CPDPP) annual report, development of inlanguage field crew training material, Train-the-Trainer activities, and California Association of Pest Control Advisers' Annual Conference, NST also recently worked a booth at the California Ag Day at the Capitol and will also be present for the Southern Association of Governments and the California Contract Cities Association Annual Municipal Seminar in May. For elected officials, there was a deskside briefing with the San Bernardino County Agricultural Commissioner as well as communications with city officials in Downey and Carson on first HLB detections. NST has also developed a new logo for the CPDPP in a readable and Googlefriendly font.

#### **USDA REPORT**

Helene Wright reported that USDA is working closely with CDFA on Citrus Yellow Vein Clearing Virus (CYVCV). In a call initiated by California Citrus Quality Council and CDFA, Dr. Jim Adaskaveg, James Cranney, and representatives from CDFA met with a cross-functional SOS working group to discuss possible changes to the federal order. The working group agreed to eliminate the need to clean out stems and leaves from fruit that would move from inside an SOS quarantine area to a packing house for processing outside of an SOS quarantine area. The working group also discussed reducing the quarantine area from the current 5-mile area and decided to discuss the matter further at a follow up meeting.

## **CLOSING COMMENTS AND ADJOURNMENT**

CDFA is working closely with USDA on CYVCV survey and a potential path forward. All work is contingent upon completing the 1-mile delimitation survey in Tulare to assess the extent of the infection. 15 trees from 8 properties have been confirmed as positive for the virus. Each property in the 1-mile area has been visited, however many of the properties will need to be revisited as residents were not home. The lab is currently working through the samples collected during survey.

The meeting adjourned at 11:28 a.m.





# FY 21-22 May 2022 Expenditures

#	Group	Region	Activity	Committee Approved 2022 Budget	Remaining 2022 Budget	May 22 Expenditures per FI\$Cal	Year to Date Expenditures per FI\$Cal	Prior year FY20-21 Year to date Expenditures
1	ACP Mgmt	Border	Treatment	\$625,046	\$387,576	\$ 6,089	\$237,470	\$ 296,325
2	<b>ACP Mgmt</b>	Central	Survey	\$2,659,168	\$1,064,755	\$ 165,088	\$1,594,413	\$ 1,621,369
3	ACP Mgmt	Central	Treatment	\$1,290,726	\$1,142,040	\$ 28,092	\$148,686	\$ 402,233
4	<b>ACP Mgmt</b>	Northern	Survey	\$1,540,124	\$465,271	\$ 200,088	\$1,074,853	\$ 881,876
5	<b>ACP Mgmt</b>	Northern	Treatment	\$445,718	\$389,526	\$ 33,790	\$56,192	\$ 408,491
6	<b>ACP Mgmt</b>	Southern	Treatment	\$1,815,452	\$1,264,319	\$ 86,453	\$551,134	\$ 815,663
7	<b>ACP Mgmt</b>	Southern	Survey	\$281,149	\$102,466	\$ 18,358	\$178,683	\$ 164,782
8	<b>ACP Mgmt</b>	Statewide	Biocontrol	\$1,686,369	\$475,468	\$ 147,277	\$1,210,901	\$ 791,557
9	<b>ACP Mgmt</b>	Statewide	Survey	\$3,000,000	\$1,140,529	\$ 124,307	\$1,859,471	\$ 1,046,090
10	ACP Mgmt	Statewide	Regulatory	\$3,215,894	\$849,495	\$ 181,609	\$2,366,400	\$ 1,534,511
11	HLB Det	Border	Survey	\$212,795	\$132,145	\$ 17,247	\$80,650	\$ 179,657
12	HLB Det	Southern	Survey	\$2,084,691	\$1,234,670	\$ 112,541	\$850,022	\$ 826,115
13	HLB Det	Statewide	Survey	\$6,532,228	\$3,221,918	\$ 341,460	\$3,310,310	\$ 1,933,926
14	HLB Det	Statewide	Diagnostics	\$3,338,979	\$1,638,203	\$ 208,086	\$1,700,776	\$ 1,927,139
15	HLB Erad	Southern	Treatment	\$5,361,616	\$2,362,367	\$ 301,626	\$2,999,249	\$ 2,071,767
16	HLB Erad	Statewide	Regulatory	\$826,945	\$461,331	\$ 23,716	\$365,614	\$ 400,794
17	ACP/HLB	Statewide	Admin	\$5,852,176	-\$457,345	\$ 740,036	\$6,309,521	\$ 3,959,992
18	ACP/HLB	Statewide	Outreach	\$2,063,377	\$1,309,339	\$ 316,274	\$754,038	\$ 934,506
19	ACP/HLB	Statewide	Data Analysis	\$1,547,305	\$819,338	\$ 78,479	\$727,967	\$ 127,576
20	ACP Mgmt	Statewide	Diagnostics	\$209,052	\$92,271	\$ 15,022	\$116,781	\$ 111,131
			Totals	\$44,588,810	\$18,095,681	\$3,145,638	<i>\$26,493,129</i>	20,435,501

CCS and CYVCV costs are temporarily shown in Group 17

October 2021 – May 2022 are closed in FI\$Cal.

# FY 21-22 May 2022 Expenditures Percentage

	#	Group	Region	Activity	Committee Approved 2022 Budget	Remaining 2022 Budget	Year to Date Expenditures per FI\$Cal	Percentage Expended
	1	ACP Mgmt	Border	Treatment	\$625,046	\$387,576	\$237,470	38%
	2	<b>ACP Mgmt</b>	Central	Survey	\$2,659,168	\$1,064,755	\$1,594,413	60%
	3	<b>ACP Mgmt</b>	Central	Treatment	\$1,290,726	\$1,142,040	\$148,686	12%
	4	ACP Mgmt	Northern	Survey	\$1,540,124	\$465,271	\$1,074,853	70%
	5	ACP Mgmt	Northern	Treatment	\$445,718	\$389,526	\$56,192	13%
	6	<b>ACP Mgmt</b>	Southern	Treatment	\$1,815,452	\$1,264,319	\$551,134	30%
	7	<b>ACP Mgmt</b>	Southern	Survey	\$281,149	\$102,466	\$178,683	64%
	8	<b>ACP Mgmt</b>	Statewide	Biocontrol	\$1,686,369	\$475,468	\$1,210,901	72%
	9	<b>ACP Mgmt</b>	Statewide	Survey	\$3,000,000	\$1,140,529	\$1,859,471	62%
	10	ACP Mgmt	Statewide	Regulatory	\$3,215,894	\$849,495	\$2,366,400	74%
	11	HLB Det	Border	Survey	\$212,795	\$132,145	\$80,650	38%
	12	HLB Det	Southern	Survey	\$2,084,691	\$1,234,670	\$850,022	41%
J	13	HLB Det	Statewide	Survey	\$6,532,228	\$3,221,918	\$3,310,310	51%
	14	HLB Det	Statewide	Diagnostics	\$3,338,979	\$1,638,203	\$1,700,776	51%
	15	HLB Erad	Southern	Treatment	\$5,361,616	\$2,362,367	\$2,999,249	56%
	16	HLB Erad	Statewide	Regulatory	\$826,945	\$461,331	\$365,614	44%
	17	ACP/HLB	Statewide	Admin	\$5,852,176	-\$457,345	\$6,309,521	108%
	18	ACP/HLB	Statewide	Outreach	\$2,063,377	\$1,309,339	\$754,038	37%
ì	19	ACP/HLB	Statewide	Data Analysis	\$1,547,305	\$819,338	\$727,967	47%
	20	ACP Mgmt	Statewide	Diagnostics	\$209,052	\$92,271	\$116,781	56%
				Totals	\$44,588,810	\$18,095,681	\$26,493,129	68%



# FY 21-22 Revenue Summary

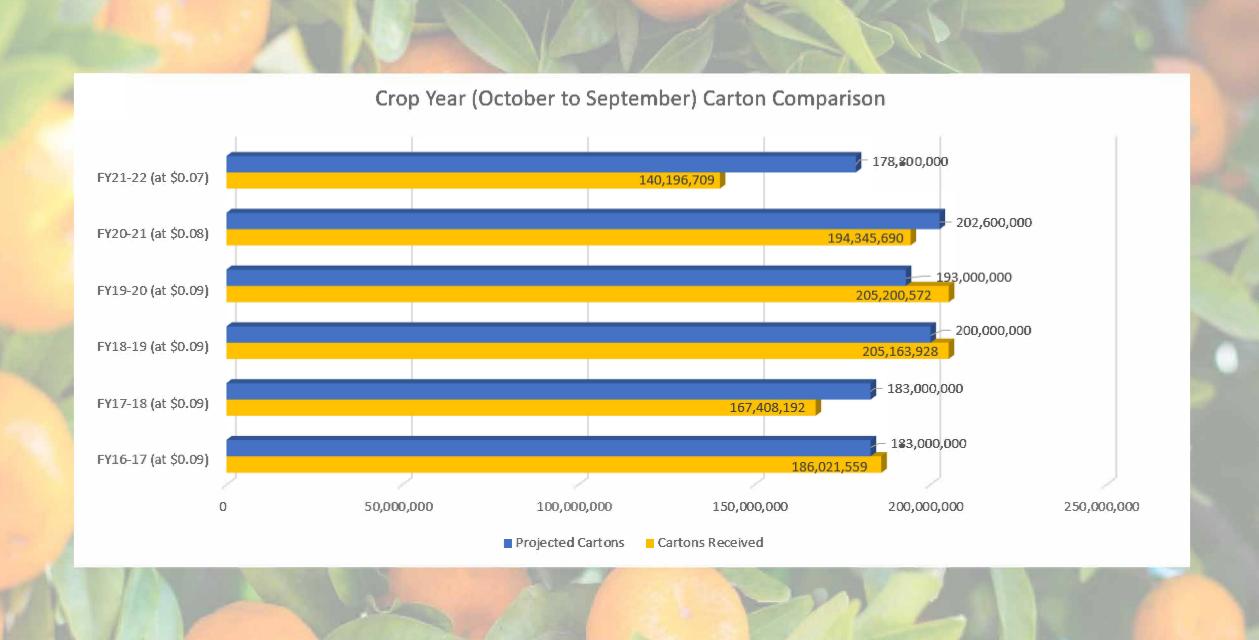
Revenue Received	
Revenue Received To Date (October 2021 to July 2022)	\$9,813,769
Last Meeting (June 7, 2022) Revenue Received to Date	\$8,957,215
Increased from last meeting to current	\$856,554

# FY 21-22 Carton Comparison

FY21/22 Projected Cartons	FY21/22 Projected Cartons (NASS)	FY20/21 Projected Cartons (CPDPC)
184,450,000	178,800,000	202,600,000
Cartons	Cartons	Cartons
\$0.07/per carton	\$0.07/per carton	\$0.08/per carton
\$12,911,500	\$12,516,000	\$16,208,000

FY20/21 collected 194,354,687 cartons at \$0.08/ per carton

Year to Date Revenue Received	Revenue Amount	Cartons
Current YTD (\$0.07/per carton)	\$9,813,769	140,196,700
Prior Year FY20-21 YTD (\$0.08/per carton)	\$11,228,383	140,354,787





# **QUESTIONS?**



California Department of Food & Agriculture
Plant Pest Diagnostics Center
HLB Testing Program
2022

Total number of plant and ACP samples per month – Fig. 1 HLB yearly totals – Fig. 2

Tally of positive detections by county and city – Tables 1-3

Tally of positive detections by city per year - Tables 4

If you have any questions, please call or email me at 916-738-6710 <u>lucita.kumagai@cdfa.ca.gov</u>.

Fig 1. 2022 - Total number of plant and ACP samples submitted per month.

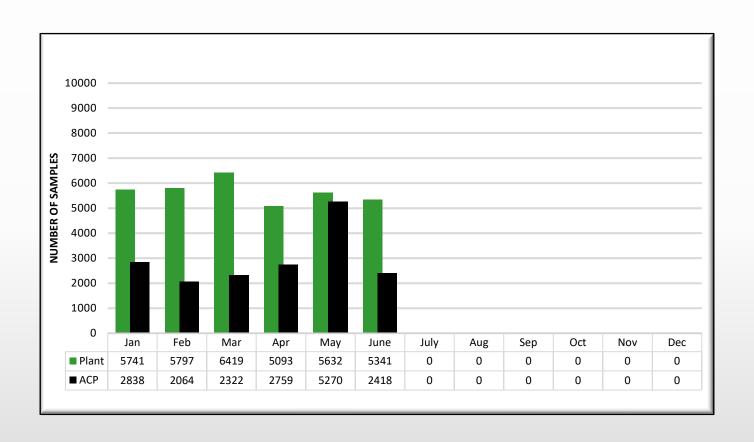
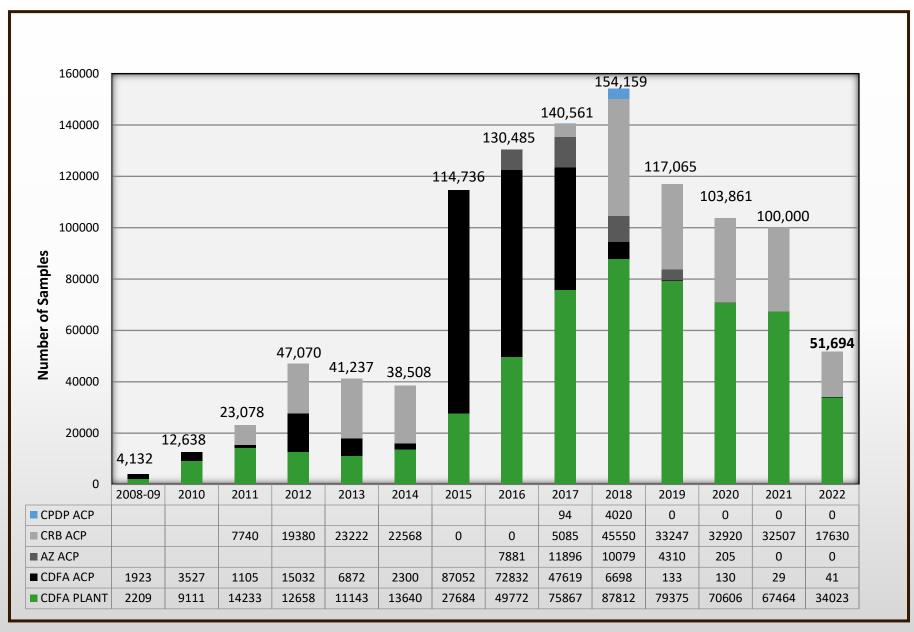


Fig 2. Number of samples tested for HLB per year from 2008 - June 2022.



Combined total of plant and ACP samples tested from 2008 – 2022 is 1,079,224.

City	# Sites	# Trees	# ACP
-			samples
	nge Count		6.4
Garden Grove Santa Ana	439 413	679 581	64 56
Anaheim	457	733	103
Westminster	305	477	20
Orange	97	129	17
Tustin	12	15	3
Fountain Valley	6	10	2
Huntington Beach Placentia	22 9	25 7	3
La Habra	2	3	1
Fullerton	4	2	3
Yorba Linda	3	2	2
Irvine	3	2	2
Total	1772	2665	278
Whittier	geles Cou 149	inty 179	27
Pico Rivera	109	133	38
Montebello	70	98	1
San Gabriel	65	82	6
Rosemead	23	28	4
Paramount	28	34	3
La Mirada	27	40	1
La Puente Norwalk	<u>4</u> 8	<u>3</u>	4
Cerritos	3	2	2
Hacienda Heights	2	2	1
Lakewood	5	6	0
Duarte	20	24	3
El Monte	4 1	3	0
Alhambra Temple City	1	1	1
Compton	1	1	0
Glendora	1	0	1
South Gate	7	4	4
Long Beach	4	2	2
Los Angeles	<u>1</u> 5	7	1
Downey Carson	4	3	1
Monrovia	8	13	0
Rowland Heights	1	0	1
Total	551	671	107
	side Cour		16
Corona	28 24	37	16 4
Riverside Eastvale	1	26 1	0
Jurupa Valley	5	2	4
Moreno Valley	1	1	0
Total	59	67	24
	nardino C		
Rancho Cucamonga Montclair	3	7 6	0
Colton	6 6	11	3
San Bernardino	2	1	1
Ontario	52	108	18
Fontana	2	1	3
Total	71	134	27
	n Diego	_	1
Fallbrook Oceanside	<u>1</u> 4	9	4
Pauma Valley	1	0	1
Vista	1	0	1
Total	7	9	7

2460

3546

443

**Grand Total** 

Table 1. Tally of positive sites, positive trees, and CLas+ ACP samples by county and city as of 7/5/2022.

Table 2. Percent positives per county

County	Sites	Trees	ACP
Orange	72.0%	75.16%	62.8%
LA	22.4%	18.92%	24.2%
Riverside	2.4%	1.89%	5.4%
San Bernardino	2.9%	3.78%	6.1%
San Diego	0.3%	0.25%	1.6%
Total	100%	100%	100%

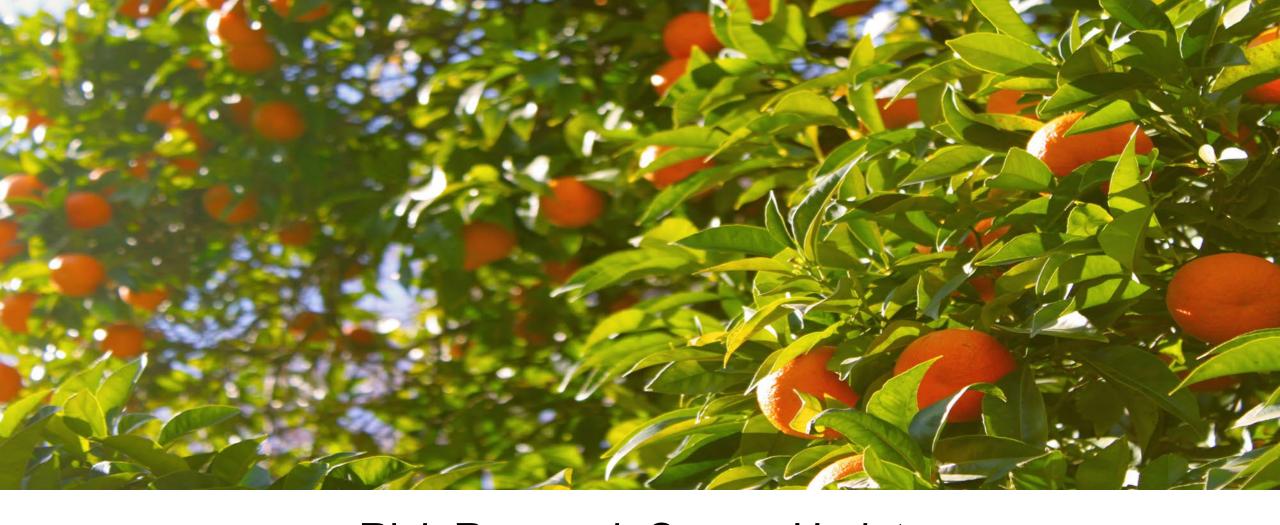
**Table 3.** Tally of positive samples from Risk-based and HLB Response surveys.

Sample type	Tr	ees	Α	СР
Risk-based Survey	125	4%	205	46%
HLB Response	3421	96%	238	54%
Total	3546	100%	443	100%

**Table 4.** Annual tally of positive trees per city from 2012 – 2022 as of 7/5/2022

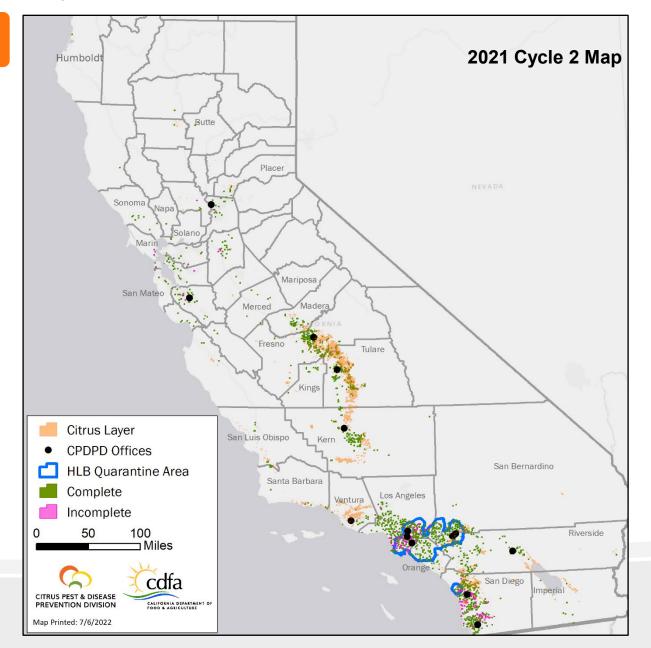
County	Total
Orange	2665
Los Angeles	671
Riverside	67
San Bernardino	134
San Diego	9
Grand Total	3546

			HLB Pos	sitive Tr	ee Dete	ctions				
City	2012	2015	2016	2017	2018	2019	2020	2021	2022	Total
Anaheim				132	109	90	21	200	181	733
Garden Grove				13	348	115	116	34	53	679
La Habra				1	0	2	0	0	0	3
Fullerton				1	0	0	0	0	1	2
Santa Ana					44	168	217	99	53	581
Westminster					15	175	3	39	245	477
Yorba Linda					1	0	0	1	0	2
Orange					31	14	36	43	5	129
Tustin					5	8	1	0	1	15
Huntington Beach						6	2	17	0	25
Placentia						7	0	0	0	7
Fountain Valley							10	0	0	10
Irvine							1	1	0	2
Hacienda Heights	1	0	1	0	0	0	0	0	0	2
San Gabriel		10	17	33	10	6	0	1	5	82
Cerritos		10	1	1	0	0	0	0		2
			1	67	35		10	1	0	
Pico Rivera						18			2	133
Whittier				18	80	23	21	35	2	179
La Puente					0	3	0	0	0	3
Lakewood					1	1	0	4	0	6
Norwalk					1	0	2	1	1	5
Rosemead					17	11	0	0	0	28
Duarte					2	0	0	0	22	24
Temple City						1	0	0	0	1
Montebello						84	4	0	10	98
El Monte						1	1	0	1	3
Compton						1	0	0	0	1
Alhambra						1	0	0	0	1
La Mirada							7	6	27	40
Paramount							11	8	15	34
Long Beach							11	2	0	2
South Gate								2	2	4
Downey									7	7
										_
Carson									3	3
Monrovia									13	13
Glendora										
Rowland Heights										
Los Angeles				_	_	-	_			
Riverside				3	0	4	6	8	5	26
Corona						15	4	11	7	37
Eastvale							1	0	0	1
Moreno Valley							1	0	0	1
Jurupa Valley								1	1	2
Montclair						2	2	2	0	6
San Bernardino							1	0	0	1
Ontario							1	64	43	108
Colton							4	7	0	11
Rancho Cucamonga							5	2	0	7
Fontana									1	1
Oceanside								9	0	9
Fallbrook								9	J	,
Pauma Valley										
Vista										
Total	1	10	19	269	699	756	488	598	706	3546

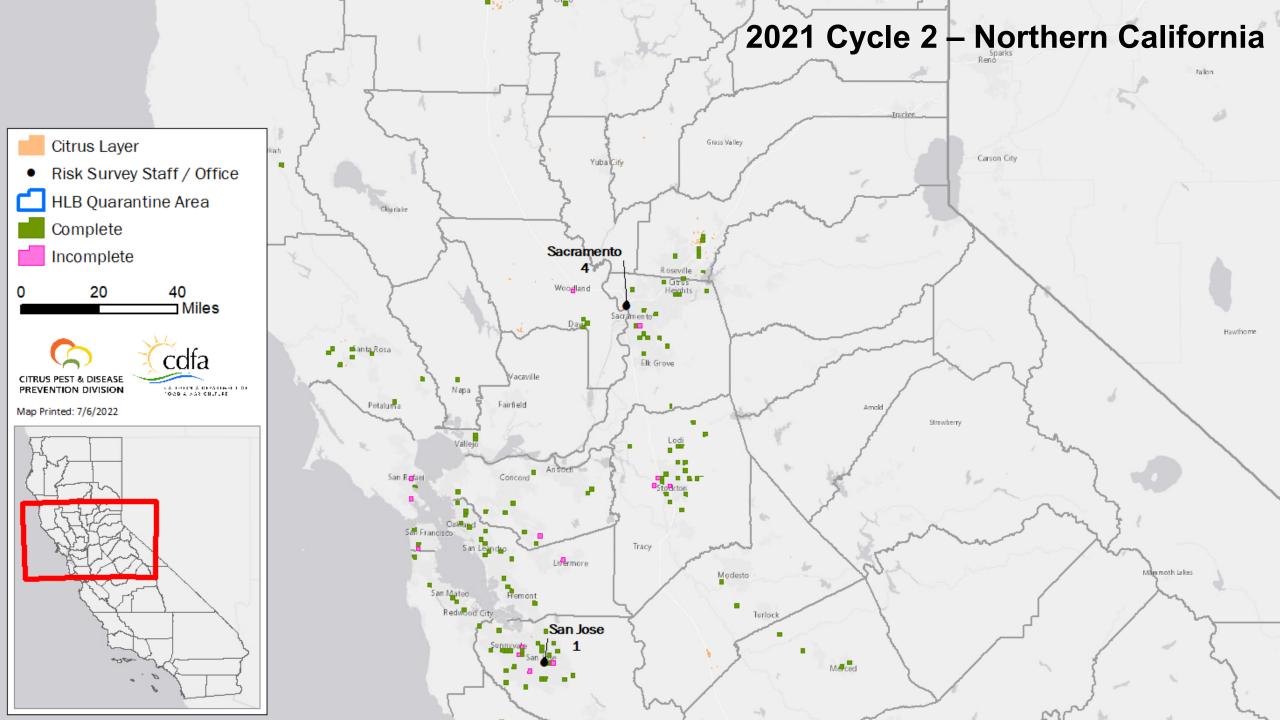


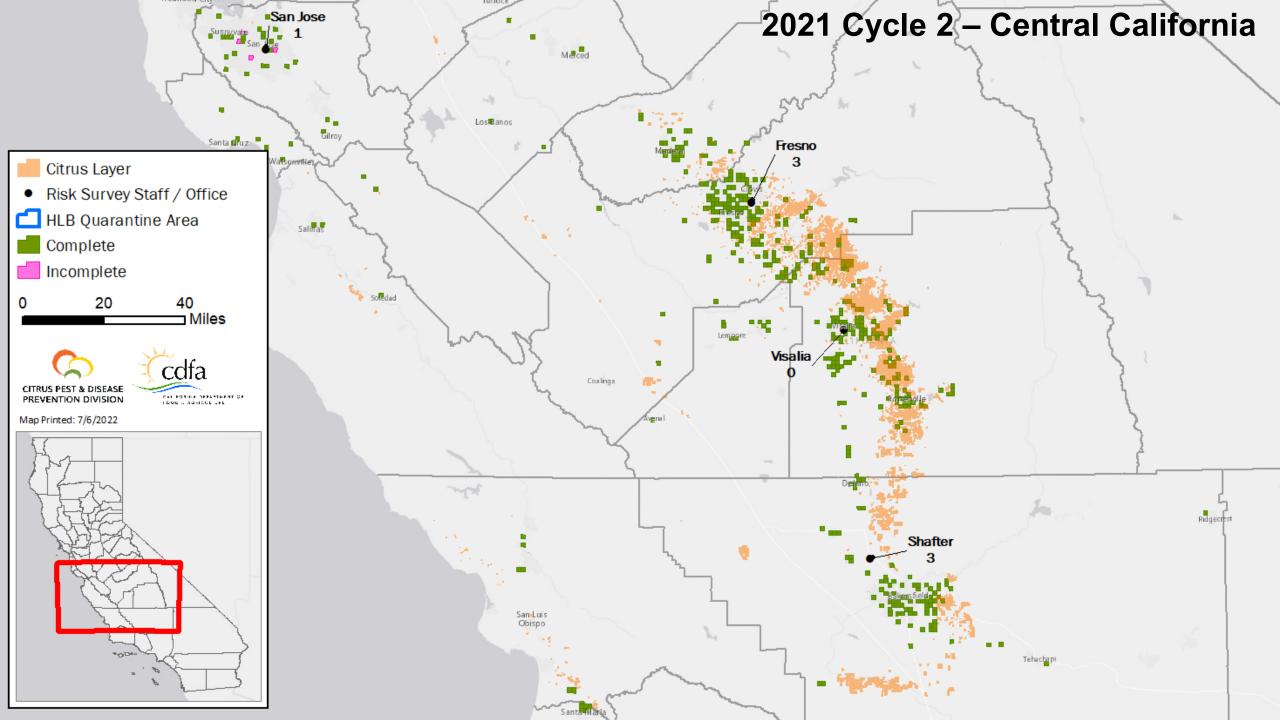
Risk Research Survey Update
California Citrus Pest and Disease Prevention Committee
July 13, 2022

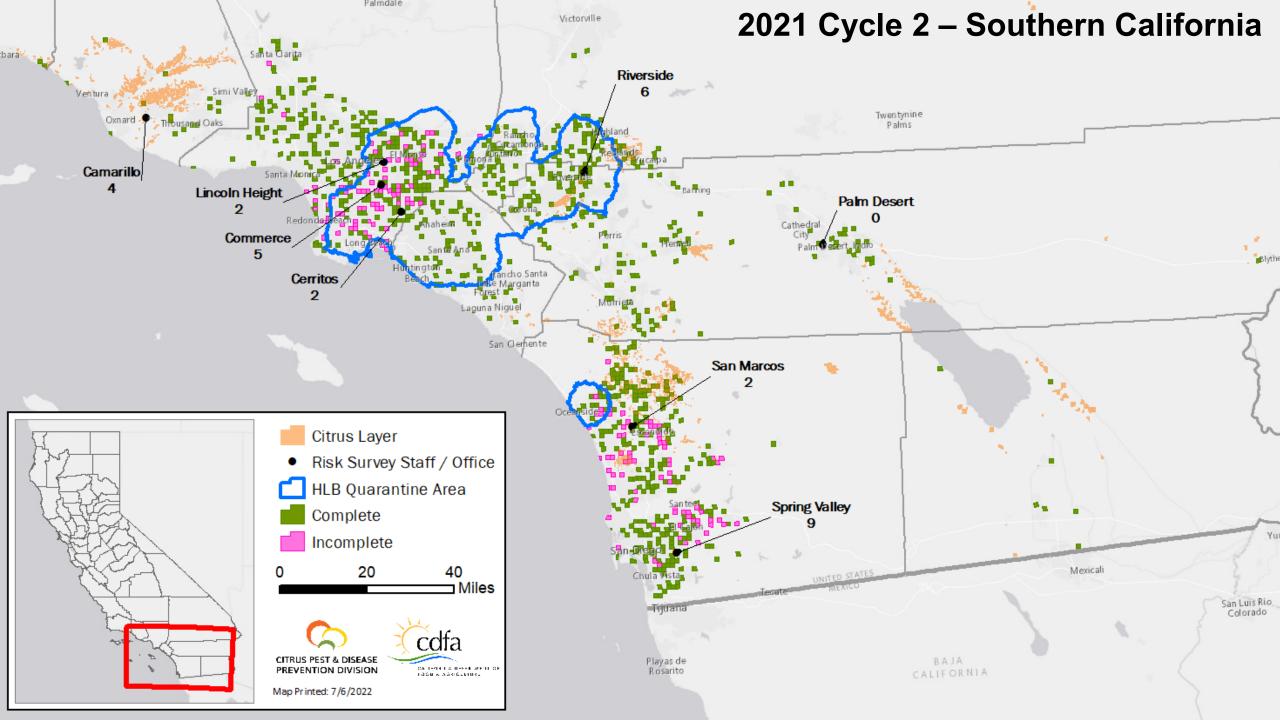
# 2021 Cycle 2



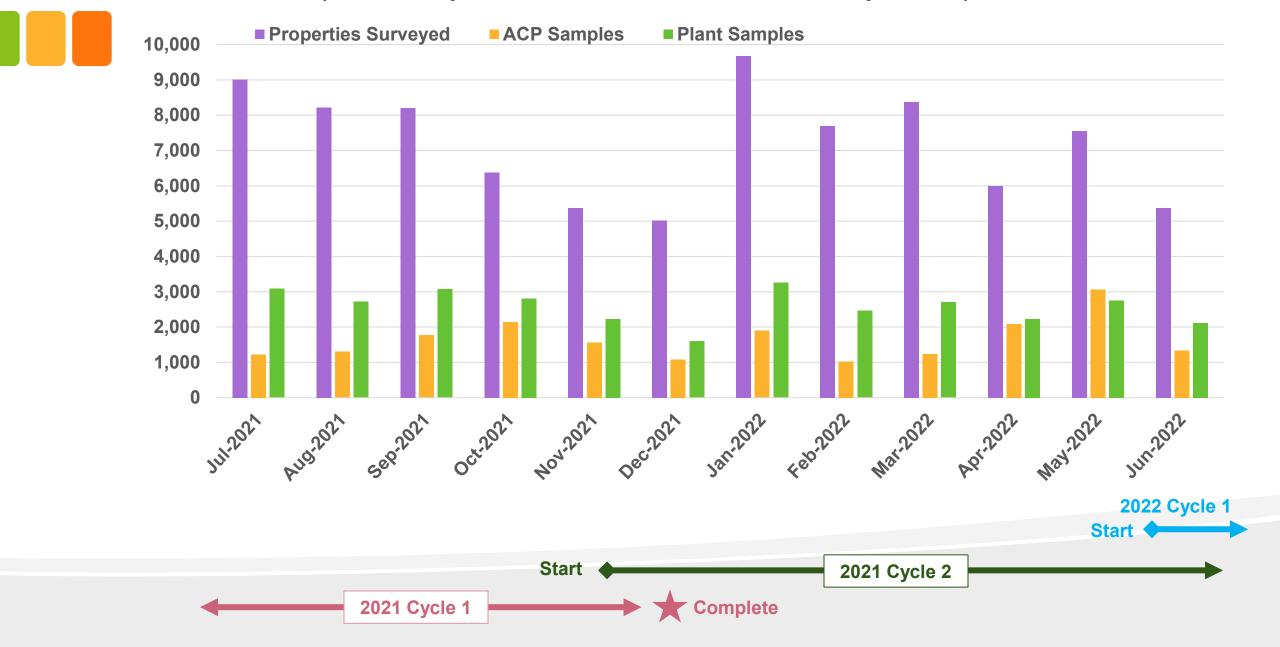
- Began November 2021
- 89% Complete
- Survey Complete in 25 of 37 Allocated Counties
- 51,495 Properties Visited
- 25,491 Properties Sampled
- 12,306 Entomology PDRs
- 17,857 Plant PDRs



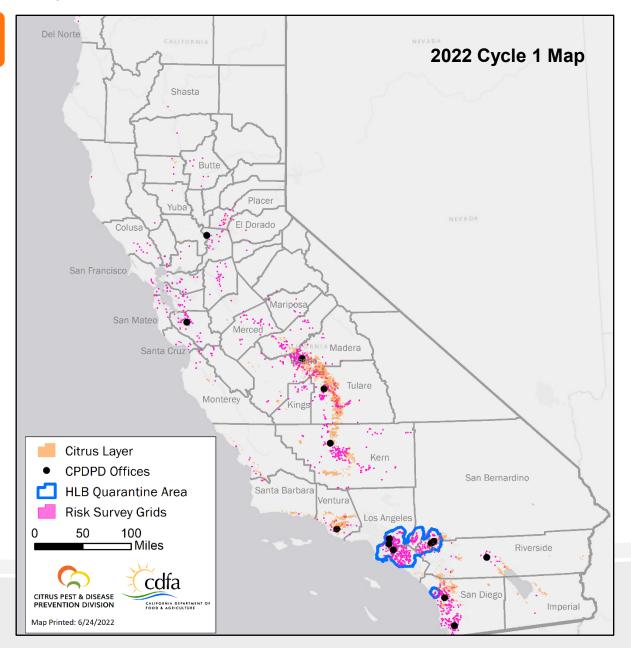




# Statewide Trends (2021 Cycle 1 and 2, and 2022 Cycle 1)



# 2022 Cycle 1



- June December 2022
- 42 Counties
- 1,246 Survey Grids



**Operational Update** 

**CPDPC Meeting** 

July 13, 2022

# Southern District

## **HLB Delimitation Survey and Treatment Areas**

## Orange County

- Survey was conducted in Westminster (1), Anaheim (17,18,94), Orange (51), Santa Ana (5,7,15,33,34,35), Huntington Beach (1,3,5,6,13), Garden Grove (12,47).
- Delimitation treatments were conducted in Westminster (1,2,3), Anaheim (14,17,18,22,27,37,38), Santa Ana (1,4,5,7,15,16,75,79,80, 83), Orange (41, 49-53), and Garden Grove (12).

# CDFA Citrus Districts and Managers \* Citrus Office \* Proposed Onso Office \*

## Los Angeles County

- Survey was conducted in South Gate (2), Carson (1,2), Duarte (3,4,5,6,7), La Mirada (4,6), Montebello (2,6,19), Paramount (2,10,11,12,13), Pico Rivera (46).
- Delimitation treatments were conducted in La Mirada (1), Paramount (1,2,3,9,10,11,12,13), Duarte (5,6,7,8,9,10), Carson (1,2), San Gabriel (15,17), Pico Rivera (37, 46), Paramount (1,2,3,9,10,11,12,13), South Gate (2) and Montebello (1,2,5,6,19).
- First CLas+ ACP was detected in Rowland Heights on 5/11/2022.

## San Bernardino County

- Survey was conducted in Chino/Ontario (15).
- Delimitation treatments were conducted in Chino/Ontario (15).
- First HLB+ tree in Fontana causing expansion.

## Riverside County

- Survey was conducted in Corona (10,11,12), Jurupa Valley (2).
- Delimitation treatments were conducted in Corona (10,11,12).

# Southern District

## **HLB Positive Trees**

County	Trees removed (April-June)	Cumulative pending trees
Orange	236	114
Los Angeles	49	42
San Bernardino	10	1
Riverside	4	2
TOTAL	299	159

• Scheduling the removal of remaining trees.

Quadrant Samples – Find Sites, Adjacent, Inconclusive (April thru June)				
Orange	1,706			
Los Angeles	1,180			
San Diego	0			
Riverside	221			
San Bernardino	127			



# Southern District

## **Residential Buffer Treatments**

Area/County	Start Date	End Date	Status
Santa Barbara	9/22	Pending	Scheduled to begin Mid-September
Ventura	8/22	Pending	Scheduled to begin Mid-August
San Diego Border Buffer	8/22	Pending	Scheduled to begin early-August
Imperial Border Buffer	N/A	N/A	Winter treatments only
San Bernardino	8/22	Pending	Scheduled to begin Mid-August
Hemet	8/22	Pending	Scheduled to begin Mid-August
UCR	8/22	Pending	Scheduled to begin Mid-August
Coachella	N/A	N/A	Winter treatments only
Imperial	N/A	N/A	Winter treatments only

**Public Meetings** 

Date	County/Areas	Purpose
4/19/2022	Los Angeles/Orange County	Delimitation treatments
4/20/2022	Chino, Ontario, Corona	Delimitation treatments
5/18/2022	Los Angeles/Orange County	Delimitation treatments
6/9/2022	Corona	Delimitation treatments
6/21/2022	Los Angeles/Orange County	Delimitation treatments



# **Central District**



# County ACP Detections

- ➤ There have been 3 ACP detections in Fresno County since May.
- ➤ There have been 10 ACP detections in Kern County since May.
- ➤ There have been 2 ACP detections in Tulare County since May.

# ACP Detection trapping

Fresno and Madera Counties – Ongoing.

# ACP Delimitation trapping

- Fresno County Ongoing.
- Kern County Never-ending.
- ➤ San Luis Obispo County Ongoing.
- ➤ Tulare County Ongoing.



# **Central District**



## ACP Treatment

➤ Treatment conducted in Fresno and Kern Counties in May and June in response to several ACP detections.

## Biocontrol

> Tamarixia released in Kern, Santa Barbara, and Tulare Counties.

# HLB Risk-Based Research Survey

Central staff began new risk cycle in June.

# CYVCV Survey

Surveys in Core 2 are ongoing.



# Northern District



## ACP Detection

- Ongoing trapping in Placer, San Joaquin, and Stanislaus Counties.
- ➤ Winter trapping will resume in November 2022.
  - Training will be provided to county pest detection supervisors and trappers.



- Ongoing delimitation in Alameda County.
  - No subsequent detections.
  - 127 traps serviced monthly.
- Ongoing delimitation in Santa Clara County.
  - Detections ongoing, traps serviced monthly.
  - No expansion of delimitation.



# Northern District



## Biocontrol

- Tamarixia releases ongoing in San Jose, Santa Clara County.
- Average 7,000 releases monthly.

# HLB Risk Survey

- > 2021 Cycle 2 is 90% complete as of July 6.
- Surveying continues primarily in Bay Area counties.



# County Regulatory Activity July 2021 - April 2022

County	FY 2021-22 Budget Amount	Percent Expended	CAs Issued	Grower Inspections	Transporter Inspections	Packer/Processor Inspections	Fruit Seller Inspections	NOVs	NOPAs
Fresno	\$93,419.64	100%	59	0	408	0	0	60	0
Imperial	\$49,682.53	55%	1	14	15	1	0	1	0
Kern	\$75,000.00	96%	17	15	767	2	2	4	0
Kings	\$26,138.94	96%	2	0	0	15	8	0	0
Los Angeles	\$271,839.35	92%	0	2	0	359	57	0	0
Monterey (*1)	\$16,171.55	46%	0	75	0	0	0	0	0
Orange	\$86,712.60	85%	9	84	10	1	0	0	0
Riverside (*1)	\$752,709.87	88%	22	202	1,731	7	13	8	0
San Bernardino (*1)	\$25,557.50	58%	19	7	2	1	0	0	0
San Diego	\$680,841.88	70%	36	159	155	64	32	5	0
San Luis Obispo	\$10,970.71	73%	7	3	0	0	0	0	0
Santa Barbara	\$19,886.44	88%	10	12	1	0	10	0	0
Tulare	\$380,000.29	68%	161	3	3,029	1	0	140	26
Ventura (*4)	\$146,007.26	71%	35	10	294	0	0	15	0
Total	\$2,634,938.56	78%	378	586	6,412	451	122	233	26

<sup>(\*#) =</sup> number of invoices missing from reporting period

# Grate Cleaning Inspections FY 2021-2022

Month	County	<b>Total Grates Inspections</b>	0 10 Leaves	11 40 Leaves	41 51+ Leaves
July 2021	Riverside	1	1	0	0
July 2021	Ventura	1	1	0	0
August 2021	Riverside	2	2	0	0
August 2021	Ventura	12	11	1	0
September 2021	Riverside	2	2	0	0
September 2021	Ventura	1	1	0	0
October 2021	Riverside	2	1	1	0
November 2021	Riverside	5	4	1	0
December 2021	Riverside	8	8	0	0
January 2022	Riverside	8	6	1	1
January 2022	Ventura	1	1	0	0
February 2022	Riverside	5	4	1	0
Tebruary 2022	Ventura	11	11	0	0
March 2022	Riverside	14	14	0	0
IVIdi CII 2022	Ventura	6	6	0	0
April 2022	Riverside	2	2	0	0
Αμπ 2022	Ventura	12	12	0	0
May 2022	Riverside	5	5	0	0
May 2022	Ventura	1	1	0	0
June 2022	Riverside	2	2	0	0
Total		101	95	5	1

# **Grower Liaison Updates: CPDPC Full Committee Meeting: July 13,** 2022

#### Northern Tulare County, Fresno County, and Madera County: Teri Blaser

In Northern Tulare County the first detection was at a juice north of Visalia at the beginning of May. There was no commercial citrus within 800 meters of the find deeming it a regulatory find. During the same time there were several finds around Lemon Cove/Woodlake at an Organic packinghouse. There was a total of eight detections, five trap finds and three finds of live psyllids. The live psyllids were found during a survey of host material on the packinghouse grounds and houses nearby. All growers have treated in the area.

There were three 25+ tree properties, two within the 400-meter residential treatment area and one just outside of that but within the 800-meter commercial citrus treatment area. All have been treated. Two of the properties were treated with the aid of the Tulare County Pest Control District, Commissioner Tucker's office, and Judy Zaninovich. Funding for the cost for the treatments was shouldered by the Tulare County Pest Control District and the Tulare County Ag Commissioner's office. The third property was able to reduce the number of trees to 24 and was treated by CDFA.

In Fresno County there were also several finds. The first two finds were at an Organic packinghouse in the Orange Cove area. It consisted of a trap find towards the end of May and finds of live psyllids at the beginning of June in nursery trees stored outside of the packinghouse.

Teri is working with the Fresno Ag Commissioner's team to ensure that all growers treat within the 800-meter area. There was only one 25+ tree property which was surrounded by the property owner's commercial citrus. Both will be treated at the same time. There is a block of abandoned trees just north of the packinghouse which is scheduled to be pushed. The owner is working on hiring a company to do the work, but there is a backlog of work for the tree removal company. Libby Ouellette, the Fresno County Deputy Ag Commissioner, has her team monitoring that block and bringing in the ACP detection dogs until the trees are completely removed. There were two additional trap finds at a packinghouse in Fowler early in June. Both are regulatory and there is no commercial citrus within 800 meters of the finds. The city of Fresno has also had a trap find confirmed on June 15, 2022, in the Sunnyside area. There is no commercial citrus near this new find.

Teri also continues to reach out to growers through monthly and as needed updates for all areas.

#### Southern Tulare County: Jessica Leslie

Jessica has continued to send out her monthly e-mail updates to all interested parties as well as reaching out to current and prospective PMA team leaders. If anyone who is not currently receiving her monthly e-mail updates is interested, please e-mail or call Jessica.

#### **Kern County: Judy Zaninovich**

There have been **10** ACP detections in Kern County in the last month. All of these detections occurred in residential or rural residential properties in Bakersfield and Arvin. There is no commercial citrus within at least a mile of any of these finds. CDFA has already treated all residential citrus hosts within 50 meters for most of these detections areas and will be treating the recent detection areas very soon.

Judy continues to keep the Kern citrus industry apprised of the recent detections through her email updates and meeting reports. She reminds growers history shows that low ACP trap detections in the spring can possibly lead to high populations by fall if conditions are right. So, she continues to urge growers and PCA's to stay vigilant by not moving leaf and stem material from the orchard and consider using an ACP-effective material when treating other citrus pests.

#### Santa Barbara County: Cressida Silvers

- Fall 2021 and Winter 2022 ACP area-wide treatment percentages have been reported to CDFA.
- The upcoming area-wide treatment window for Fall 2022 is Sept 4 24.
- The CRB citrus layer for the county was recently updated.

#### San Luis Obispo County: Cressida Silvers

- There have been no new ACP detections in the county.
- The CRB citrus layer for the county was recently updated.

#### **Imperial County: Curtis Pate**

The Canine Detection Team has been less active in Imperial this past month. There have been few ACP detections by human and canine scouts. A primary reason for lower detections is likely due to extreme heat and hardening of mature trees with much lower flush levels. ACP has been detected on new plantings near residential plantings.

In mid-May there were *Tamarixia* releases in the neighborhoods on the west side of Calipatria and Brawley. Following up on those releases, we have been unable to find parasitized ACP nymphs. The PCD is releasing lacewings in those areas currently.

#### **Ventura County: Sandra Zwaal and Cressida Silvers**

- A Ventura Co. Task Force meeting is scheduled for mid-July.
- The annual Grower Meeting to announce the upcoming ACP area-wide treatments is planned for August. Both Grower Liaisons will work with the Farm Bureau CEO to plan, coordinate speakers, and provide recommendations for topics. New for this year is a Spanish version of the ACP-basics (biology, identification, treatments, management, quarantines) presentation.
- The 2022 Fall ACP area-wide treatments are begun mid-July. The new treatment schedule remains routine and is similar to the previous years' schedules with treatments beginning with the east side of the county and working towards to the west. Each treatment window is scheduled for 2-3 weeks with overlapping PMAs between treatment windows.

#### San Diego County: Sandra Zwaal

- 2 ACP adults were confirmed positive for HLB in San Diego Co. One ACP was found in a commercial grove and one in a residential area. Grove owners in the 250-m area were notified to treat.
- The San Diego fall ACP area-wide treatments are scheduled for August.
- Sandra continues to update the grove and grower contact data.
- A Field Day is being planned to show how to identify, monitor, and manage ACP. Sandra is currently working with the PCD Manager and with UC to identify a grower cooperator and site. The Field Day may include UC presentations related to other citrus pests and diseases.

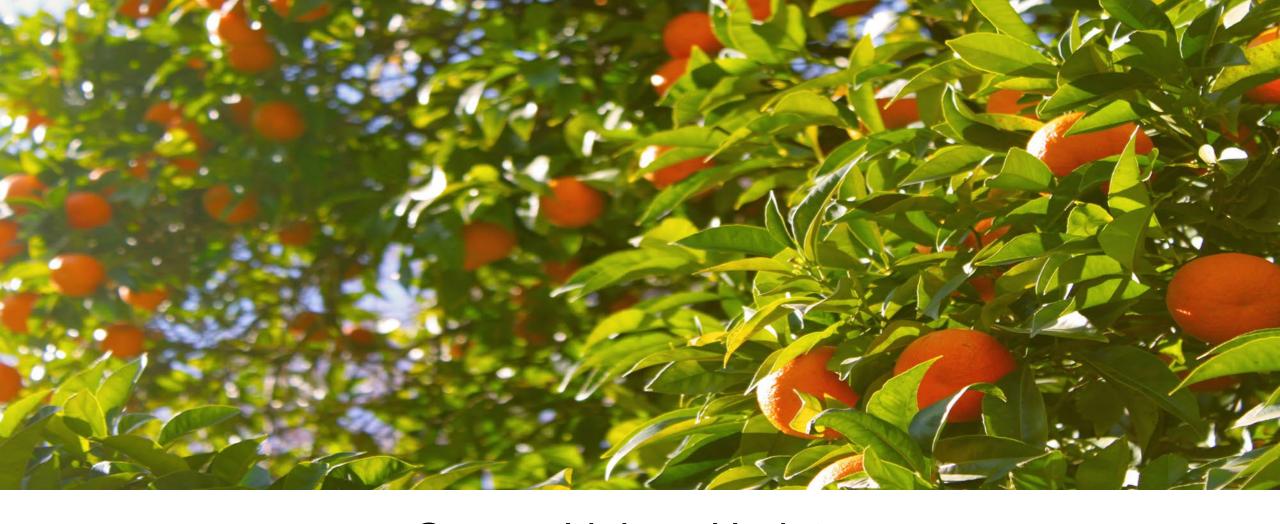
#### San Bernardino County - Sandra Zwaal

- The 2022 Fall ACP area-wide treatments are scheduled to begin mid-July.
   Treatment reminders have been distributed by Sandra.
- In preparation for the upcoming treatments, Sandra is in the process of updating the grove and grower contact data.
- A Field Day is being planned to include both San Bernardino and Riverside growers to show how to identify, monitor, and manage ACP. Sandra is also working with UC and this event may include additional UC presentations related to other citrus pests and diseases.

#### **Riverside County-Sandra Zwaal**

- No commercial sites are within 250-meters of the recent HLB confirmed positive plant and ACP samples in the Corona and Jurupa area.
- Riverside County was sent an introduction to the new GL, Sandra Zwaal.
- The 2022 Fall ACP area-wide treatments for the non-PCD areas of Riverside Co. are scheduled for mid-July. The schedule was distributed by Sandra to all Riverside Co. citrus growers. Groves within the PCD will receive a separate schedule specific to their areas by their PCD Managers.

- Sandra has reached out to the Riverside CAC, PCD Managers, and the Riverside Farm Bureau to collaborate on ACP/HLB outreach activities, including coordinating ACP area-wide treatments.
- In the upcoming weeks, Sandra will be reviewing PMA maps, and grove and grower contact information.



Grower Liaison Updates
CPDPC Full Committee Meeting

July 13, 2022





# Central District: Grower Liaison Updates

#### Fresno, Madera, Northern Tulare: Teri Blaser

All growers have treated in the area.

#### Southern Tulare: Jessica Leslie

 Jessica has continued to send out her monthly e-mail updates to all interested parties as well as reaching out to current and prospective PMA team leaders.



# Central District: Grower Liaison Updates Continued

#### Kern County: Judy Zaninovich

- There is no commercial citrus within at least a mile of any of the recent finds.
- Judy continues to keep the Kern citrus industry apprised of the recent detections through her email updates and meeting reports.
- She reminds growers history shows that low ACP trap detections in the spring can possibly lead to high populations by fall if conditions are right.
- She continues to urge growers and PCA's to stay vigilant by not moving leaf and stem
  material from the orchard and consider using an ACP-effective material when treating
  other citrus pests.



# Central: Grower Liaison Updates Continued

#### Santa Barbara County Update: Cressida Silvers

The upcoming area-wide treatment window for Fall 2022 is Sept 4 - 24.

#### Ventura County: Sandra Zwaal & Cressida Silvers

- On May 31<sup>st</sup>, a Ventura Co. Task Force meeting was held and facilitated by the new Farm Bureau CEO.
- The annual Grower Meeting to announce the upcoming ACP area-wide treatments is planned for August.
- Both Grower Liaisons will work with the Farm Bureau CEO to provide recommendations for topics and help coordinate speakers.
- The 2022 Fall ACP area-wide treatments are scheduled to begin in July. The new treatment schedule remains routine and like the previous years' schedule.





# Southern District: Grower Liaison Updates Continued

#### San Diego County – Sandra Zwaal

The San Diego Fall ACP area-wide treatments are scheduled for August.

#### San Bernardino County – Sandra Zwaal

- The Fall ACP area-wide treatments are scheduled to begin in July.
- Treatment reminders are being distributed by Sandra.
- In preparation for the upcoming treatments, Sandra will update the grove and grower contact data for both counties.
- A Field Day is being planned to include San Bernardino, San Diego and Riverside growers to show how to identify, monitor, and manage ACP.
- Sandra is working with the UC and this event may include additional UC presentations related to other citrus pests and diseases.

## Southern District: Grower Liaison Updates Continued

#### Imperial County: Curtis Pate

- There have been few ACP detections by PCD personnel, PCAs, and canine scouts.
- In mid-May, there were Tamarixia releases in the neighborhoods on the west side of Calipatria and Brawley.
- They have been unable to find parasitized ACP nymphs.
- The PCD is releasing lacewings in those areas.
- Riverside County: Sandra Zwaal
- Riverside County was sent an introduction of the new grower liaison, Sandra Zwaal.
- No commercial sites are within 250-meters of the recent HLB confirmed positive plant and CLas+
   ACP samples in the Corona and Jurupa valley area.
- The 2022 Fall ACP area-wide treatments in the non-PCD areas of Riverside County are scheduled for mid-July.
- Sandra has reached out to the Riverside CAC, PCD Managers, and the Riverside Farm Bureau to collaborate on ACP/HLB outreach activities, including coordinating ACP area-wide treatments.
- In the upcoming weeks, Sandra will be reviewing PMA maps, and grove and grower contact
   CITRUS PEST & DISEASE
   Information.

# Asian Citrus Psyllid Biocontrol Update



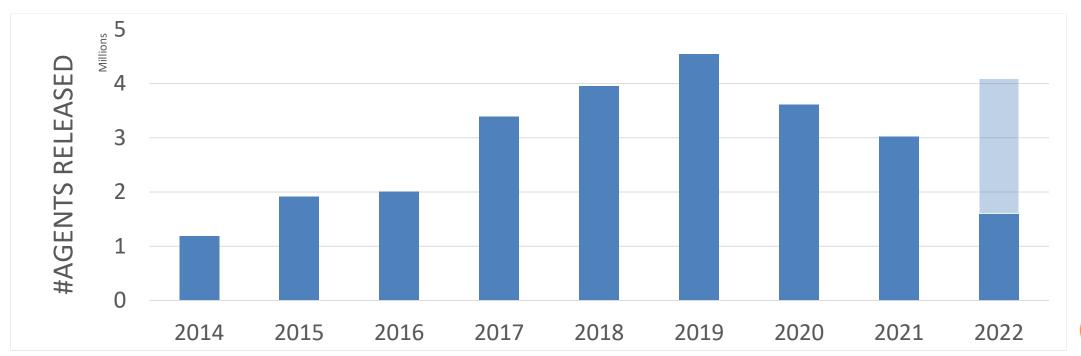
July 2022



# Tamarixia Releases in California

Total Releases by Year

With Estimate of Remainder of This Year's Release



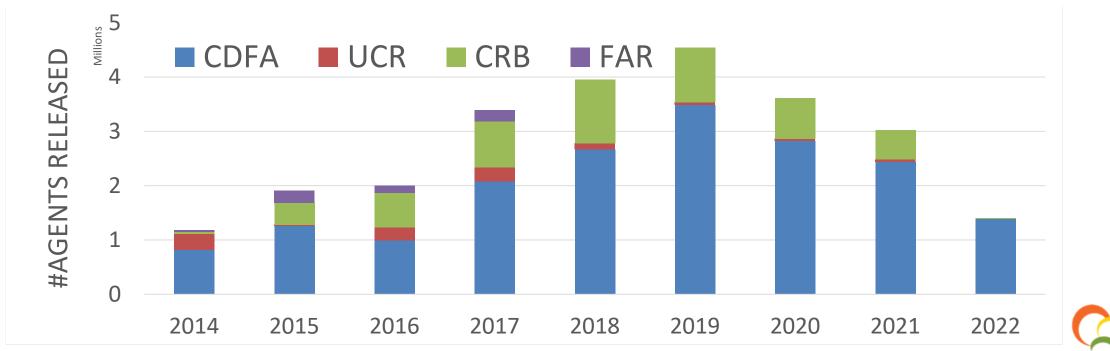


# Tamarixia Releases in California

## Multiagency Participation

- CDFA (2012 Present)
- Citrus Research Board (2014 Present)

- Foothill Agricultural Research (2014 2017)
- UC Riverside (2010 2021)





# Biological Control Agent Releases

December 2011 – July 2022

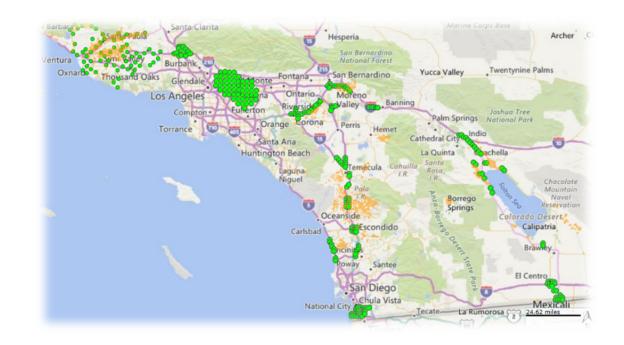
	Releases, 2022	Releases	2011-2022
County	T. radiata	Tamarixia	D. aligarhensis
	Released	Released	Released
Imperial	55,200	574,343	10,295
Los Angeles	361,004	6,943,519	107,734
Orange	388,800	5,352,676	71,179
Riverside	170,200	3,702,802	127,739
San Bernardino	115,700	1,919,375	57,252
San Diego	147,800	2,872,088	86,403
Ventura	112,000	2,142,056	16,830
Santa Barbara	64,600	295,082	12,012
Kern	48,400	272,564	О
Santa Clara	46,200	181,337	0
Placer	0	3,400	0
San Luis Obispo	0	109,500	0
Tulare	7,200	43,200	О
Monterey	0	14,400	0
Arizona	12,100	172,200	0
Mexico	0	306,000	0
TOTAL	1,529,204	24,904,542	489,444
	TOTAL (2011-2021):		25,393,986



# **Biological Control Agent Release Areas**

#### Releases in:

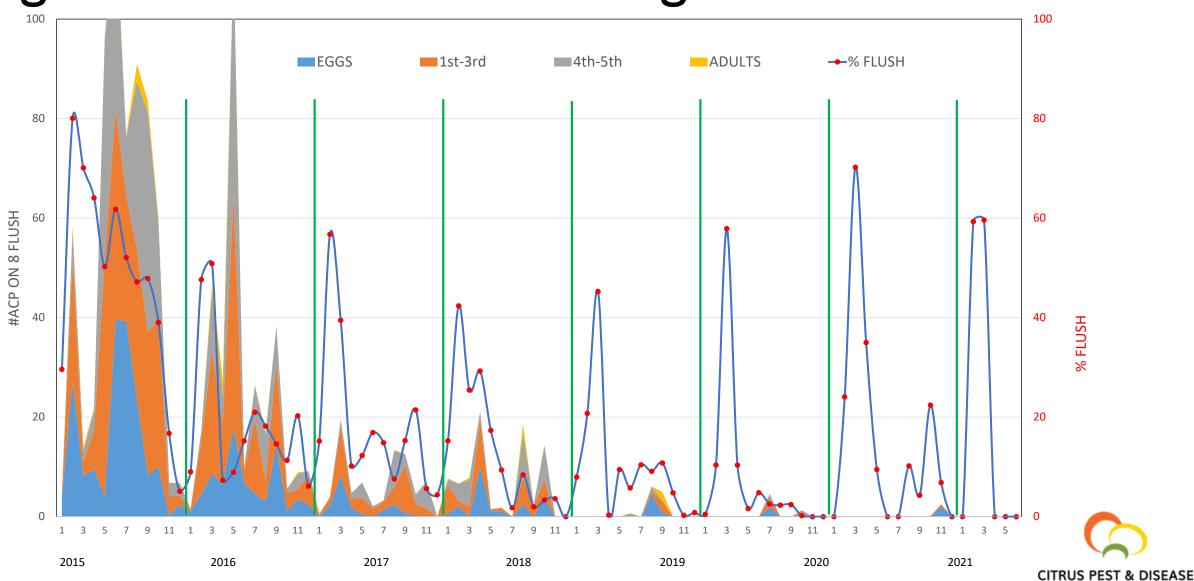
- HLB Quarantine areas
- Borders
- Trade routes
- Area-wide management
- Newly established ACP



Release Type	20	21	2022		
	# Agents	%	# Agents	%	
Borders	92,634	3	67,300	5	
HLB	2,456,592	81	992,500	76	
New	135,355	4	88,400	7	
Routes	339,244	11	154,200	12	



# Region-Wide Urban Monitoring 2015 - Present



PREVENTION DIVISION

# Publication on ACP Biocontrol in California



Forest Health Assessment

FHAAST-2019-05

June 2022

# Contributions of CLASSICAL BIOLOGICAL CONTROL

to the U.S. Food Security, Forestry, and Biodiversity

**Edited by** 

Roy G. Van Driesche, Rachel L. Winston, Thomas M. Perring, and Vanessa M. Lopez

Contributions of Classical Biological Control to the U.S. Food Security, Forestry, and Biodiversity (bugwoodcloud.org)

URL: https://bugwoodcloud.org/resource/files/23194.pdf

CHAPTER 12

Successful Biological Control of Asian Citrus Psyllid, Diaphorina citri, in California

Mark S. Hoddle<sup>1\*</sup>, Christina D. Hoddle<sup>1</sup>, David J. W. Morgan<sup>2</sup>, and Ivan Milosavljević<sup>1</sup>

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<sup>2</sup> California Department of Food and Agriculture, Mt. Rubidoux Field Station, Riverside CA david.morgan@cdfa.ca.gov









# ACP DETECTOR CANINES UPDATE

Presentation for CPDPC Full Committee
July 13, 2022

WHERE MAN'S BEST FRIEND FINDS IT!

PEST CONTROL – AGRICULTURE – FOOD SAFETY

# **Overall Summary**

1/1/2022 - 6/27/2022

#### Residential

Item	CA	AZ
Number of Trees with ACP	55	6
Total Number of Trees Inspected	1,541	300
Number of Doors Answered	316	66
Number of Doors not Answered	239	9
K9 Inspection	269	71
Visual Only	202	0
No Permission	27	3

#### **Commercial Orchards**

Item	CA	AZ
Number of Trees With ACP	260	0
Total Number of Trees Inspected	58,078	3,985
Number of Clients	30	3
Number of Blocks	288	15

#### **K9 Performance**

Naturally Occurring ACP			
Total K9 Alerts	375		
Alerts With ACP Visually Confirmed	319		
% Visually Confirmed	85%		

Training Aids (Live and Pseudo)				
Total K9 Alerts	176			
Alerts At Tree With Training Aid	165			
Accuracy	94%			

# Work in Desert Region- 2022 Imperial County and Coachella Valley

	January	February	March	April	M	ay	Ju	ine	Ju	ly	Totals
Residential (R)/ Commercial (C)	С	С	С	С	R	С	R	С	R	С	
Trees K9 located with ACP	8	6	15	140	15	32	9	45	5	16	291
Trees Surveyed	7,804	4,425	11,094	11,263	245	5,358	60	7,956	30	665	48,900

- 1. These scouting services were provided free of charge to the pest control districts. This will continue until May 2023. Their managers decide where to deploy our canine teams and communicate with growers the survey results.
- 2. The canine team based in Fresno was sent to this region when there was no work with CDFA in the San Joaquin Valley.

# Comments in Letters of Support Growers and PCD Managers in Desert Region

- 1. The dogs helped us to identify treatments that were applied wrong and materials that are not as effective as we believed.
- 2. ACP were found by the dogs in a tree next to a yellow CDFA trap with out reports of trap hits in the area.
- 3. The dogs helped confirm addresses with populations of ACP nymphs at the correct stage to utilize Tamarixia release.
- 4. The ability of the dogs to detect ACP at such low numbers was quite remarkable, often alerting on trees where just a single ACP was present in any life stage. After working with them, I have now altered my techniques when scouting for ACP myself.
- 5. In areas that we have ACP traps showing no signs of ACP, the dogs showed different.
- 6. The Coachella Valley PCD has very good cooperation. After areawide sprays occurred we ran the dogs and still could find ACP in certain areas. Every time this occurred it was either a grower didn't treat or there was an adjacent backyard tree that we were unaware of where ACP were breeding.
- 7. The dogs have helped us find trouble spots that were otherwise undetected.

# Work in San Joaquin Valley- 2022

	January	February	March	April	N	Лау	Ju	ne	Ju	ıly
Residential (R)/ Commercial (C)	R	R	R		R	С	R	С	R	С
Trees K9 located with ACP	0	0	0		0	0	0	4 <sup>1</sup>	0	0
Trees Surveyed	340	211	184	0	45	2,113	260	7,575	78	1,201
Counties	Kern Tulare Fresno	Fresno	Tulare			ern Ilare	Tul	ern are <sup>2</sup> sno		ern esno

#### Notes:

- 1- Nymphs and eggs located by dogs on Orange Cove packinghouse potted trees 5 days after treatment with organic and conventional. Owner shown and said he would treat with a conventional product that day. We are returning weekly to survey these 4,000 potted trees. ACP nymphs collected by Fresno County Entomologist.
- 2- Nymphs found with visual inspection on residential tree near Lemon Cove packinghouse where dogs could not be used. ACP nymphs collected by CCTEA.

# Canine Teams Inspecting Bins of Fruit At Ranch &/or Packinghouse

- Fresno County Deputy Ag Commissioner
  - · We offered to send canine team with county inspectors.
- SJV Organic Growers Group
  - Would like canines to inspect bins coming into packinghouse and before leaving orchard of origin.
  - Seek permission from food safety certifying body before starting.
  - Perhaps bins in Ventura can be part of ACP live odor runs.
- Doc's Organics-Imperial County
  - Will cooperate in NIFA grant research (if funded) of canines inspecting bins of fruit as they arrive.

# Funding

- 1. APHIS funding continues until May 2023 to support current two canine teams.
- 2. We have been informed this will be the last year APHIS, PPQ, Science and Technology will be providing financial support.
- 3. Would this committee be interested in funding the program to continue?
- 4. If so, what steps need to be taken now?
- 5. Can they be accomplished in the next 10 months?

# **Budget**

	Fed Sup	No-FSup	No-FSup
	6/2022- 5/2023	6/2022- 5/2023	6/2023- 5/2024
Salaries	401,275	401,275	588,794
Benefits (15%)	60,191	60,191	88,329
Training Base-Riverside County	45,742	45,742	48,945
Travel	117,949	117,949	126,204
Canine	72,638	72,638	70,761
Administration	38,464	38,464	41,156
Contingencies (5%)	36,813	36,813	50,209
Total	773,071	773,071	1,012,388
Federal Support <sup>1</sup>	509,517	0	0
Amount Needed	263,554	773,071	1,012,388
Annual Price per Team	131,777	379,579	253,097 <sup>2</sup>
Number of Canine Teams	2	2	4

# Staffing

	4/2022- 3/2023	4/2023- 3/2024
Canine Teams	2	4
Trained Dogs <sup>3</sup>	5	9
San Joaquin Valley	1	2
Desert Region	1	2

#### Notes:

- 1- USDA APHIS PPQ also will provide \$118,548 for items not in this budget. Scope of work is supplying 2 teams and overhead for one last year.
- 2- Price per team goes down as overhead is shared by more teams
- 3- One backup dog in reserve as a substitute.

# Future Canine Program Costs June 2023-May 2024

- \$1,012,388 annual program cost
- \$253,097/ team / year with 4 teams
- \$973/day
- \$1.79/ tree (average)

#### Calculations used:

545 average commercial trees/day/team in 2022. 260 working days/year.

# Pending Grant Applications USDA-NIFA-ECDRE

Funds Cannot Be Used To Support ACP Canine Teams Providing Services

### **Objectives:**

- 1. Analyze data from farm-level implementation of proven ACP detector canine technology to optimize regional management or eradication of ACP in commercial groves and residential settings in CA and AZ.
- 2. The increased efficacy of detecting ACP when using ACP detector canine teams versus human scouts reduces the consequences of HLB by slowing the establishment of ACP more than increased detection increases ACP treatment costs.
- 3. Determine if detector canines can be utilized in citrus greenhouses to detect prior ACP feeding on plants after breaches, such as a tear in the greenhouse or after a hurricane.
- 4. ACP detector canine teams increase citrus industry knowledge of the duration of effectiveness of the systemic pesticide Imidacloprid, leading to greater vector control that more than offset the additional costs from possibly treating more frequently.

PI: Lisa Finke, Co-PI Neil McRoberts, Jonathan Kaplan



# **OUTREACH UPDATE**

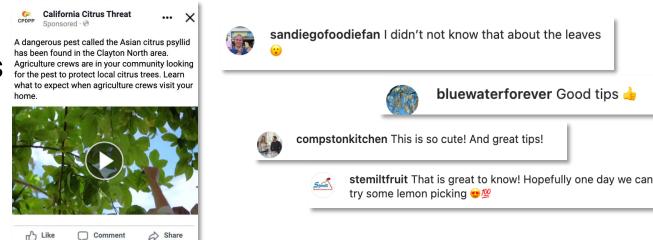


# Homeowner Outreach Activities



## **ADVERTISING AND SOCIAL MEDIA PARTNERSHIPS**

- According to Nielsen, 71% of consumers trust advertising, opinions and product placements from influencers.
  - CPDPP partnerships on Instagram, Facebook and TikTok.
- Shared content on tips for growing, harvesting and sharing homegrown citrus to prevent the spread of HLB and the ACP.





## **MULTICULTURAL OUTREACH**

## **Media Outreach**

- Outreach to Hispanic news outlets on awareness of the ACP and HLB and tips on how to prevent the spread.
  - Broadcast and print
- Tamarixia outreach to Asian language news outlets regarding releases in Santa Clara County.
  - Print and online





Featured Tu Hogar Jardineri

Así puede proteger sus árboles de cítricos contra el calor y las plagas

O to Marking Hillselfrade - 15 do not have





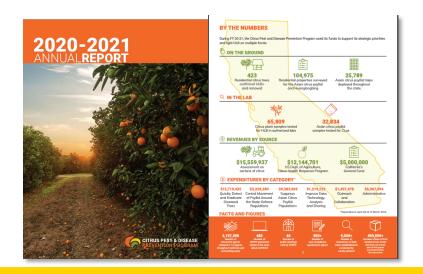
# Industry Outreach Activities



## STAYING ENGAGED WITH THE CITRUS INDUSTRY

### **Annual Report**

- 4,800+ reports mailed to compliance agreement holders.
- Digital version on CitrusInsider.org.
- In June, we saw a 91% increase in our average number of new subscribers from the past six months in 2022.



### **Tulare County Grower Meeting**

- Coordinated with CPDPD and Northern Tulare County Grower Liaison Teri Blaser on Tulare County Citrus Grower Meeting as a result of recent ACP detections in the area.
  - 80 participants



## STAYING ENGAGED WITH THE CITRUS INDUSTRY

### Pauma Valley ACP+

- Clas+ ACP in Pauma Valley citrus grove.
  - Crisis communications plan
  - Development of key messages
  - Citrus Insider post and newsletter distribution



### CitrusInsider.org

- Fruit for Thought E-newsletter: 50% open rate.
- News alerts on new detections.



Industry Members Encouraged to
Increase Vigilance Following Recent
ACP Detections

#### San Joaquin Valle

Following recent Asian citrus psyllid (ACP) detections in the Central Valley over the la growers, packers, haulers and all citrus industry members are encouraged to be extre ACP mitigation steps and adherence to regulatory practices.

Asian citrus psyllids found in Fresno County

San Joaquin Valley

# **Elected Official Outreach Activities**



## **CONNECTING WITH ELECTED OFFICIALS**

#### **Elected Official Audience Outreach**

- Over the past several months, we've had a booth presence at several conferences and events, connecting with elected officials from across the state.
- In May, CPDPP connected face-to-face with more than 100 mayors, city council members and city managers at Southern California Association of Governments and California Contract Cities' annual meetings.
- League of California Cities September









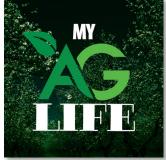
# **Current and Upcoming Outreach Activities**

## RECENT ACP AND HLB DETECTIONS

- As a result of recent ACP and HLB detections throughout several areas of California, NST has engaged multiple outreach tactics to ensure residents and industry members alike are aware of the latest updates surrounding California citrus.
  - CPDPP Crisis communications plan Pauma Valley
  - Earned media opportunities
  - Radio and social media advertising
  - Citrus Insider alerts



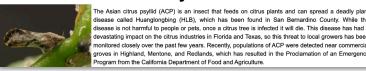








#### **Citrus Threatened By Pests and Disease**





## **CURRENT AND UPCOMING ACTIVITIES**

- San Diego County outreach opportunities
  - Chula Vista Lemon Festival in August
- Additional social media influencer partnerships
- Content development for CaliforniaCitrusThreat.org refresh
- Video content development
- Science Advisory Panel facilitation

