

CONSENT AGENDA

1. Meeting minutes from February 17, 2021 CPDPC Meeting

CALIFORNIA CITRUS PEST AND DISEASE PREVENTION COMMITTEE MEETING

Meeting Minutes
Wednesday, February 17, 2021

Committee Members Present:

Kevin Ball	John Gless	Gregorio Rundini
Brad Carmen	John C. Gless	Roger Smith
Ed Civerolo	Jim Gorden	Keith Watkins
Aaron Dillon	Mark McBroom	
Bob Felts, Jr.	Dr. Etienne Rabe	

Committee Members Absent:

Craig Armstrong	Nick Hill	James McFarlane
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CDFA Staff:

Kelley Aubushon	Karla Huerta	Colleen Murphy
Fidan Aghayarova	Laura Irons	Keith Okasaki
Fernando Berber	Mathew Jian	Lea Pereira
Karina Chu	Anmol Joshi	David Phong
Kiana Dao	Marina Kaiser	Grace Radabaugh
Amelia Everett	Daniel Lee	Lydia Rodriguez
Tina Galindo	Betty Lee	ThuyVy Truong
Alisha Garcia	Magally Luque-Williams	Claudia Vasquez
David Gutierrez	Zachary McCormack	Jennifer Willems
Spencer Hom	David Morgan	
Victoria Hornbaker	Alex Muniz	

CRB Staff:

Holly Deniston-Sheets	Melinda Klein	Marcy Martin
Rick Dunn		

Guests:

Price Adams	Deborah Larmon	Cressida Silvers
Bob Atkins	Jessica Leslie	Karen Westerman
Teri Blaser	Amy McGlung	Ed Williams
Casey Creamer	Mia Neunzig	Michele Wineman
Lisa Finke	Margaret O'Neill	David Wirta
Sara Garcia-Figuera	Curtis Pate	Helene Wright
Subhas Hajeri	Sylvie Robillard	Judy Zaninovich
Evelyn Huarto	Briana Russell	Sandra Zwaal

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Opening Comments:

The Citrus Pest and Disease Prevention Committee (CPDPC) meeting was called to order at 9:05 am via webinar. Jim Gorden welcomed the CPDPC members, staff, and members of the public participating online. Mr. Gorden stated that there was a quorum for the meeting.

Public Comments:

No public comments were made.

APPROVAL OF CONSENT AGENDA ITEMS

Motion: To recommend approving of the November 18, 2020 Consent Agenda as presented.

First: Keith Watkins

Second: John C. Gless

Motion carries: Motion passed unanimously

FINANCE SUBCOMMITTEE REPORT

Review 2019/2020 Budget Expenditures and Revenue:

Bob Felts, Jr. stated that the program expended \$25,387,980 through September 2020. Fi\$Cal is showing a \$3,000,000 shy of the manual tracking expenditures since closure through Fiscal Year (FY) September 2020. Total revenue for FY 19/20 was \$18,491,480. Any adjustments may be related to late fees and interest. Additional 19/20 revenue received after January 2021 will be credited as prior year in FY 20/21.

Review 2020/2021 Budget Expenditures and Revenue:

Mr. Felts, stated that the total expenditures are \$3,495,604 through February 2021. The Finance Subcommittee was notified that all State agencies have been asked by the Governor's Office to reduce general funds expenditures by five percent for the state deficit. Expenditures through December 2020 were thirty percent less than last year due to lagging invoices. He stated the budget is just under \$42,250,000 leaving a balance of \$38,495,604 or expenditures. Revenue received through January 2021 is \$2,288,776. Revenue numbers may be adjusted to reflect credits for overpayments received from packing houses.

EXECUTIVE COMMITTEE REPORT

Form 700 Update:

Victoria Hornbaker stated that Form 700s are due before April 1, 2021 and must be filed electronically. She stated that the trainings for sexual harassment/violence in the workplace and ethics training need to be completed. There is an alternative sexual harassment/violence in the workplace training that is more in line to what CPDPC members need. Contact her for a link to then alternative training.

Election of Office Holders Discussion:

Ms. Hornbaker stated that there is a vacancy on the CPDPC due to Kevin Severns' retirement. She received one resume from Jared Plumlee who is currently with Booth Ranches in Orange Cove, California and the same area that Kevin Severns represented.

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Victoria reminded the CPDPC members that the election held last January carried a motion to maintain the same officers of the previous two years. Jim Gorden, Dr. Etienne Rabe, and Mark McBroom's term will end January of 2022. Victoria will send the current bylaws to CPDPC members.

Motion: To appoint Jared Plumlee to the open position for Fresno County.

First: Keith Watkins

Second: Rodger Smith

Motion Carries: 10 Yeas (Kevin Ball, Brad Carmen, Ed Civerolo, Bob Felts, Jr., John Gless, John C. Gless, Jim Gorden, Mark McBroom, Gregorio Rundini, Rodger Smith, Keith Watkins), and 2 abstained (Aaron Dillon, Dr. Etienne Rabe)

OPERATIONS SUBCOMMITTEE REPORT

Current State of the Program (Staff, Leases, Vehicles, etc.):

Ms. Hornbaker stated that there are currently 168 total positions within the Citrus Pest and Disease Prevention Division (CPDPD) and vacant positions are in various stages of being filled. She stated that the Division is in the process of securing new office space in Ventura County. She stated that an initiative brought up by the Governor's Office requires a reduction in lease space and that the only offices leased by CPDPD are the Sacramento HQ/Northern District, Visalia and Cerritos. Other offices are shared with Pest Disease/Exclusions Projects, Pest Exclusion, or other Plant Division Branches. She stated that due to COVID, home storage permits are being implemented to allow work vehicles to be stored at home thus allowing staff to deploy from home to the field. CPDPD received 114 long term lease vehicles and need an additional 135 vehicles. In the meantime, the CPDPD is utilizing short term rentals for meet the needs of the Division. . Leases give the division flexibility and relief from maintenance costs.

STRATEGIC PRIORITY 1 – Find and Eradicate Huanglongbing

CDFA Operational Update:

Southern District

David Gutierrez stated that delimitation and treatment surveys continue in Orange, Riverside, and Los Angeles Counties. San Bernardino County's re-treatment will begin in early March. Survey and treatment were completed on 78 properties in the San Diego (Fallbrook) area, with no new find sites and all sample results were negative. The winter areawide treatment was completed in Santa Barbara, Borrego Springs, San Pasqual, and Imperial Counties and will continue for Ventura, San Bernardino, Hemet, Coachella and the US/MX border buffer. A total of 116 huanglongbing (HLB) positive trees were removed from November 2020 to January 2021. Risk-based survey Cycle 2 was completed in Orange and Imperial Counties, Riverside, San Bernardino, Los Angeles, and San Diego will be completed next week. The two-mile border buffer risk survey is 26 percent completed in San Diego County and 53 percent completed in Imperial County.

Central District

Mr. Gutierrez stated there was a new Asian citrus psyllid (ACP) detection on February 3 on a yellow panel trap at the Exeter Specialties Packing house located in Tulare County. Staff conducted a 50-meter visual survey and there were no further detections. This detection was

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reported as a regulatory incident. Detection trapping is on-going in Fresno and Madera County. Delimitation trapping is on-going in Kern County. Treatment in Kern County was projected to be completed within the following week.

Northern District

Mr. Gutierrez stated that an ACP was detected on November 25, 2020 in Pinole, Contra Costa County. Treatment was completed on December 23. Delimitation trapping is occurring in four grids and there were no additional detections. In Santa Clara County, final treatments occurred on November 30, 2020 and delimitation trapping is occurring in 18 grids. One ACP was detected on January 13, 2021 and an additional detection on February 4. Monthly biocontrol is on-going. HLB risk survey Cycle 2 is being conducted in over twenty counties and will be completed by the end of February. Winter residential trapping is continuing in over twenty counties and year-round county trapping continues in three counties.

Kern County ACP Update:

Jennifer Willems stated the last confirmed ACP detection was in Bakersfield on January 6 that triggered a 400-meter treatment area. Treatment is nearing completion and staff are coordinating with the pest hotline to treat the remaining properties. She stated that a suspect ACP detection occurred on February 16 in Arvin and staff are waiting for lab results. The find falls between two other 50-meter treatment areas. Staff began a visual survey for the new 50-meter area on February 16.

STRATEGIC PRIORITY 2 – Control ACP Movement and Enforce Regulations

CDFA Regulatory Update:

Keith Okasaki stated the Quarantine Enforcement Cooperative Agreements were conducted between July and December 2020. The next county agreement period will be at least 15 months and will align with the CPDPC's fiscal year starting in October. He noted that workplan documents will be sent to counties to propose work done under the next contract period and will begin in July. Counties have performed 444 grower inspections, 2,359 transporter inspections, 374 packer inspections.

County Regulatory Update:

Mr. Okasaki stated that grate cleaning inspections were requested from Ventura and Riverside Counties on shipments received from other counties. Ventura had not been receiving many shipments from Monterey when grate cleaning inspections started. The majority of inspections were conducted in Riverside County due to shipments arriving in a high-risk area. The chart presented showed an increase in number of bins inspected with a high leaf average, in Riverside County. Those packers were put on notice and numbers still have increased. He noted that they will continue to monitor the numbers closely and act when appropriate, including suspending the grate cleaning when necessary.

STRATEGIC PRIORITY 3 – ACP Control/Suppression

Status of Request for Proposal (RFP) for Rapid ACP Screening:

Ms. Hornbaker stated that the RFP was sent to the contract's office in early February. Many of the CPDPD contracts got pushed back due to emergency contracts from other divisions. She also stated that the Imperial County Grower Liaison (GL) has expired, and other GL

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contracts will be expiring at the end of June and will be posted soon. The Riverside County GL is currently posted.

SCIENCE SUBCOMMITTEE REPORT

Effectiveness of Southern California HLB Program:

Dr. Etienne Rabe stated that approximately one third of the CPDPD budget, \$15,000,000, is spent on Southern California HLB operations. Currently, there is a statutory mandate to remove HLB positive trees and will need to take this into account or address this mandate if there are any changes in the current process in Southern California. The Southern California area treatment/delimitation operations over the years is less than two percent of the 5,000 square mile total area. He said that the PowerPoint presentation will be reviewed again at the next meeting.

STRATEGIC PRIORITY 4 – Improve Data Technology, Analysis and Sharing

Ethyl Formate Registration Update:

Dr. Rabe stated that there are no current updates.

Neonicotinoid Risk Mitigation Update:

Casey Creamer stated that the California Department of Pesticide Regulation (DPR) Risk Mitigation comment period is closed. DPR is evaluating their analysis as a result of industry comments. The regulation process was delayed, and a second draft will be released this fall.

Data Analysis Tactical Operations Center (DATOC) Update:

Dr. Rabe stated that there are no current updates from DATOC, but they are still evaluating the ACP trap technologies, sticky traps, and attract and kill devices.

CalTrap and Citrus Surveyor Update:

CalTrap:

Colleen Murphy stated that CalTrap received extra funding to include delimitation and other enhancements. Ms. Murphy stated that Los Angeles County is currently using CalTrap with great success and will soon train additional counties to use the application. California Department of Food and Agriculture (CDFA) trapping staff are currently being trained and then they will train the counties. CDFA staff are currently using the CalTrap mobile app out in the field. CalTrap is expected to roll out on June 1 including a help desk feature. iPads may need to be purchased for CalTrap to run efficiently. She also stated that CalTrap is for sticky traps and Citrus Surveyor is for everything else.

Citrus Surveyor:

Ms. Murphy stated that the mobile application began field testing on February 8, 2021 and received good feedback. Applications includes risk survey, delimitation, and treatment. On February 19, she will begin to configure the supervisor application so that duties can be assigned to field staff. Not all field have cell phones and are awaiting deployment in order to run Citrus Surveyor.

OUTREACH SUBCOMMITTEE REPORT

STRATEGIC PRIORITY 5 – Outreach and Education

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Grower Liaison Working Group Update:

Mr. Gutierrez stated that the grower liaison working group received feedback from the Statewide Coordinator and GLs and created two documents. These documents are meant to provide guidance and direction to the GLs and the Statewide Coordinator by identifying overarching responsibilities. CPDPC members complimented the GLs on what they have done with their communications and newsletters. Mr. Gutierrez will send the two documents to the CPDPC members for their review and comments.

Outreach Update:

Price Adams stated that the Nuffer Smith Tucker (NST) published key messages for the *Candidatus Liberibacter asiaticus* positive ACP find in Fallbrook, San Diego County. Ongoing *Tamarixia radiata* outreach continues to be coordinated across several media platforms since fall and has had positive results. She noted that the *Tamarixia* outreach group coordinated with Dr. David Morgan in reaching out to Spanish publications and with multicultural outreach programs. She stated that the website CaliforniaCitrusTreat.org is continuously being updated and now includes in-language sites for Chinese, Spanish, and Vietnamese. This has shown positive results, especially within the Vietnamese/Korean homeowners, who are either unaware or skeptical of the program. Industry outreach through the past few months has played a supporting role with GLs and CPDPC in educating growers on regulatory requirements. Keith Watkins created an editorial for both growers and residents in Kern County on the increase in ACP detections and encouraging treatments. Ms. Adams noted that the website Citrusinsider.org is currently improving with new information to include treatment schedules by region, a new blog page, a quarterly newsletter that includes content not included in existing communication channels, and a flier on how to submit plant samples to be tested. Elected official outreach programs included a pre-recorded video to the City of West Covina City Council and memo briefings to the City of Dinuba City Council and the San Diego County Planning and Development Services Department on HLB/ACP detections and the implications of planting citrus. NST is continuing to put together more informational content for elected officials and county partners on *Tamarixia* releases. She noted the upcoming activities will include an English/Spanish audio news release on *Tamarixia*, multicultural outreach to Hispanic media outlets, nursery outreach, a customizable frequently asked questions flyer for 25 plus growers, packing house virtual meetings, sharing industry success stories and outreach on Lunar New Year.

United States Department of Agriculture (USDA) Update:

Helene Wright stated that the USDA is in the process of turning over intrastate shipping nursery inspections to the CDFA and/or the County Agricultural Commissioner.

Citrus Research Board (CRB) Report:

Marcy Martin stated that a modified calendar has been circulated with the hopes of reconvening in person meetings by the end of summer/fall. Ms. Martin stated to contact her to be added to the CRB distribution list if you are not receiving GL newsletters, DATOC quarterly reports, or meeting materials.

Recap of Action Items from this Meeting:

ACTION ITEM: Ms. Hornbaker will send the CPDPC bylaws to the members.

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Action Item: Ms. Murphy to provide updates on CalTrap and Citrus Surveyor at the next Operations Subcommittee meeting, including the cost of iPads that are needed for CalTrap.

Action Item: Mr. Gutierrez will send GL and Statewide Coordinator documents to CPDPC members for their review and comment. The comments will be discussed at the next Outreach Subcommittee meeting and then brought to the next full Committee meeting.

Closing Comments and Adjournment:

This meeting adjourned at 11:30 am.

Citrus Pest and Disease Prevention Revenue
Monthly Citrus Assessment Totals FY 20-21

	Reporting Months*															
	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Monthly Total
Prior FY**					\$661.72											\$661.72
October-20	\$391,686.84	\$187,077.22		\$3,073.80												\$581,837.86
November-20		\$653,210.58	\$569,636.29	\$483.12												\$1,223,329.99
December-20			\$1,079,166.06	\$358,290.89	\$9,549.73	\$12.34										\$1,447,019.02
January-21				\$653,896.03	\$1,166,482.99	\$25,495.59										\$1,845,874.61
February-21					\$1,631,072.84	\$433,523.87										\$2,064,596.71
March-21						\$2,008,171.97										\$2,008,171.97
April-21																\$0.00
May-21																\$0.00
June-21																\$0.00
July-21																\$0.00
August-21																\$0.00
September-21																\$0.00
Total	\$391,686.84	\$840,287.80	\$1,648,802.35	\$1,015,743.84	\$2,807,767.28	\$2,467,203.77	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,171,491.88

																	Year End Total	% of Total Expenditures
Total (FY16/17)	\$ 812,142.45	\$ 1,326,016.67	\$ 2,031,640.08	\$ 1,455,851.41	\$ 2,258,591.53	\$ 2,549,575.70											\$ 10,433,817.84	\$ 16,741,946 62.32%
Total (FY17/18)	\$ 481,613.57	\$ 1,050,488.08	\$ 1,560,517.66	\$ 1,999,787.03	\$ 2,230,950.76	\$ 1,824,553.00											\$ 9,147,910.10	\$ 15,137,479 60.43%
Total (FY18/19)	\$ 742,789.59	\$ 919,305.41	\$ 1,564,808.76	\$ 2,419,328.90	\$ 2,005,473.60	\$ 2,958,363.66											\$ 10,610,069.92	\$ 18,464,754 57.46%
Total (FY19/20)	\$ 581,585.82	\$ 1,201,789.86	\$ 1,564,881.85	\$ 2,323,903.84	\$ 2,105,366.28	\$ 2,401,141.59											\$ 10,178,669.24	\$ 18,464,754 55.12%

*Reporting starting November due to minimum one month lag, reported as of the last day of each month.

**Prior FY revenue reporting starts February/March

***202,600,000 cartons x \$.08/carton = \$16,208,000

Total Projected Revenue (Original)***	\$16,208,000.00	Estimated Outstanding	-\$7,036,508.12
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Operational Update

CPDPC Meeting

May 12, 2021

Southern District

HLB Delimitation Treatment and Survey

Orange County

- Anaheim (Areas 80-85), Orange (Areas 32-38), Santa Ana (Areas 57-58, 60, 62- 69), and Garden Grove (Areas 56-62).
- Retreatments were conducted in Orange (Areas 1-6, 8,10, & 13).

Los Angeles County

- Long Beach (Area 2), Whittier (Areas 36-37), Paramount (Areas 3-4), Pico Rivera (Areas 37-38), and find sites/adjacent in Los Angeles.
- Retreatments were conducted in Whittier (Areas 20-25), Glendora (Area 1) and Resurvey in San Gabriel (Area 1).

San Bernardino County

- Retreatments were conducted in Montclair, Ontario, and Colton.

Riverside County

- New areas in Corona (Areas 8-9) and retreatments were conducted in Corona (Areas 1-5).

Areawide treatments

- The Winter cycle (Tempo only) has been completed in all the areas.
- Next cycle will be in Summer/Fall 2021 with both Tempo and Merit.



Southern District

- **HLB+ trees updates:** As of April 28

County	Removed in Feb/Mar/Apr	Cumulative Pending for Removal
Orange	56	11
Los Angeles	5	1
Riverside	12	0

- Staff in the process of scheduling the pending tree removals.
- A new tree removal contract for both Los Angeles and Orange County effective May 1.

- **Risk-based Survey Cycle I 2021**

- The first cycle of 2021 has already started effective mid-March and progressing.

- **Two-mile Border buffer risk survey 2021 Spring Cycle 3 (March 22, 2021 – June 20, 2021)**

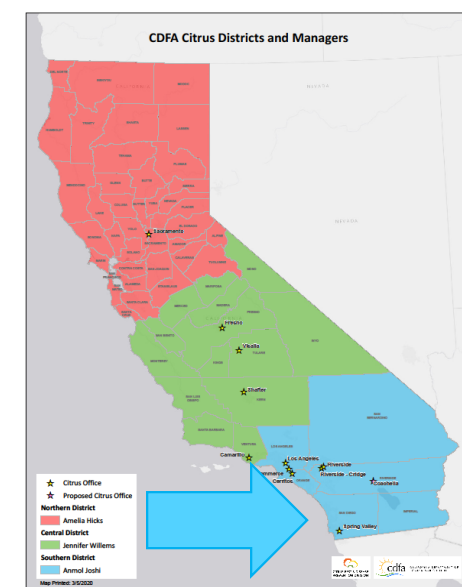
- Completed 25% in San Diego County and 42% in Imperial County.

- **Quadrant Samples taken in Feb/March/April**

- Orange Co. (352 samples)
- Los Angeles Co. (273 samples)
- Riverside Co. (554 samples)
- Imperial Co. (118 samples)

Public Meetings Held

- March 4 - Los Angeles County
- March 24- Orange County
- April 20 - San Bernardino County



Central District



- **Detection trapping**
 - Fresno and Madera Counties - Ongoing.
- **Delimitation trapping**
 - Kern, Madera, and San Luis Obispo Counties - Ongoing.
- **Treatment**
 - Kern County treatment project is complete.
 - No new ACP detections.
- **Risk Survey**
 - Cycle 2 nearly completed in Fresno, Kern, and Tulare counties in May. Staff from Northern and Southern District continue to assist Fresno and Kern. Tulare staff will split to help Fresno and Kern as well.
- **Citrus Commodity Survey**
 - 2 staff from each office have begun working on citrus commodity surveys.



Northern District



Contra Costa County (Pinole)

- Ongoing delimitation trapping in 4 grids.
- No additional detections.

Santa Clara County (San Jose)

- New detection on April 2 triggered treatment of 9 properties on April 20.
- New 4 square mile delimitation.
- No additional detections.
- Ongoing monthly releases of *Tamarixia*.



HLB Risk Survey

- Cycle 2 (2020) completed.
- Cycle 1 (2021) occurring in 7 counties.

ACP Detection

- Winter residential trapping concluded in April.
- Year-round County trapping continues in 3 counties.

ACP Treatment

- No active treatment projects.

County Regulatory Work Plans and Activity

FY 19-20											
July 2019 - June 2020											
	County	Budgeted Amt.	Amt. Invoiced	Percent Expended	CAs Issued	Grower Inspections	Transporter Inspections	Packer Inspections	Fruit Seller Inspections	NOVs Issued	NOPAs Issued
Zone 2	Fresno	\$ 70,408.66	\$ 31,130.62	44%	122	0	16	2	0	6	0
	Kern	\$ 92,000.00	\$ 38,255.11	42%	26	13	486	6	0	5	0
	Kings	\$ 27,325.30	\$ 14,964.38	55%	1	0	31	79	0	0	0
	Tulare	\$ 336,871.38	\$ 285,413.28	85%	197	0	4,004	41	2	685	35
Zone 3	Monterey	\$ 10,741.79	\$ 10,741.79	100%	32	58	0	0	1	0	0
	San Luis Obispo	\$ 8,952.85	\$ 8,952.85	100%	9	23	2	0	0	0	0
Zone 4	Santa Barbara	\$ 22,250.66	\$ 9,114.59	41%	23	5	2	2	6	0	0
	Ventura	\$ 97,718.94	\$ 97,718.94	100%	25	11	417	5	0	23	3
Zone 5	Imperial	\$ 49,173.61	\$ 49,173.61	100%	5	41	33	50	0	2	0
	Riverside	\$ 518,396.49	\$ 518,396.49	100%	69	500	4,189	123	0	52	0
	San Bernardino	\$ 17,512.55	\$ 17,512.55	100%	20	15	8	5	0	6	0
	San Diego	\$ 476,850.61	\$ 476,850.61	100%	381	316	306	165	142	8	0
Zone 6	Los Angeles	\$ 252,218.18	\$ 214,302.52	85%	7	0	0	282	7	0	0
	Orange	\$ 80,081.20	\$ 53,829.65	67%	9	40	7	5	0	0	0
Totals		\$ 2,060,502.22	\$ 1,826,356.99	89%	926	1,022	9,501	765	158	787	38

FY 20-21											
July 2020 - February 2021											
	County	Budgeted Amt.	Amt. Invoiced	Percent Expended	CAs Issued	Grower Inspections	Transporter Inspections	Packer Inspections	Fruit Seller Inspections	NOVs Issued	NOPAs Issued
Zone 2	Fresno (*1)	\$ 72,795.09	\$ 40,318.01	55%	31	2	186	2	2	10	0
	Kern	\$ 85,000.00	\$ 38,220.35	45%	20	30	874	10	0	4	0
	Kings (*1)	\$ 25,743.28	\$ 5,836.07	23%	0	0	0	44	0	0	0
	Tulare	\$ 336,871.35	\$ 123,304.52	37%	50	1	1,476	0	0	149	62
Zone 3	Monterey	\$ 11,765.25	\$ 6,878.52	58%	1	49	0	0	0	0	0
	San Luis Obispo (*1)	\$ 10,485.89	\$ 4,575.93	44%	1	4	0	0	0	0	0
Zone 4	Santa Barbara	\$ 19,904.44	\$ 6,198.91	31%	8	7	1	0	1	0	0
	Ventura (*1)	\$ 123,239.50	\$ 49,539.35	40%	14	5	51	2	0	0	0
Zone 5	Imperial	\$ 51,394.90	\$ 47,255.74	92%	0	26	23	90	0	0	0
	Riverside	\$ 677,263.30	\$ 559,025.55	83%	29	364	1,484	14	2	9	0
	San Bernardino (*1)	\$ 17,512.55	\$ 13,650.95	78%	8	11	1	2	0	3	0
	San Diego	\$ 482,982.95	\$ 287,894.74	60%	70	98	120	103	0	2	0
Zone 6	Los Angeles	\$ 263,279.60	\$ 152,757.69	58%	24	0	0	253	17	0	0
	Orange (*2)	\$ 84,687.75	\$ 19,936.39	24%	0	28	0	0	0	0	0
Totals		\$ 2,262,925.85	\$ 1,355,392.72	60%	256	625	4,216	520	22	177	62

*Denotes number of FY 20-21 missing invoices through February 2021

County Regulatory Work Plans

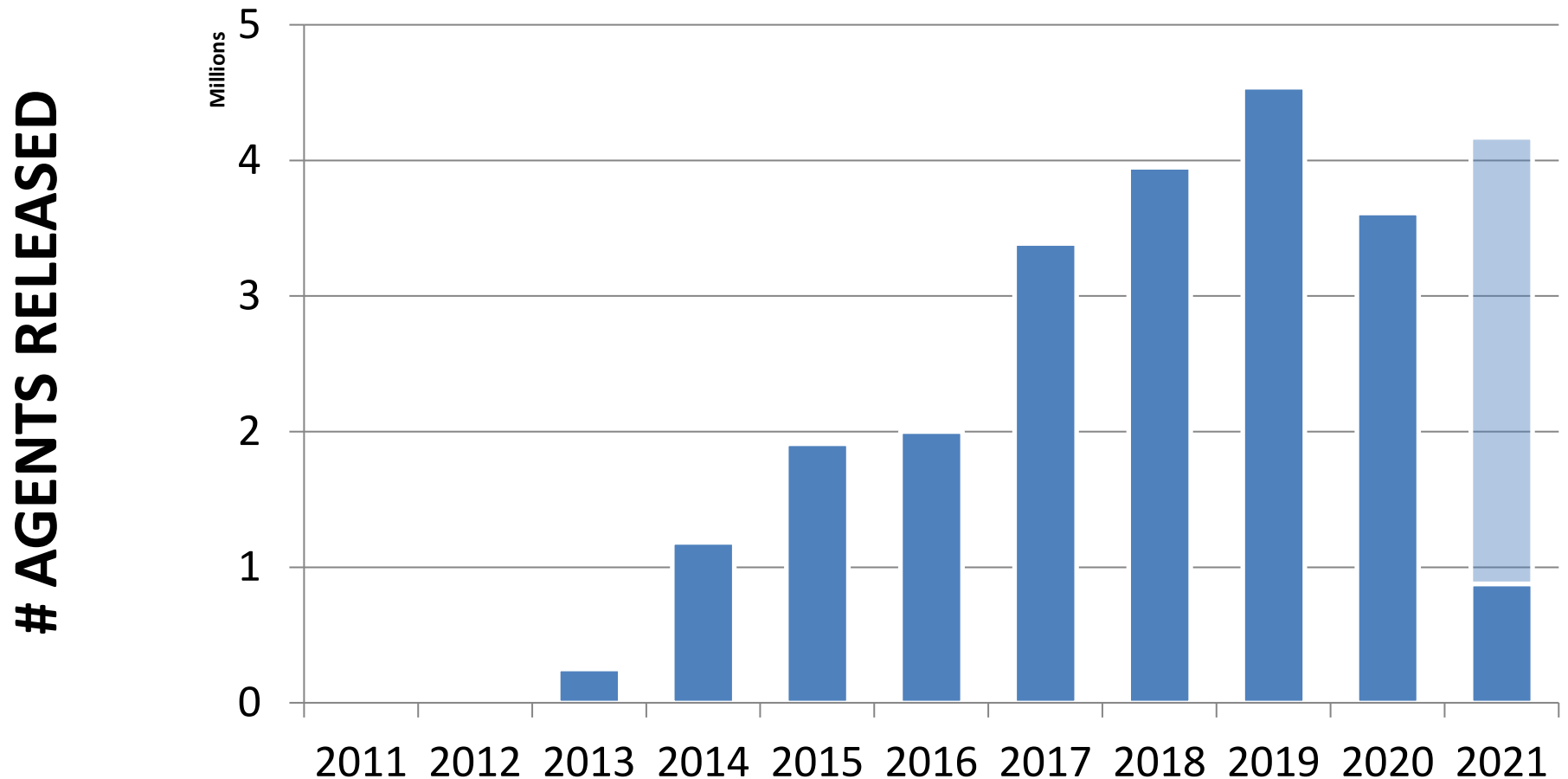
	County	FY20-21 (12 month)	Percent Difference	FY21-22 (15 month)
Zone 2	Fresno	\$72,795.09	2.67%	\$93,419.64
	Kern	\$85,000.00	-29.41%	\$75,000.00
	Kings	\$25,743.28	-18.77%	\$26,138.94
	Tulare	\$336,871.35	-9.76%	\$380,000.29
	Zone 2 Totals	\$520,409.72	-11.68%	\$574,558.87
Zone 3	Monterey	\$11,765.25	9.96%	\$16,171.55
	San Luis Obispo	\$10,485.89	-16.30%	\$10,970.71
	Zone 3 Totals	\$22,251.14	-2.41%	\$27,142.26
Zone 4	Santa Barbara	\$19,904.44	-20.07%	\$19,886.44
	Ventura	\$123,239.50	-5.22%	\$146,007.26
	Zone 4 Totals	\$143,143.94	-7.29%	\$165,893.70
Zone 5	Imperial	\$51,394.90	-22.67%	\$49,682.53
	Riverside	\$677,263.30	-11.09%	\$752,709.81
	San Bernardino	\$17,512.55	16.75%	\$25,557.50
	San Diego	\$482,982.95	12.77%	\$680,841.88
	Zone 5 Totals	\$1,229,153.70	-1.80%	\$1,508,791.72
Zone 6	Los Angeles	\$263,279.60	-17.40%	\$271,839.35
	Orange	\$84,687.75	-18.09%	\$86,712.60
	Zone 6 Totals	\$347,967.35	-17.57%	\$358,551.95
Grand Totals		\$2,262,925.85	-6.85%	\$2,634,938.50

Asian Citrus Psyllid Biocontrol Update



California Department of Food and Agriculture
May 2021

Released ACP Biocontrol Agents

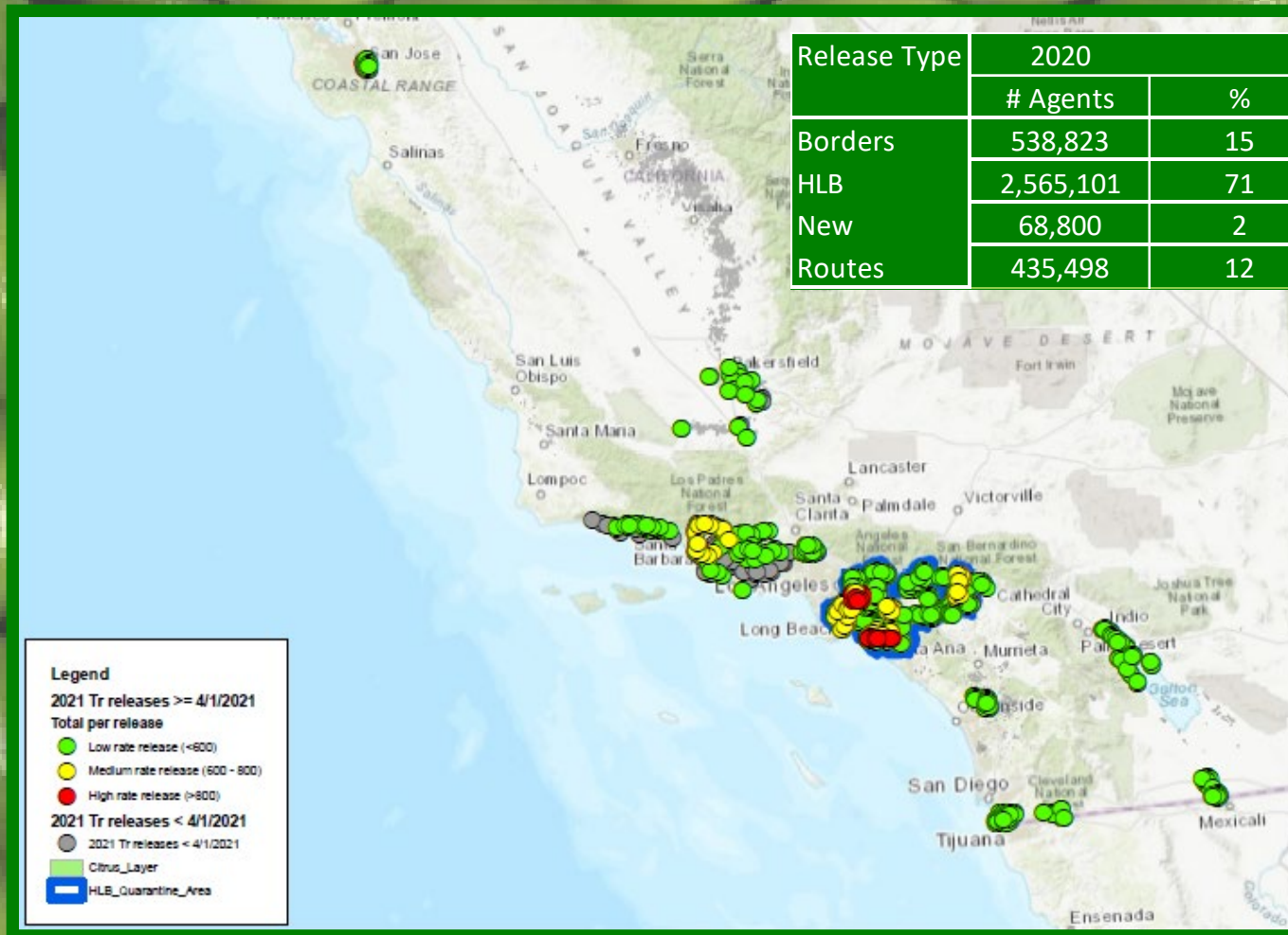


Biological Control Agent Releases

April, 2021

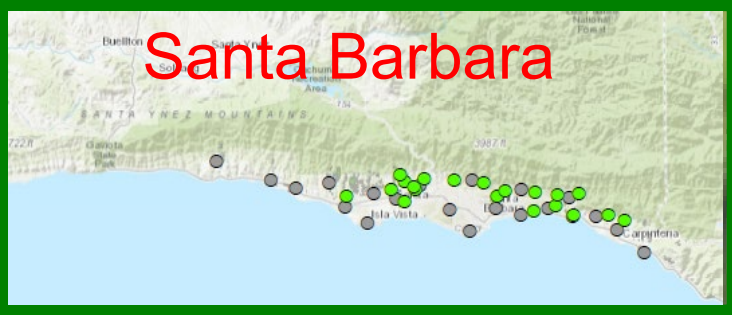
County	Releases, 2021	Releases 2011-2020	
	<i>T. radiata</i> Released	Tamarixia Released	<i>D. aligarhensis</i> Released
Imperial	22,000	479,609	10,295
Los Angeles	247,405	6,028,756	107,734
Orange	203,600	4,361,612	71,179
Riverside	123,609	3,300,704	127,739
San Bernardino	59,815	1,617,681	57,252
San Diego	60,000	2,532,840	86,403
Ventura	84,200	1,855,412	16,830
Santa Barbara	15,600	166,082	12,012
Kern	27,200	180,309	0
Santa Clara	22,400	98,037	0
Placer	0	3,400	0
San Luis Obispo	0	104,700	0
Tulare	0	36,000	0
Monterey	0	14,400	0
Arizona	10,800	139,800	0
Mexico	0	306,000	0
TOTAL	876,629	21,225,342	489,444
	TOTAL (2011-2020):		21,714,786

Biological Control Agent Release Statewide

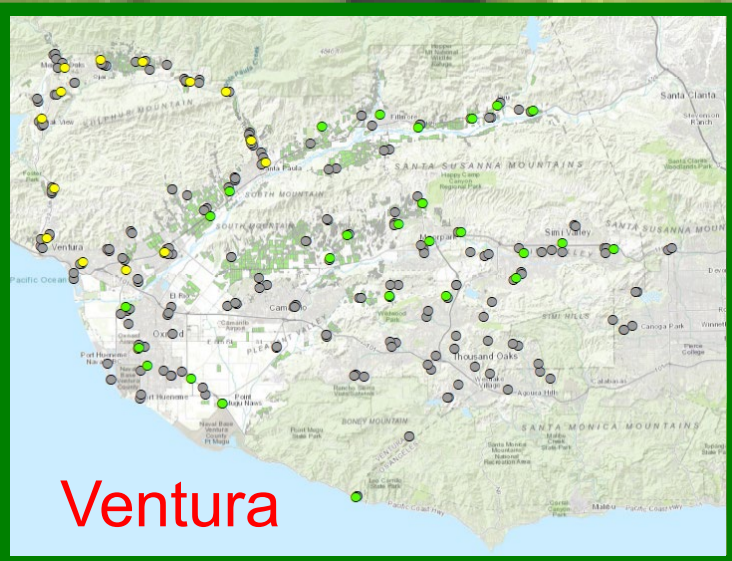


Biological Control Agent Release Close-ups

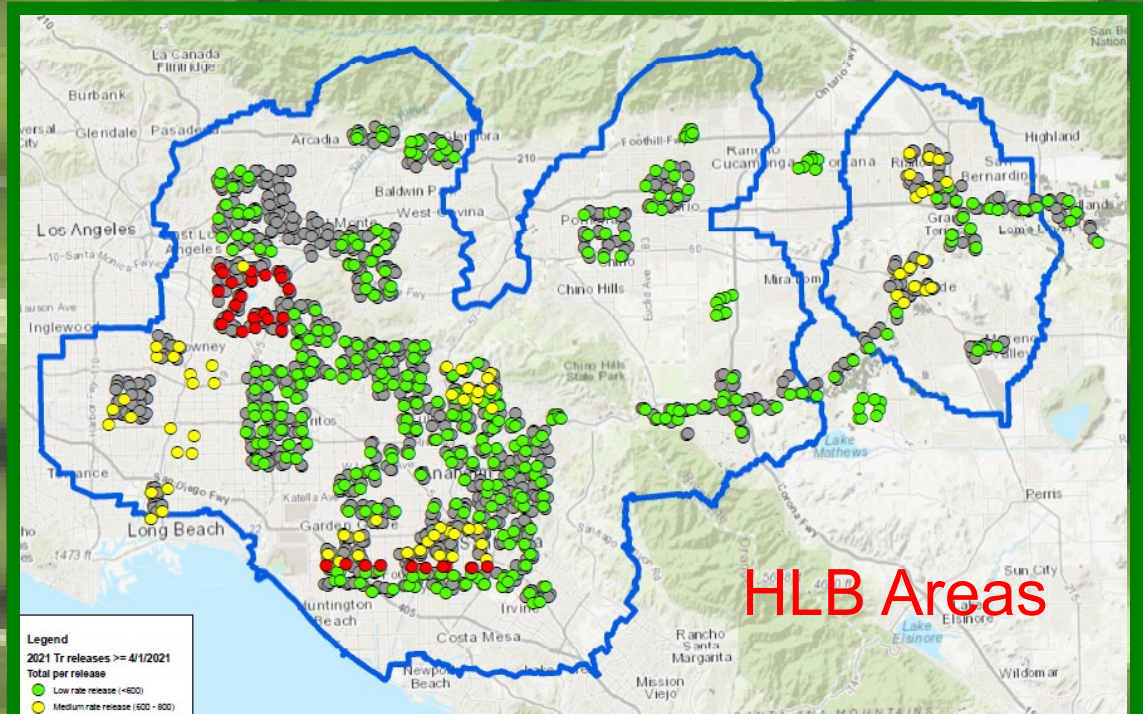
Santa Barbara



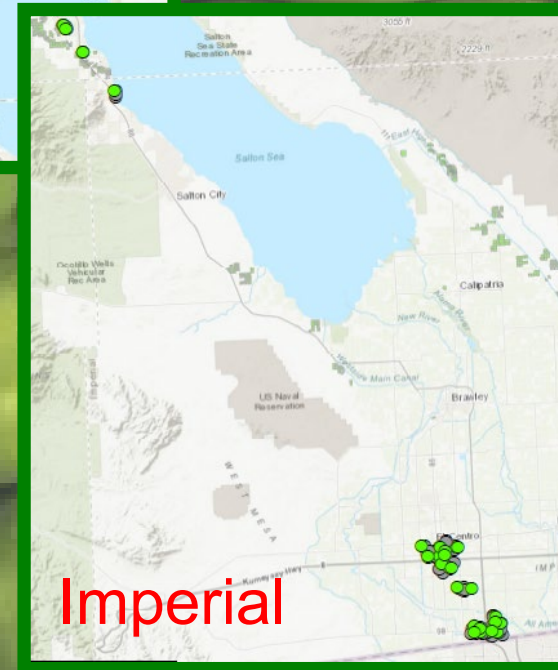
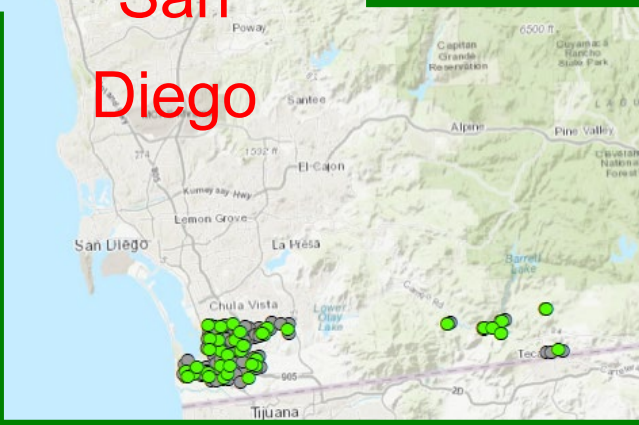
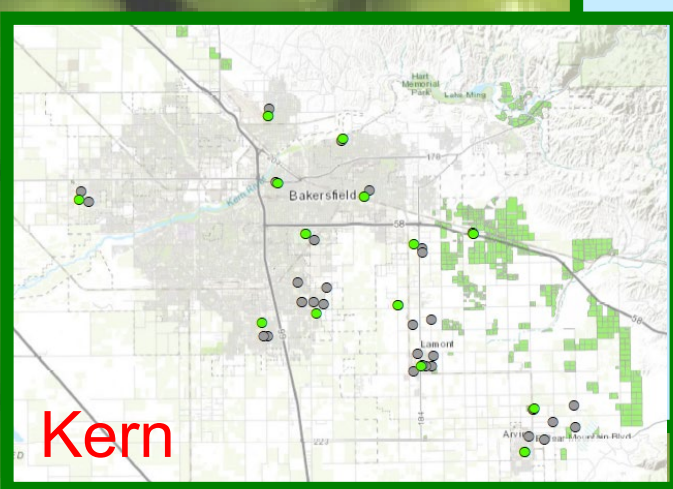
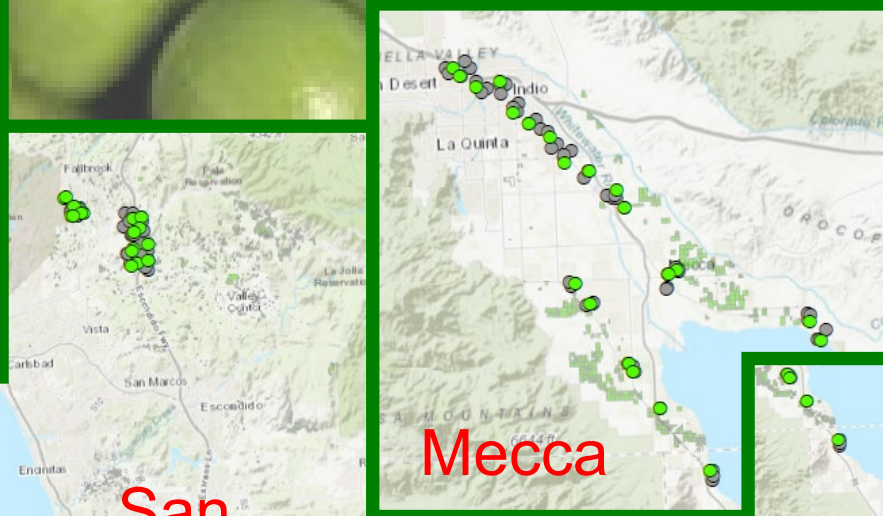
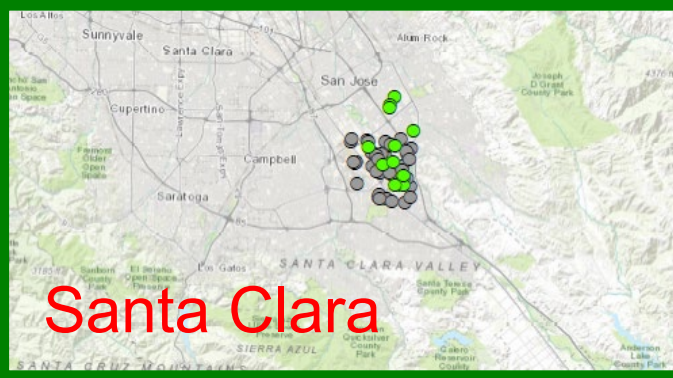
Ventura



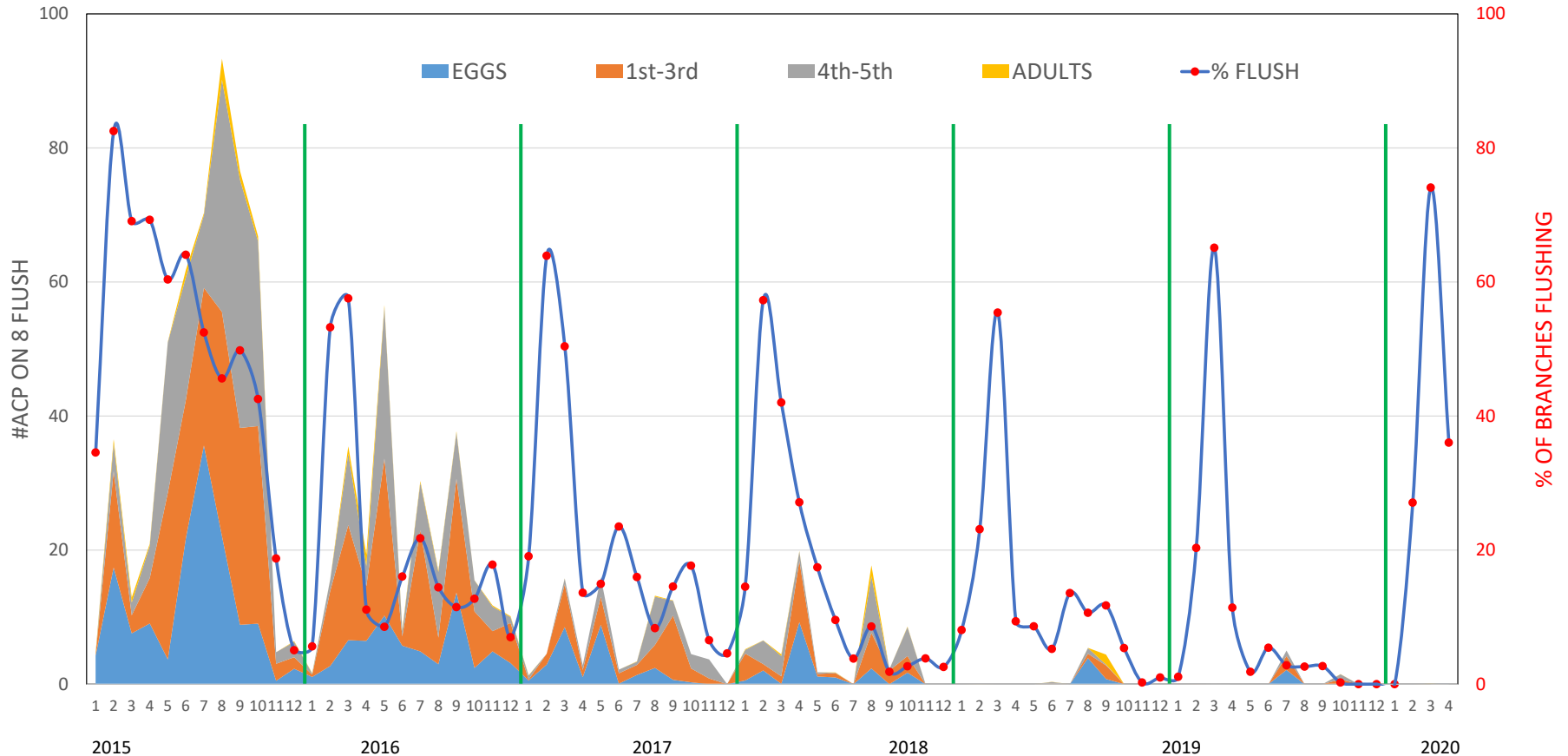
HLB Areas



Biological Control Agent Release Close-ups



Monitoring Results April 2021



Publication on 2015-2020 Urban ACP Monitoring



Contents lists available at [ScienceDirect](#)

Biological Control

journal homepage: www.elsevier.com/locate/ybcon



Density dependent mortality, climate, and Argentine ants affect population dynamics of an invasive citrus pest, *Diaphorina citri*, and its specialist parasitoid, *Tamarixia radiata*, in Southern California, USA

Ivan Milosavljević^{a,*}, David J.W. Morgan^b, Rachael E. Massie^b, Mark S. Hoddle^{a,c}

^a University of California, Department of Entomology, 900 University Ave, Riverside, CA 92521, USA

^b California Department of Food and Agriculture, 4500 Glenwood Drive, Riverside, CA 92501, USA

^c Center for Invasive Species Research, University of California, Riverside 92521, USA

HIGHLIGHTS

- Highest *D. citri* densities were found in intermediate and coastal regions.
- Parasitism rates averaged 25% with lag density-dependent parasitism being detected.
- Parasitism by *T. radiata* was >50% greater when *L. humile* was absent.
- *Diaphorina citri* densities declined by over 75% across all study sites over four years.
- Reduced *D. citri* densities may have slowed spread of *Candidatus Liberibacter asiaticus* in California.

A social-ecological systems perspective of huanglongbing management in California

Sara Garcia Figuera

Quantitative Biology and Epidemiology Laboratory

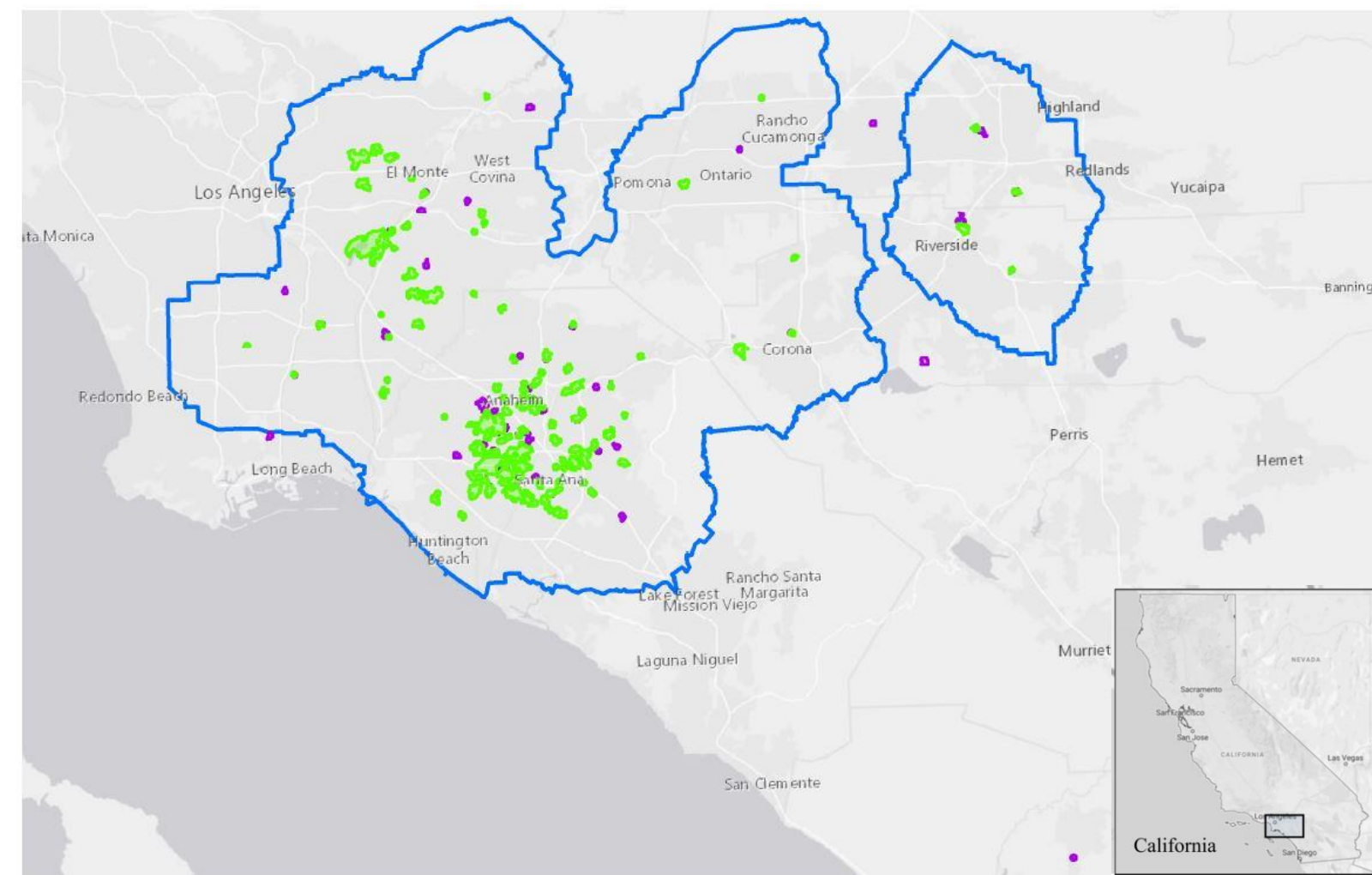
Department of Plant Pathology

University of California – Davis

Science Subcommittee Meeting

April 15th, 2021

HLB epidemic in California

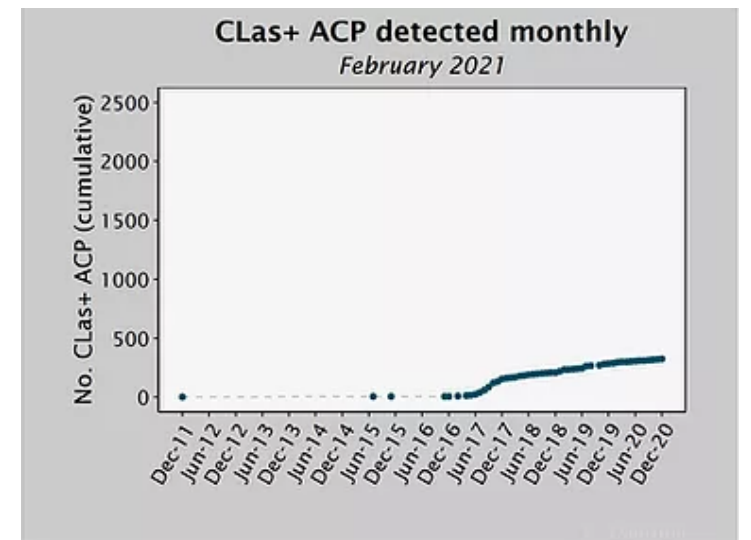
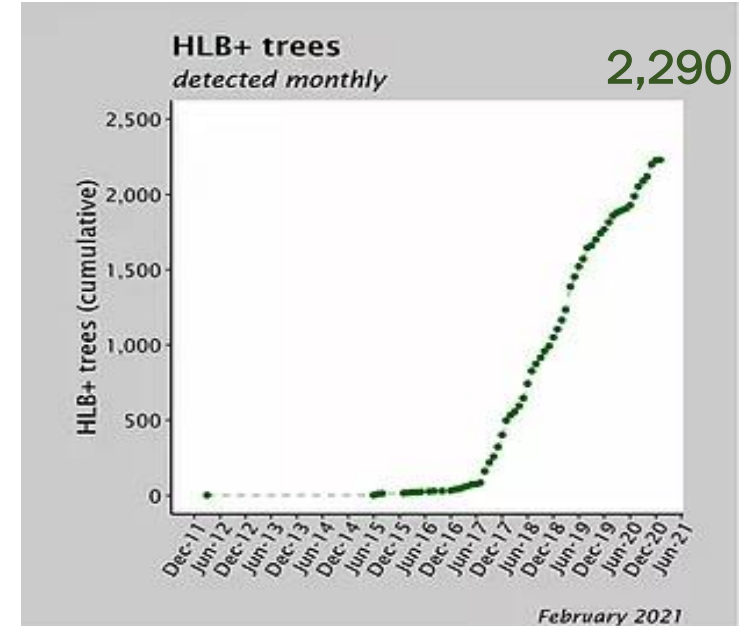


HLB Quarantine and
Treatment Area

3/26/2021

- HLB Quarantine Area
- HLB Treatment Area
- Mandatory
- Non-mandatory

0 5 10
Miles



Area-wide management of ACP

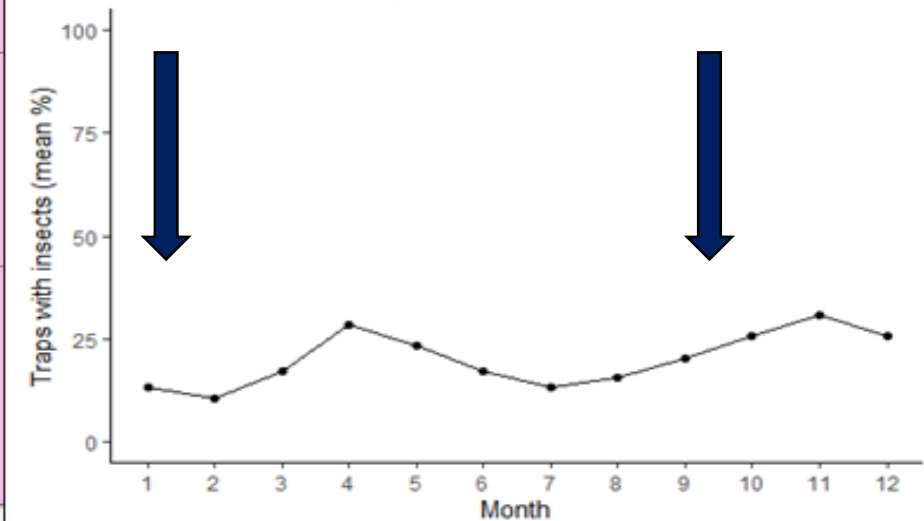


Coordinated
insecticide
treatments for ACP

Use of
certified plant
material

Infected tree
removal
(roguing)

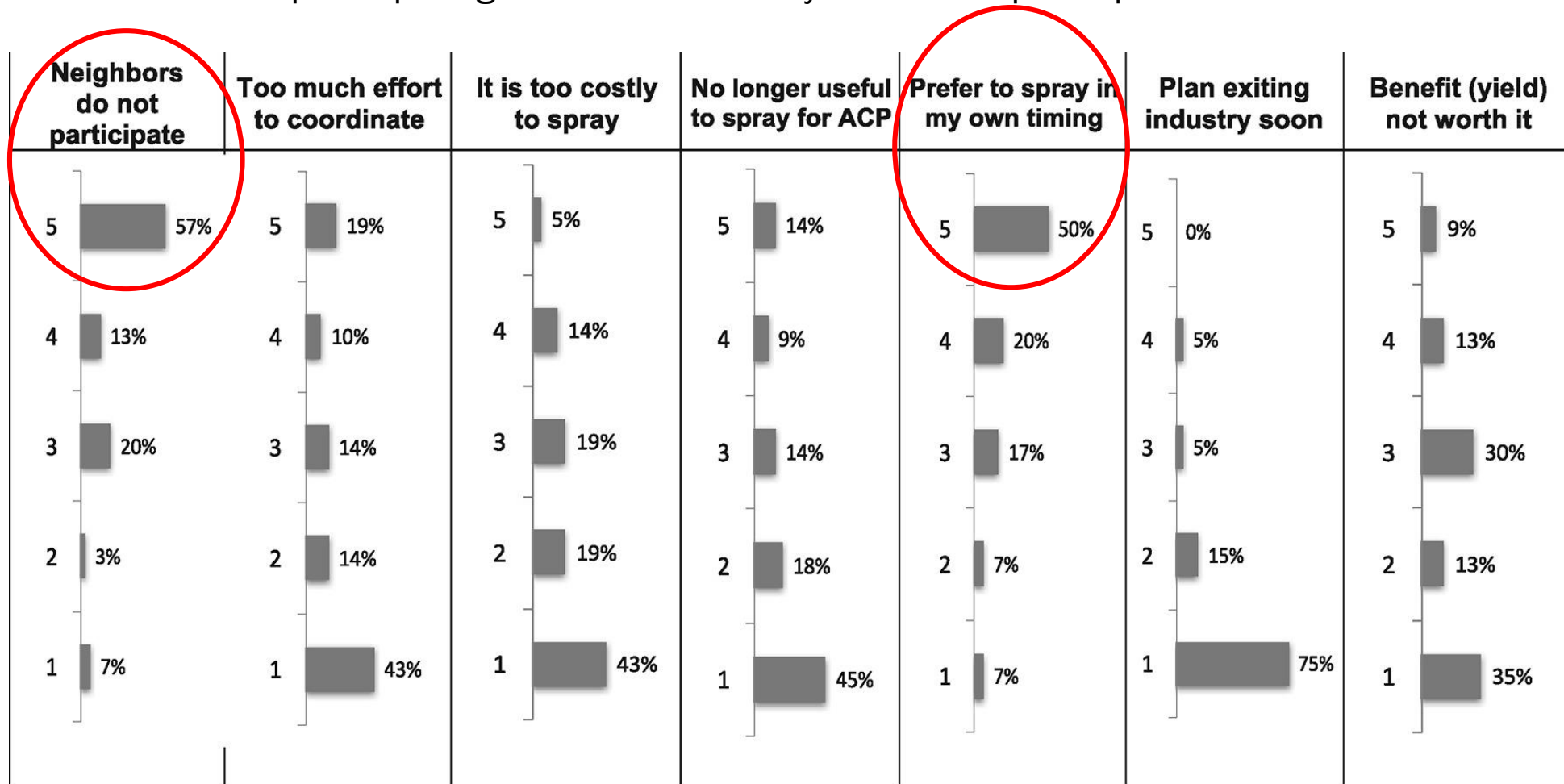
Commercial grove traps
all Southern CA counties, 2015 - 2019



Holly Deniston-Sheets, DATOC

The AWM program was a failure in Florida

Reasons for not participating in CHMAs stated by non-CHMA participants



References:

Disagree

1

2

Somewhat Agree

3

4

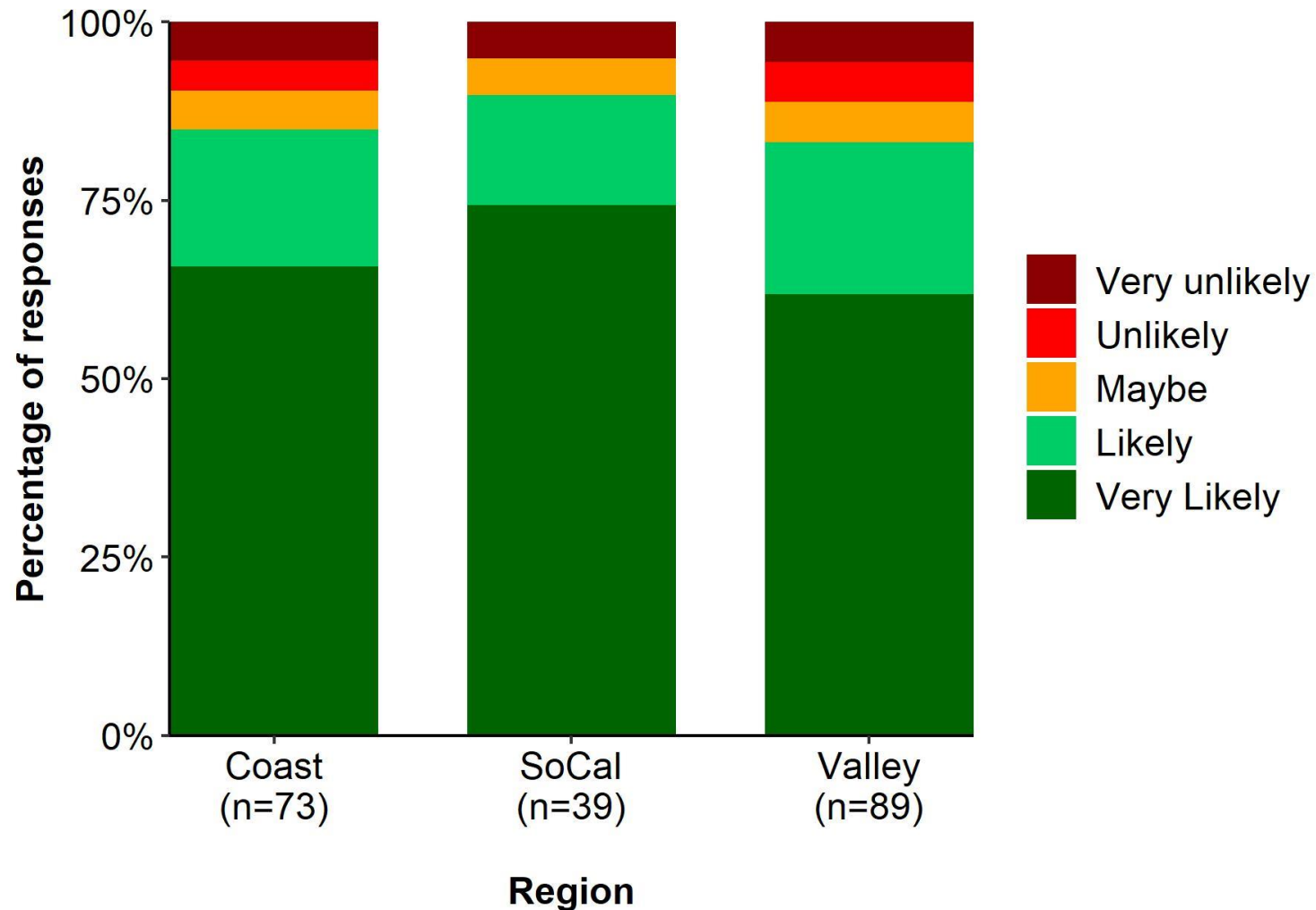
Agree

5

Singerman & Useche (2017) *Applied Economic Perspectives and Policy* 39(4): 609-664

Confidence in the efficacy of AWM

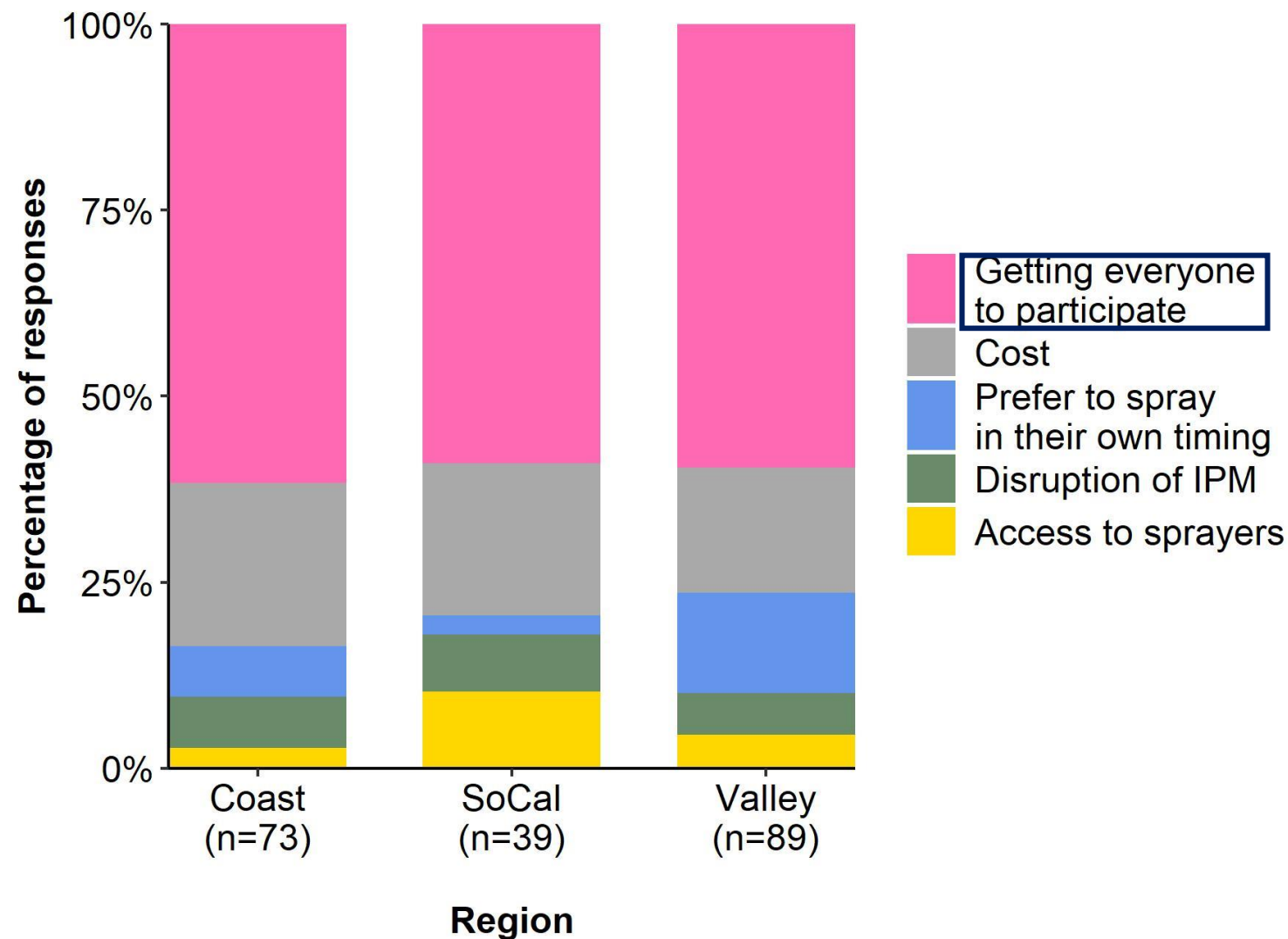
How likely do you think it is that coordinated insecticide treatments for ACP will slow down HLB spread more than uncoordinated treatments?



Clicker surveys distributed at CRB Grower Seminars in June of 2019 (n=300)

Barriers to AWM

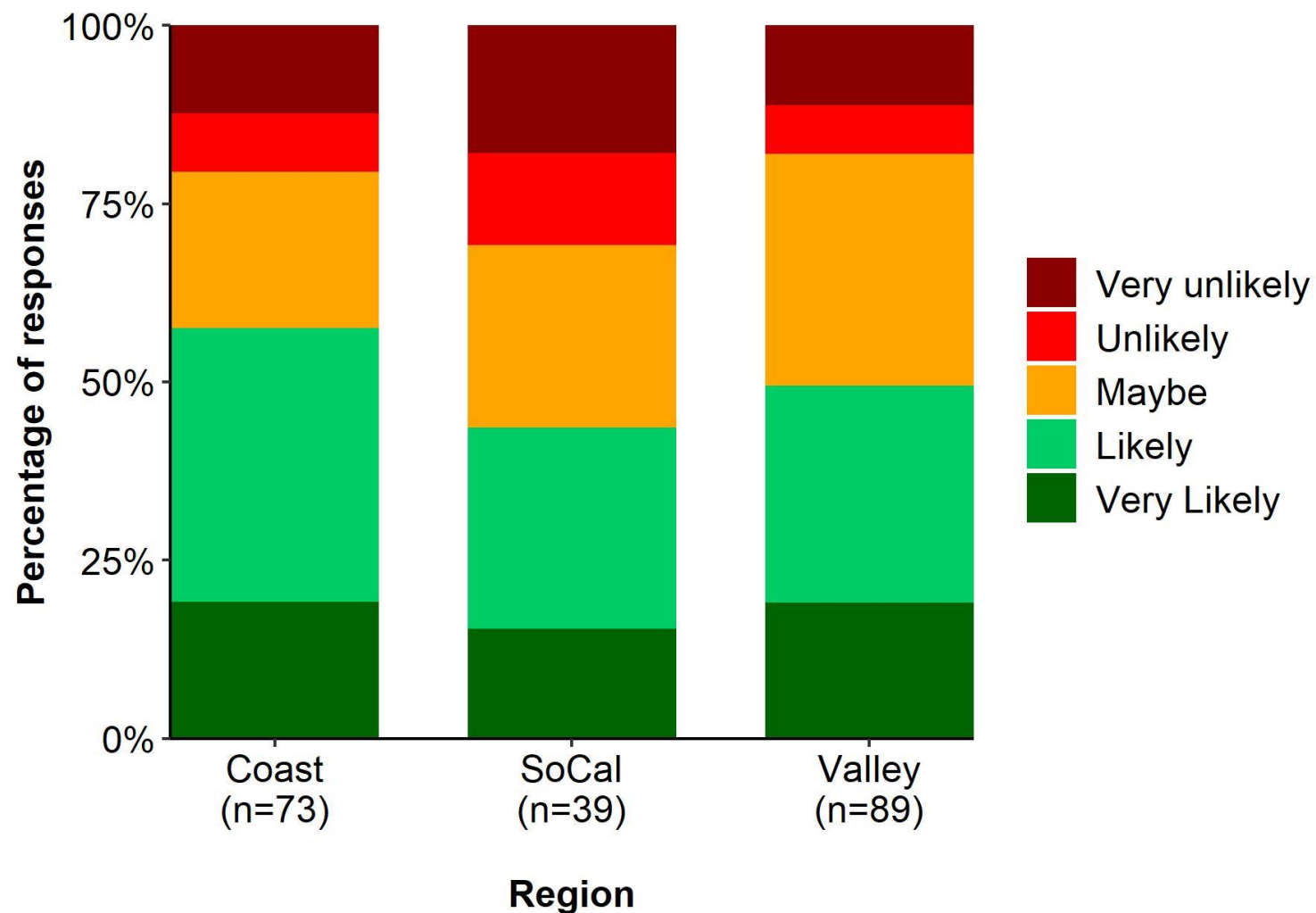
What do you think is the main barrier to area-wide management of ACP in your area?



Clicker surveys distributed at CRB Grower Seminars in June of 2019 (n=300)

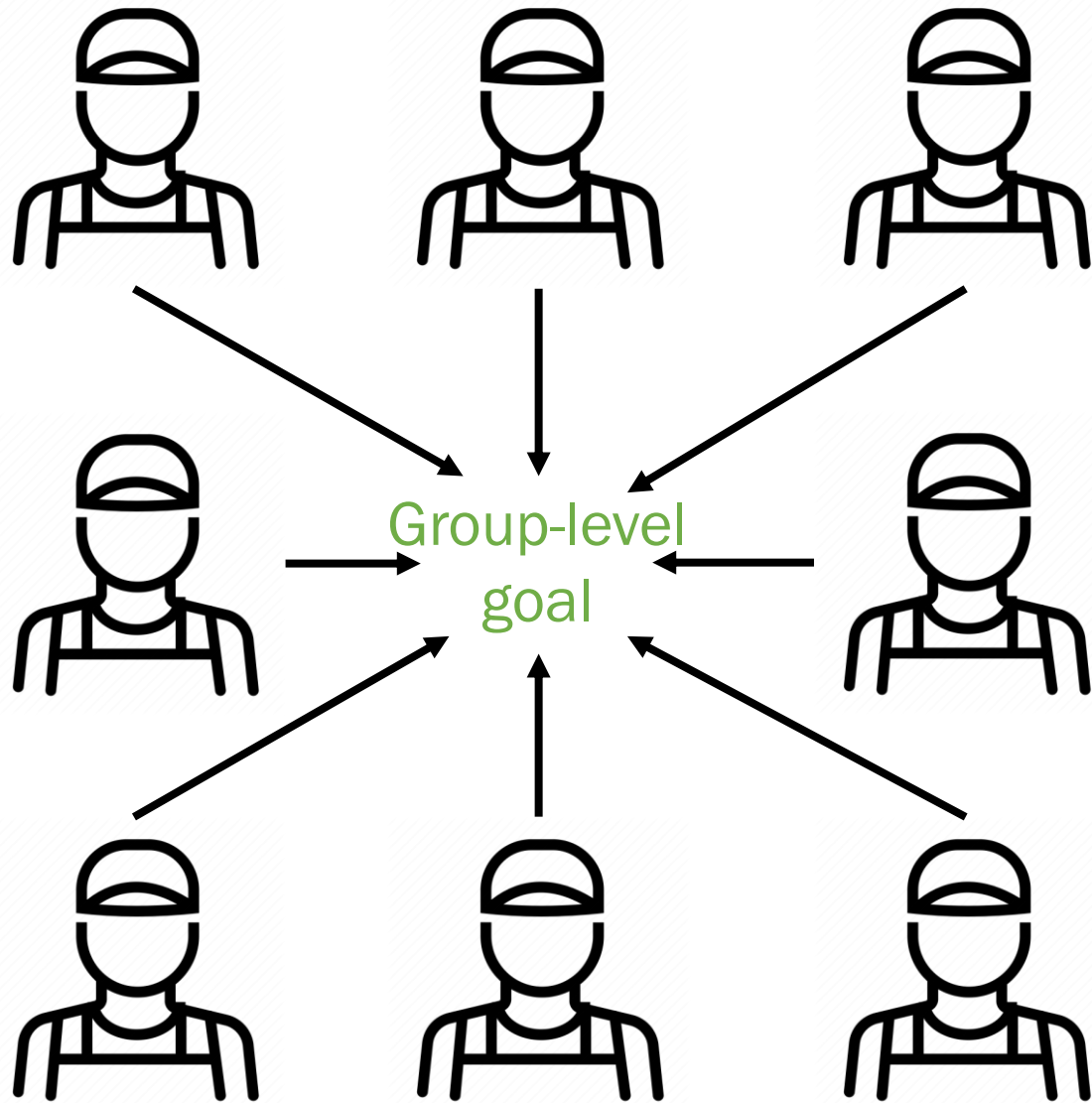
Confidence that neighbors will coordinate

How likely do you think it is that your neighbors
will apply insecticides for ACP
within recommended treatment windows?



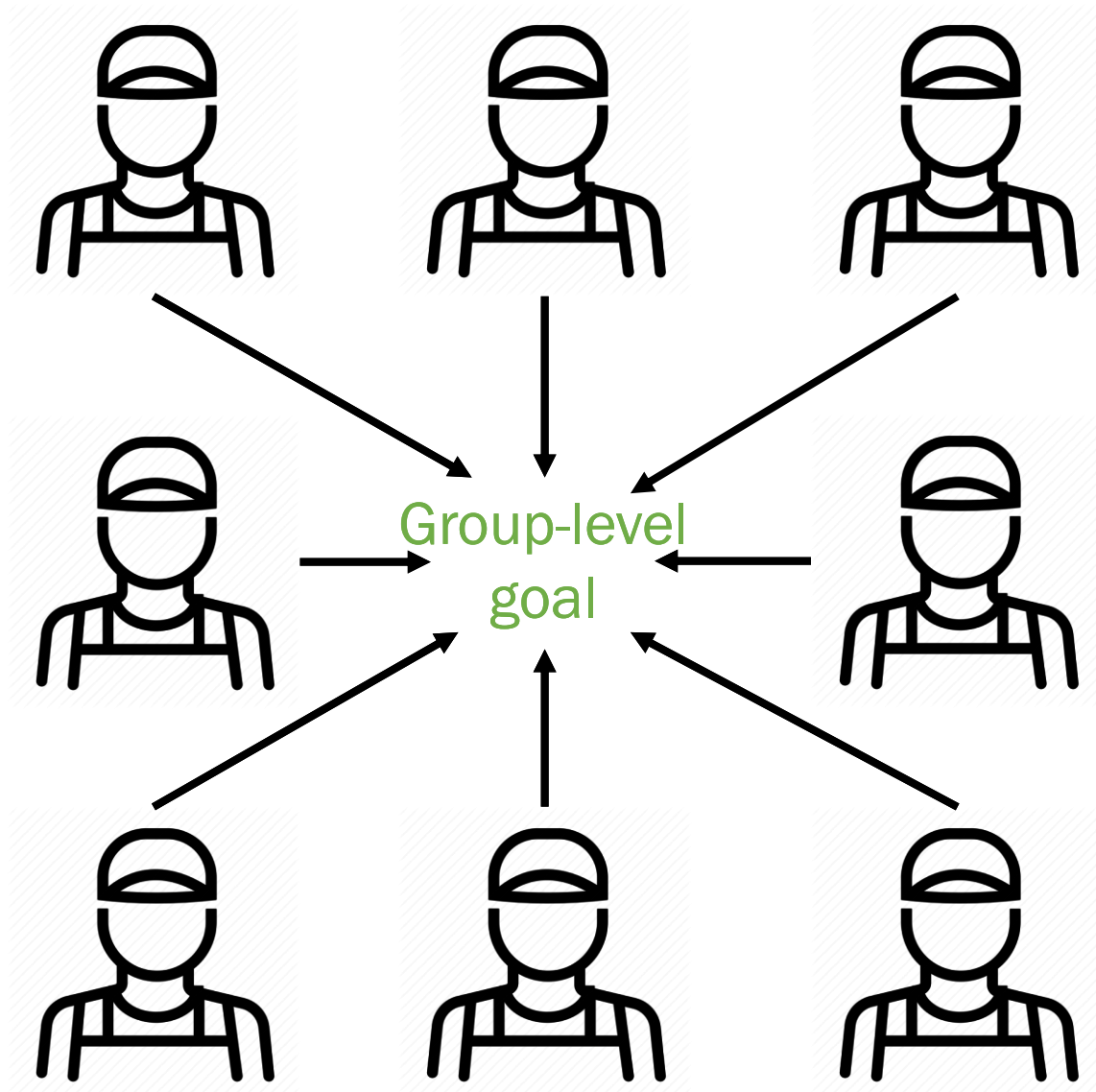
Clicker surveys distributed at CRB Grower
Seminars in June of 2019 (n=300)

From a social perspective...



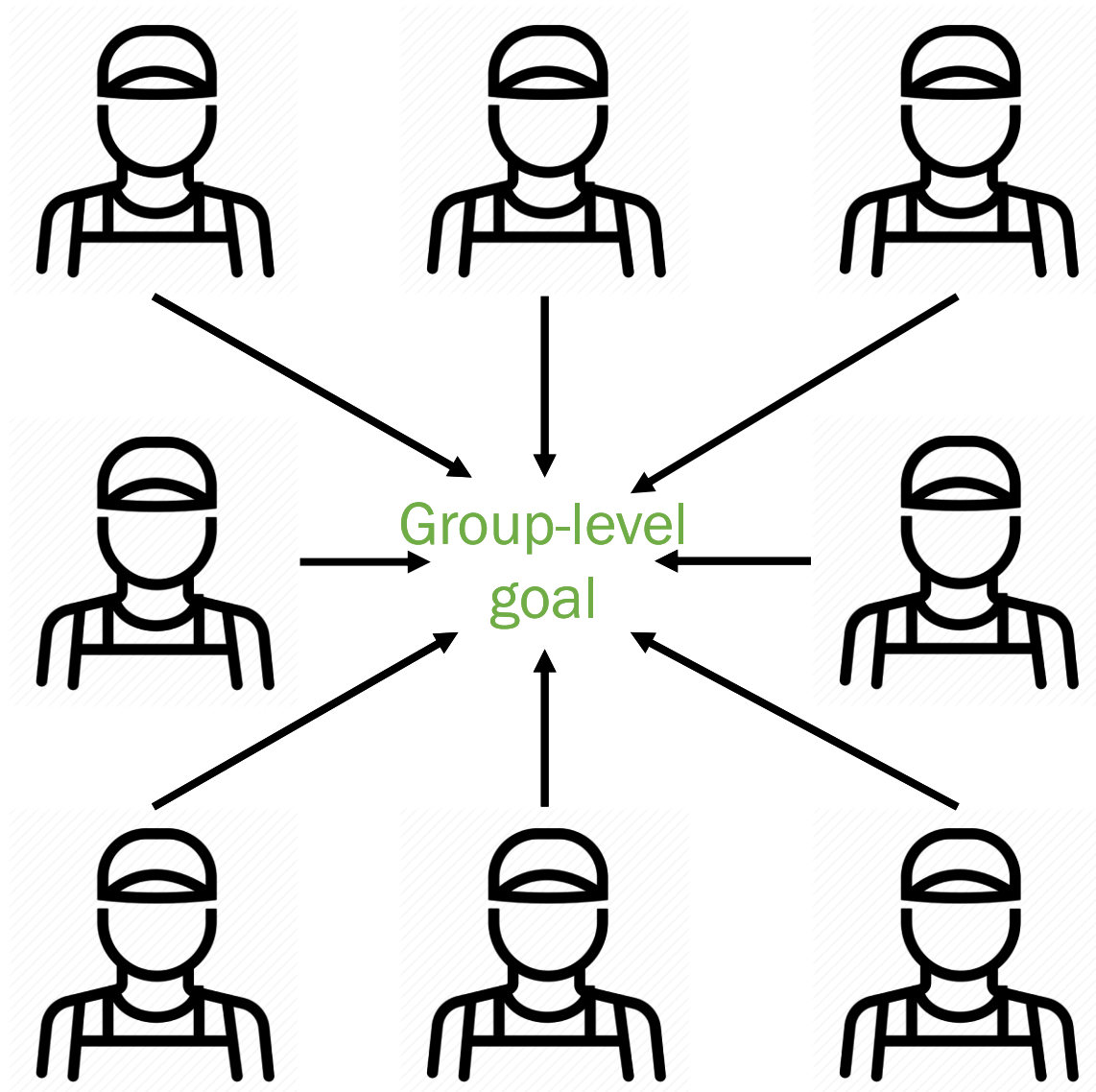
Social dilemma or
Collective action problem

From a social perspective...



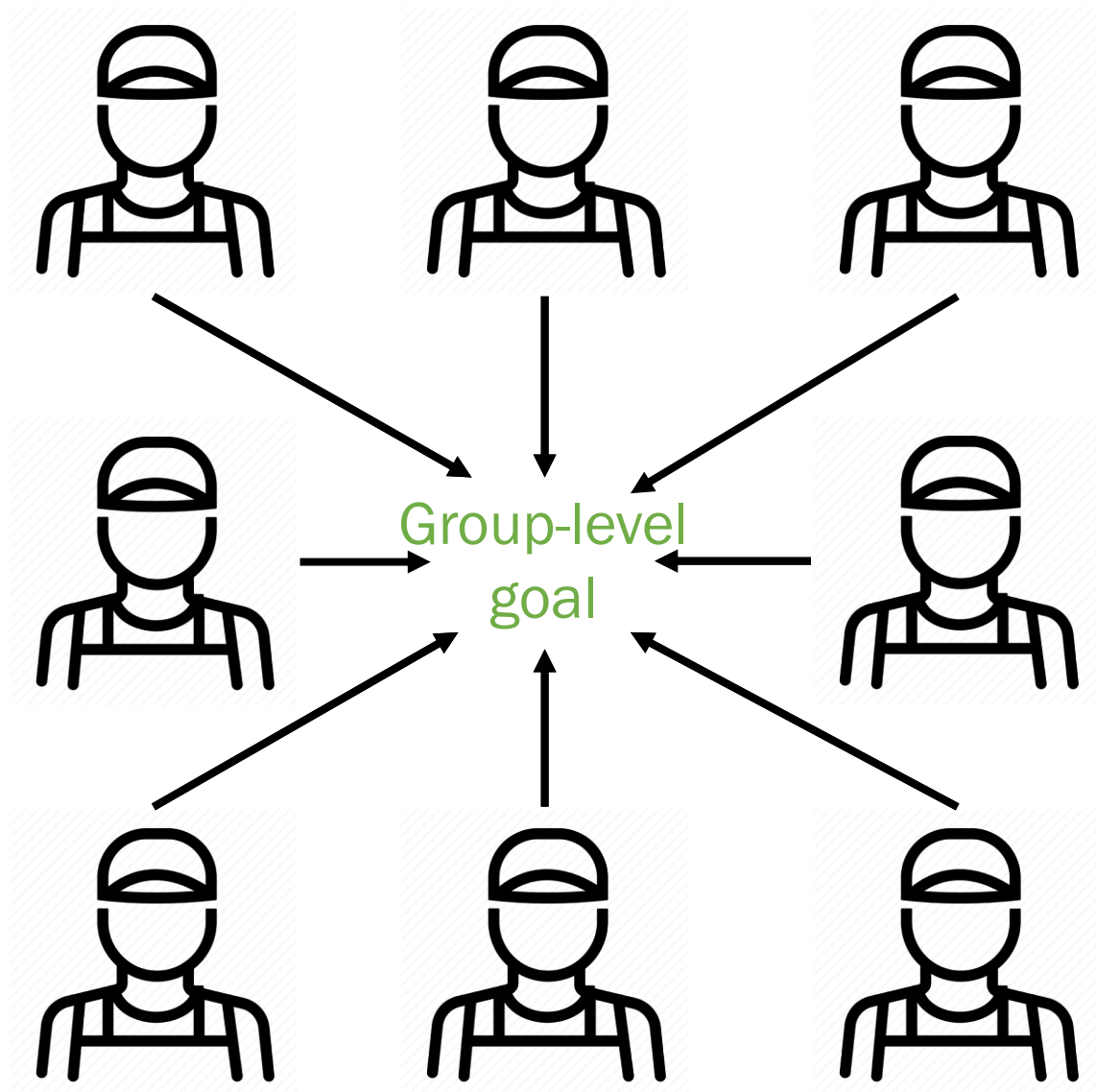
Social dilemma or
Collective action problem

From a social perspective...



Social dilemma or
Collective action problem

From a social perspective...



Social dilemma or
Collective action problem

- Forests
- Fisheries
- Groundwater
- **Invasive species!**

Ostrom's design principles for collective action

Principle	Description
1A	User boundaries: Clear boundaries between legitimate users and nonusers must be clearly defined.
1B	Resource boundaries: Clear boundaries are present that define a resource system and separate it from the larger biophysical environment.
2A	Congruence with local conditions: Appropriation and provision rules are congruent with local social and environmental conditions.
2B	Appropriation and provision: The benefits obtained by users from a common-pool resource (CPR), as determined by appropriation rules, are proportional to the amount of inputs required in the form of labor, material, or money, as determined by provision rules.
3	Collective-choice arrangements: Most individuals affected by the operational rules can participate in modifying the operational rules.
4A	Monitoring users: Monitors who are accountable to the users monitor the appropriation and provision levels of the users.
4B	Monitoring the resource: Monitors who are accountable to the users monitor the condition of the resource.
5	Graduated sanctions: Appropriators who violate operational rules are likely to be assessed graduated sanctions (depending on the seriousness and the context of the offense) by other appropriators, by officials accountable to the appropriators, or by both.
6	Conflict-resolution mechanisms: Appropriators and their officials have rapid access to low-cost local arenas to resolve conflicts among appropriators or between appropriators and officials.
7	Minimal recognition of rights to organize: The rights of appropriators to devise their own institutions are not challenged by external governmental authorities.
8	Nested enterprises: Appropriation, provision, monitoring, enforcement, conflict resolution, and governance activities are organized in multiple layers of nested enterprises.



Institutional approaches for HLB management

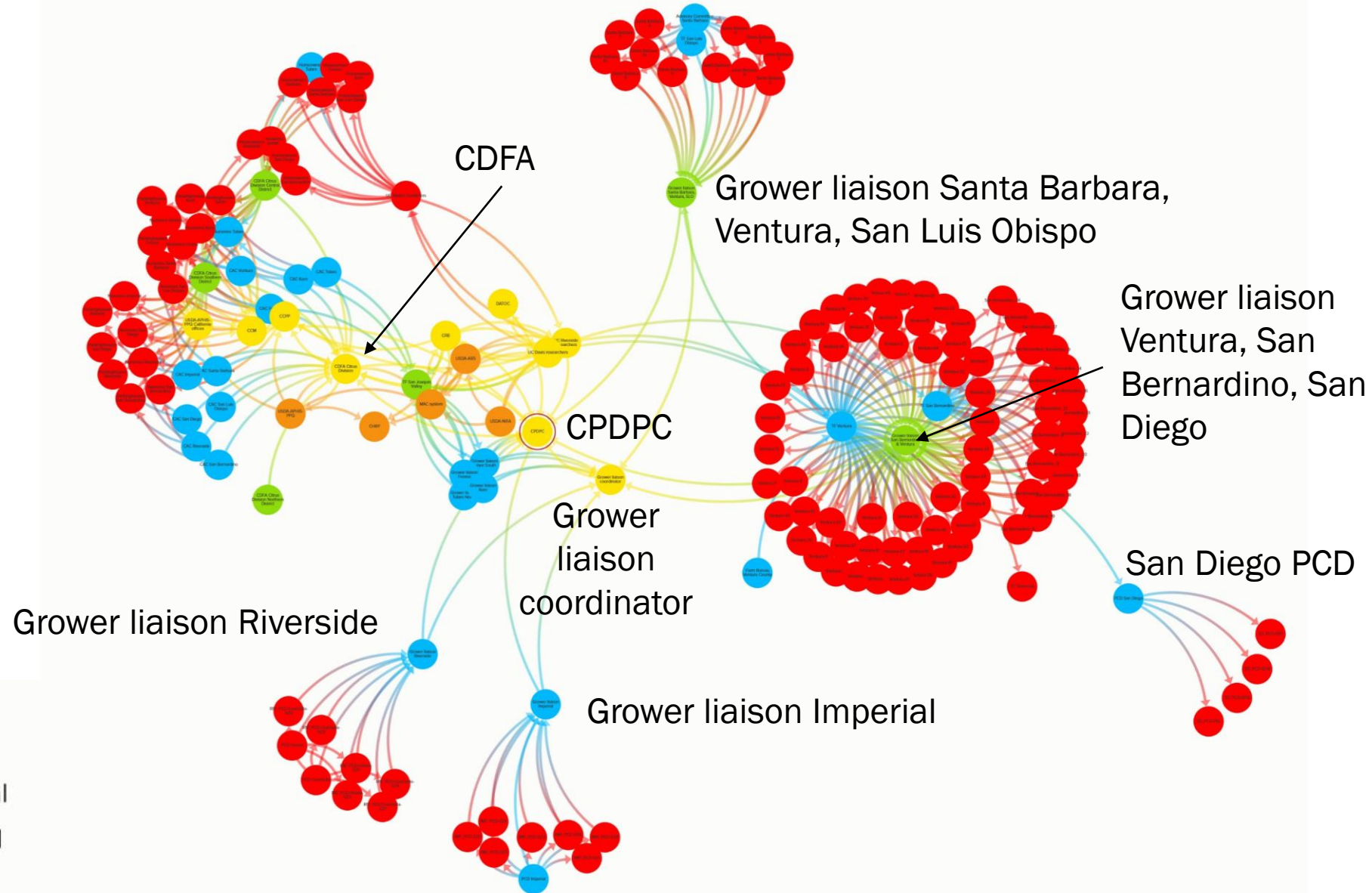


Design principle	São Paulo (Brazil)	Mexico	Entre Ríos (Argentina)	Florida (USA)	Texas (USA)	California (USA)
1. Clearly defined boundaries	Regional management groups	Epidemiological Phytosanitary Management Areas (AMEFIs)	-	Citrus Health Management Areas (CHMAs)	Citrus Pest and Disease Management Zones	Psyllid Management Areas (PMAs) or Pest Control Districts (PCDs)
3. Collective-choice arrangements	AWM organized locally through Fundecitrus. Other HLB rules defined at national level in consultation with Citrus Sectorial Chamber	AWM organized at national level	AWM not available. Other HLB rules defined at national level in consultation with Inter-institutional Coordination Unit	AWM organized by growers in collaboration with UF-IFAS	AWM organized by the Texas Citrus Pest and Disease Management Corporation (TCPDMC)	AWM organized locally through PCDs or PMAs. Citrus Pest and Disease Prevention Committee (CPDPC) establishes rules for HLB in collaboration with CDFA
7. Minimal recognition of rights to organize	Fundecitrus	AMEFIs and State Plant Health Committees established by the government, but with grower leaders and citrus industry representatives	Federación del Citrus de Entre Ríos	CHMAs imposed on growers, but use of a grower leader	TCPDMC	CPDPC, PCDs, grower leader in PMAs
8. Nested enterprises	Yes	Yes	Yes	Yes	Yes	Yes

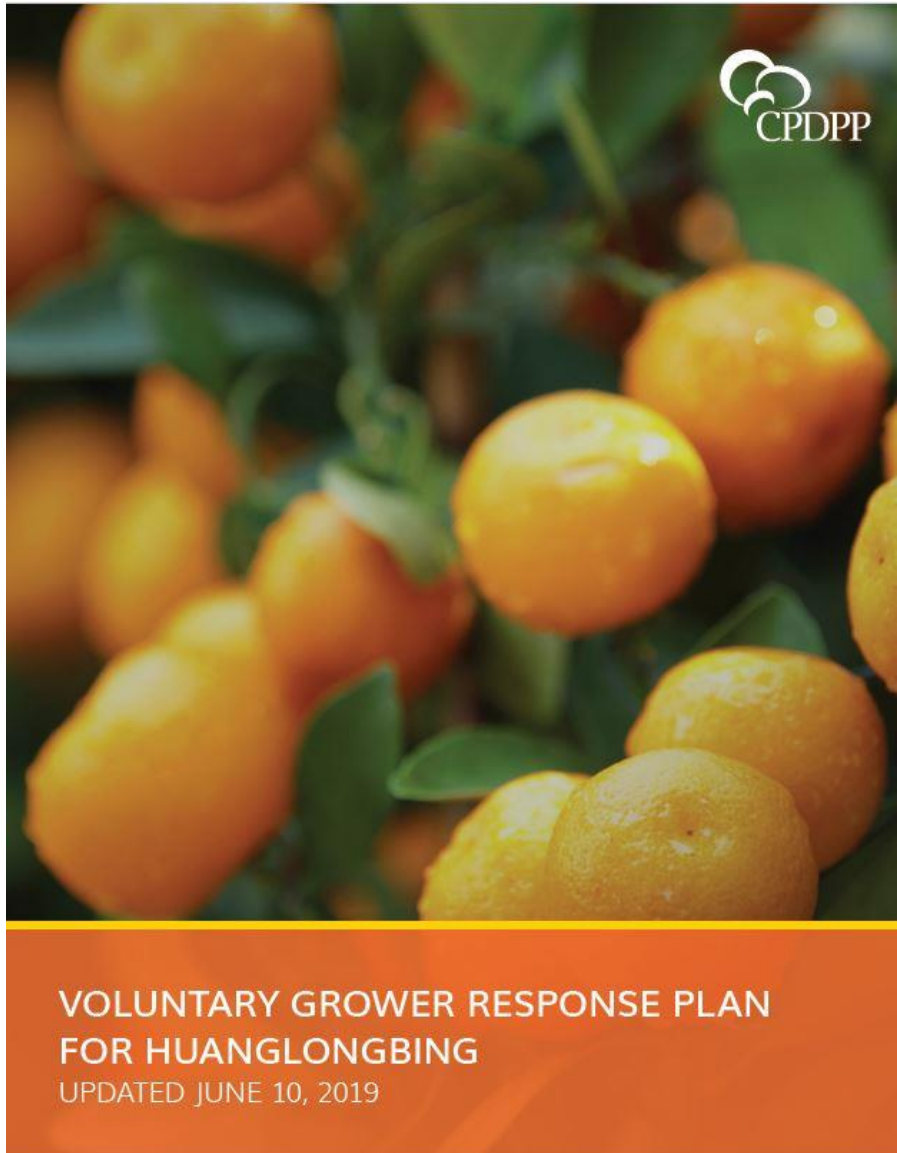
Ostrom's design principles for HLB in California

Design principle (Ostrom, 1990)	HLB management in California
1. Clearly defined boundaries	<p>Psyllid Management Areas (PMAs)</p> <p>Pest Control Districts (PCDs)</p>
2A. Congruence between rules and local conditions	<p>Rules defined by the CPDPC in collaboration with CACs and CDFA</p> <p>Some pre-existing PCDs</p> <p>Quarantine zones and rules defined by local conditions (citrus production, ACP populations, climate)</p>
2B. Congruence between appropriation and provision rules	<p>Insecticide treatments for ACP funded by individual growers.</p> <p>Other assessments based on production volume (CPDPP) or acreage (PCD)</p>
3. Collective-choice arrangements	<p>AWM organized locally through PCDs or PMAs</p> <p>CPDPC establishes rules in collaboration with CDFA</p>
4A. Monitoring users	<p>Seasonal reports of area treated for ACP in coordination, collected by grower liaisons</p> <p>Packinghouse inspections of grate cleaning or spray & harvest</p>
4B. Monitoring the resource	<p>ACP monitoring by CDFA, CACs, CRB and PCAs hired by growers</p>
5. Graduated sanctions	<p>If less than 90% of the acreage in a PMA or PCD is not treated in coordination, it will not qualify for the residential buffer treatment</p> <p>When there is a violation of the tarping requirement, a notice of violation is sent before further sanctions</p>
6. Conflict-resolution mechanisms	<p>Task Force meetings and other public meetings have been used for addressing conflicts</p>
7. Minimal recognition of rights to organize	<p>CPDPC, PCDs, grower leader in PMAs</p>
8. Nested enterprises	<p>State-wide program coordinated at the regional, county and local level, grower liaisons</p>

HLB governance network in California



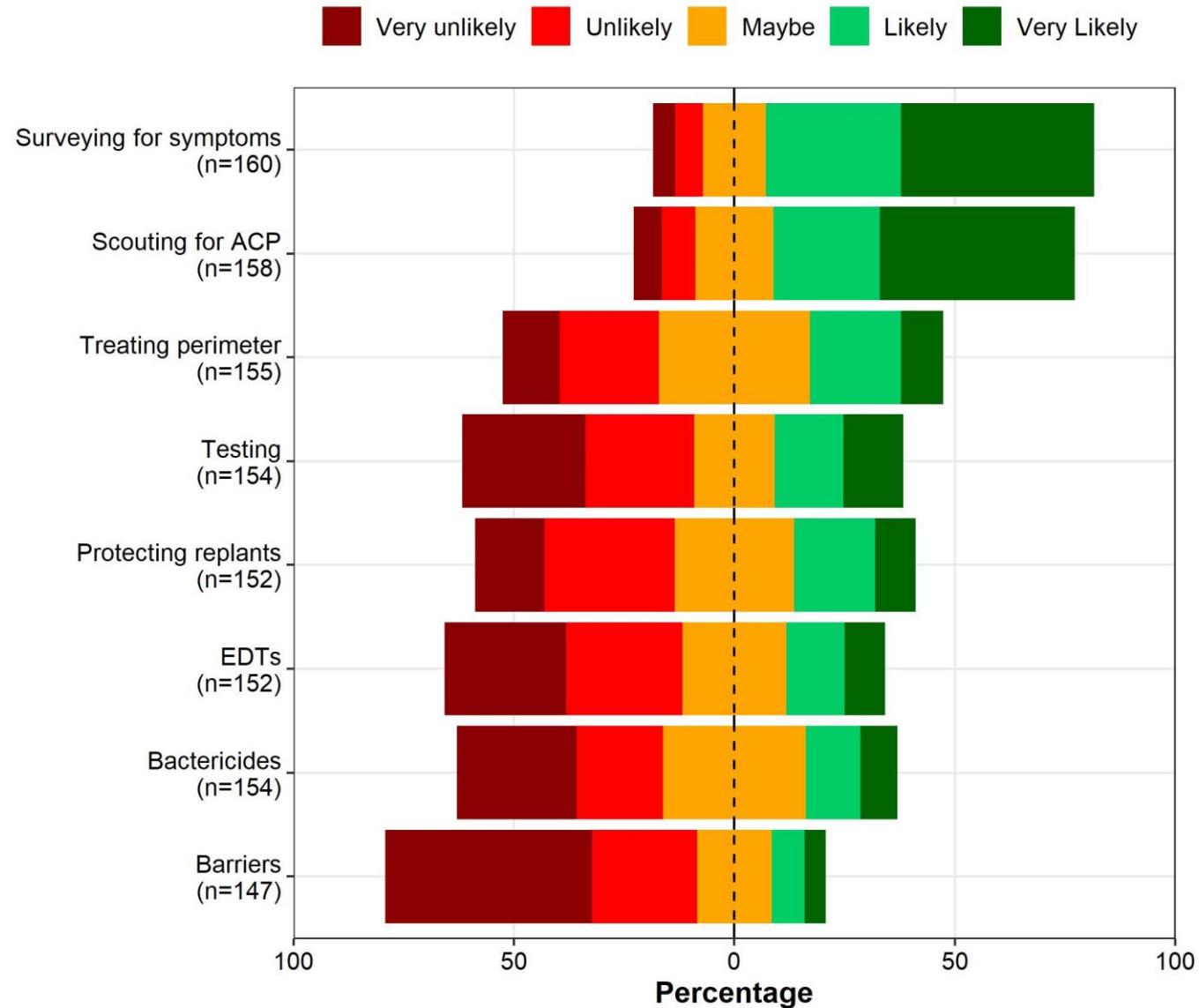
What factors impact adoption of HLB management practices?



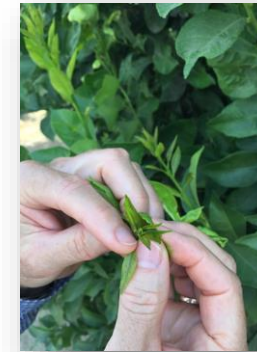
Clicker surveys distributed at CRB Grower Seminars in June of 2019 (n=300)



Not all practices were as likely to be adopted



Surveying for symptoms



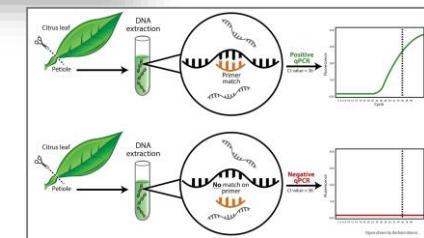
Scouting for ACP on flush



Protecting replants



Barriers

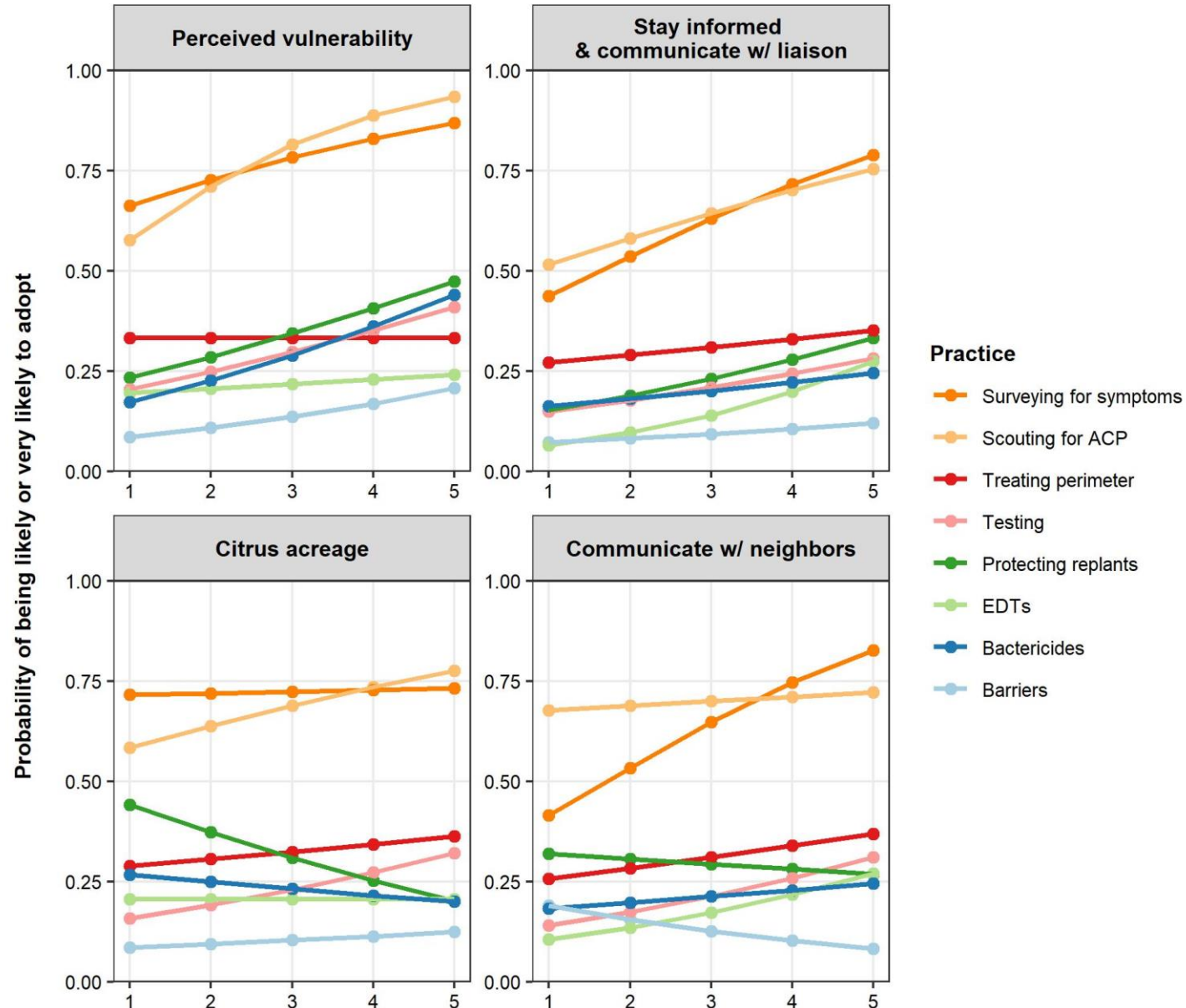


Testing



Early Detection Technologies (EDTs)

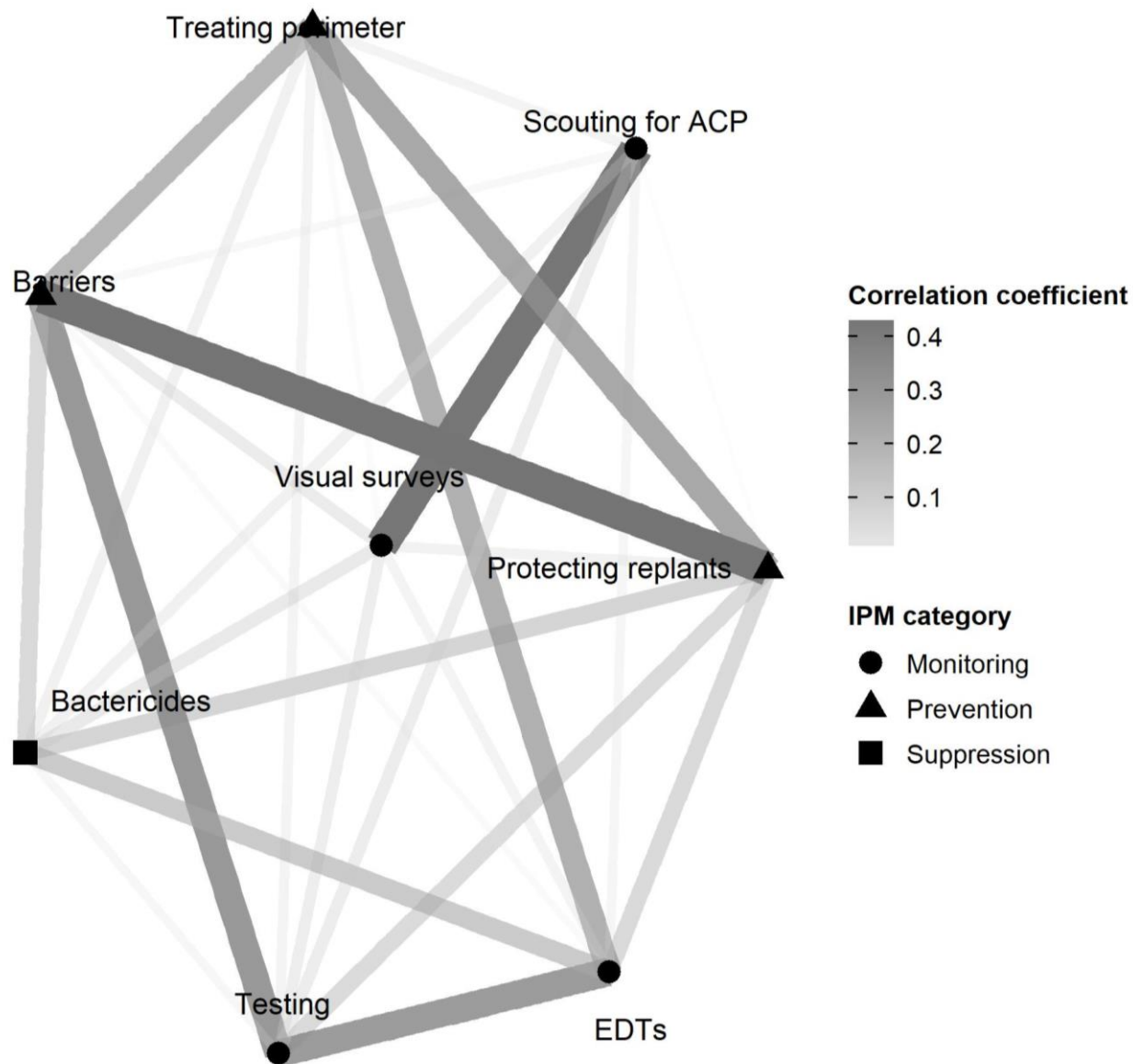
Probability of adoption depends on several factors



- More vulnerable to HLB → more likely to scout for ACP, protect replants, treat grove perimeters and use bactericides*
- More likely to stay informed and communicate with liaison → more likely to adopt many practices*
- More likely to communicate with neighbors → more likely to survey for HLB symptoms and use EDTs
- Bigger groves → more likely to scout for ACP and test, less likely to take extra measures to protect new plantings.

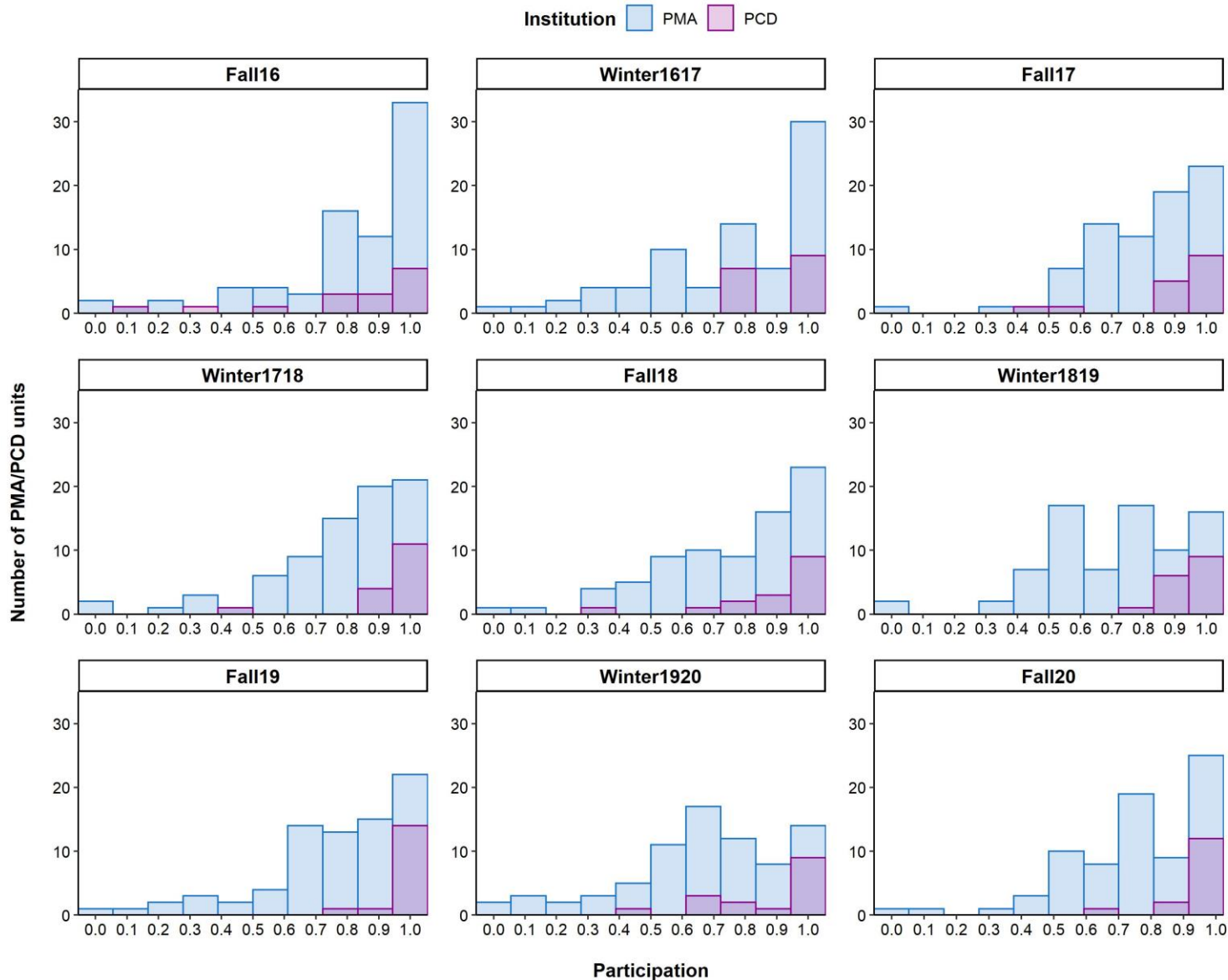
*BUT effect of staying informed and communicating depends on vulnerability

Practice adoption is interdependent



- The two practices with the highest acceptance, surveying for HLB symptoms and scouting for ACP, had a very high correlation and emerged at the core of the practice adoption network
- Surveying and testing were not significantly correlated with any other practice (not even testing or EDTs).
- Practices that seemed to have low acceptance, such as barriers, protecting replants, testing and EDTs were highly correlated. Maybe because of their novelty and/or cost?

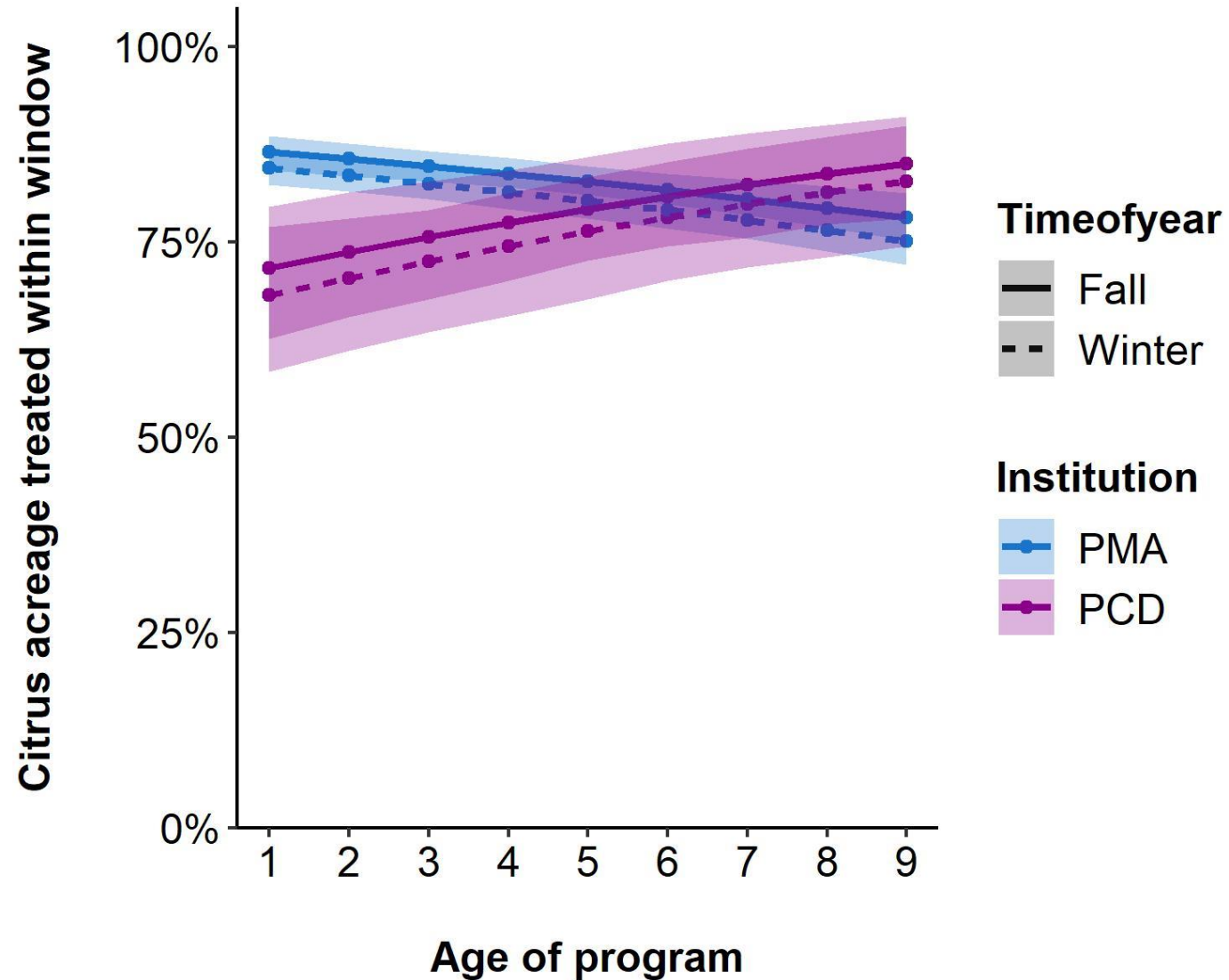
Analysis of participation in AWM



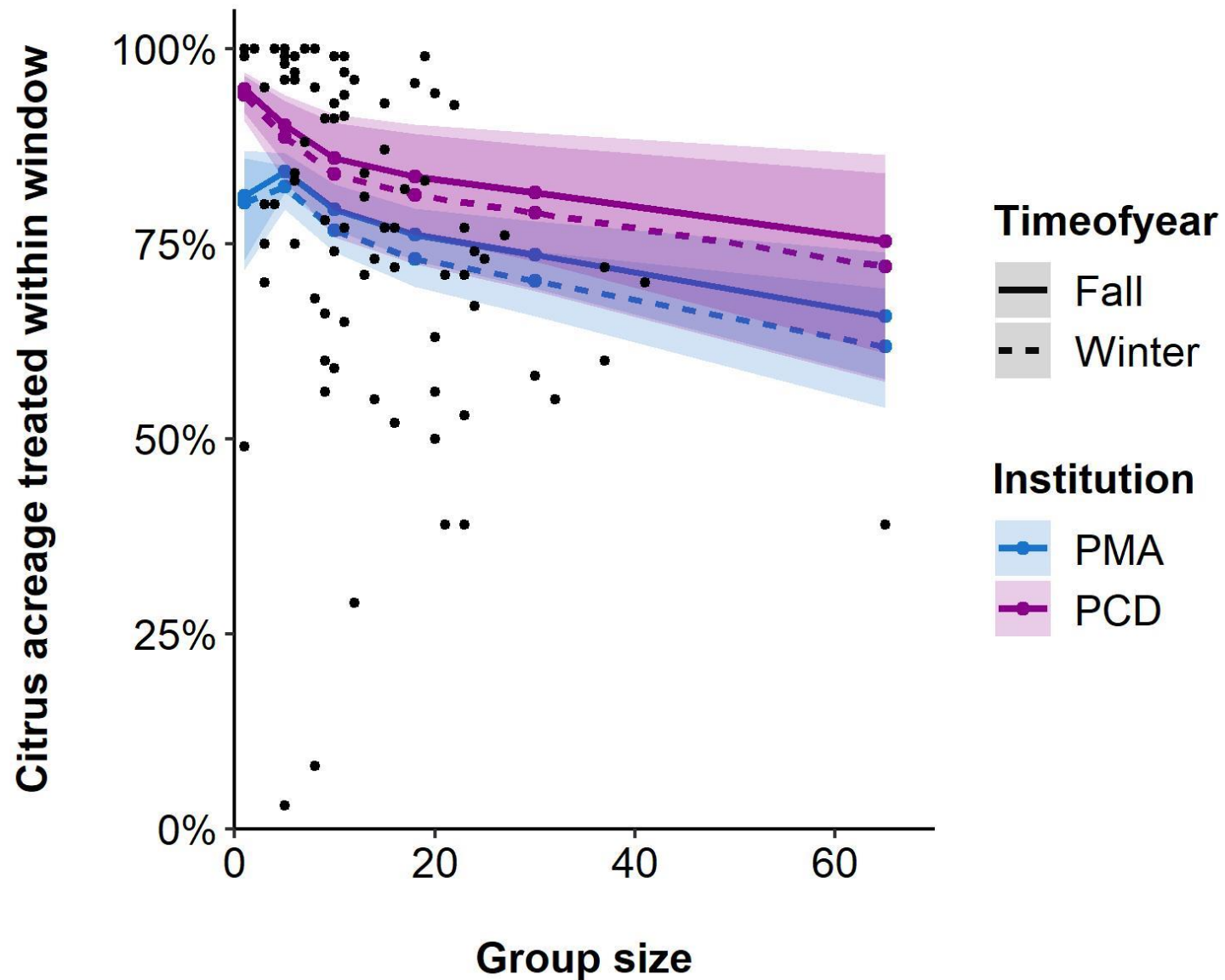
AWM participation depends on:

- Institutional approach (PMA/PCD)
- Group size (-)
- Total citrus acreage (-)
- Size of citrus groves (+)
- Heterogeneity in grove size (-)
- Season of treatment (Fall/Winter)
- Age of program (?)

PMAs and PCDs different trajectory over time

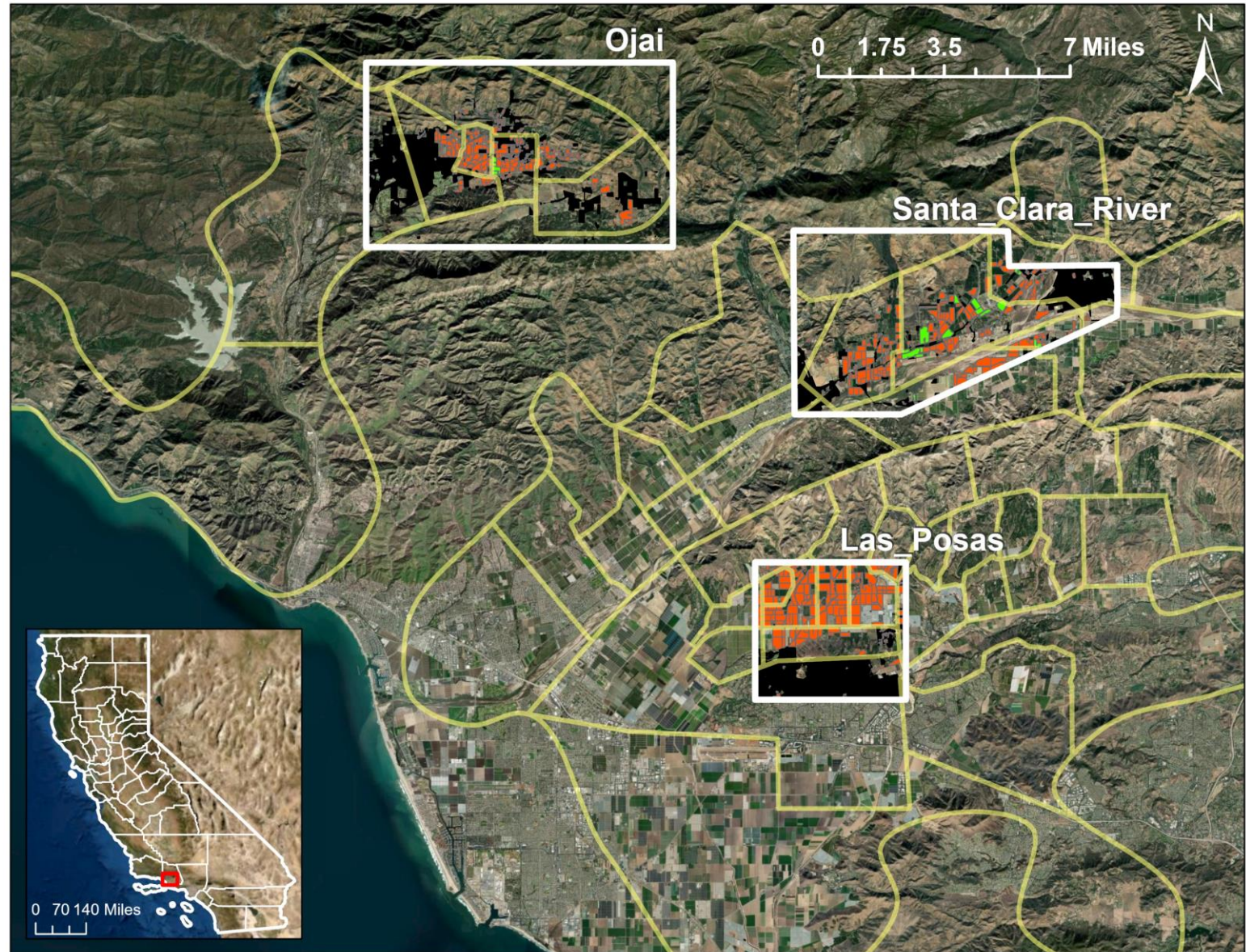


More people leads to lower participation

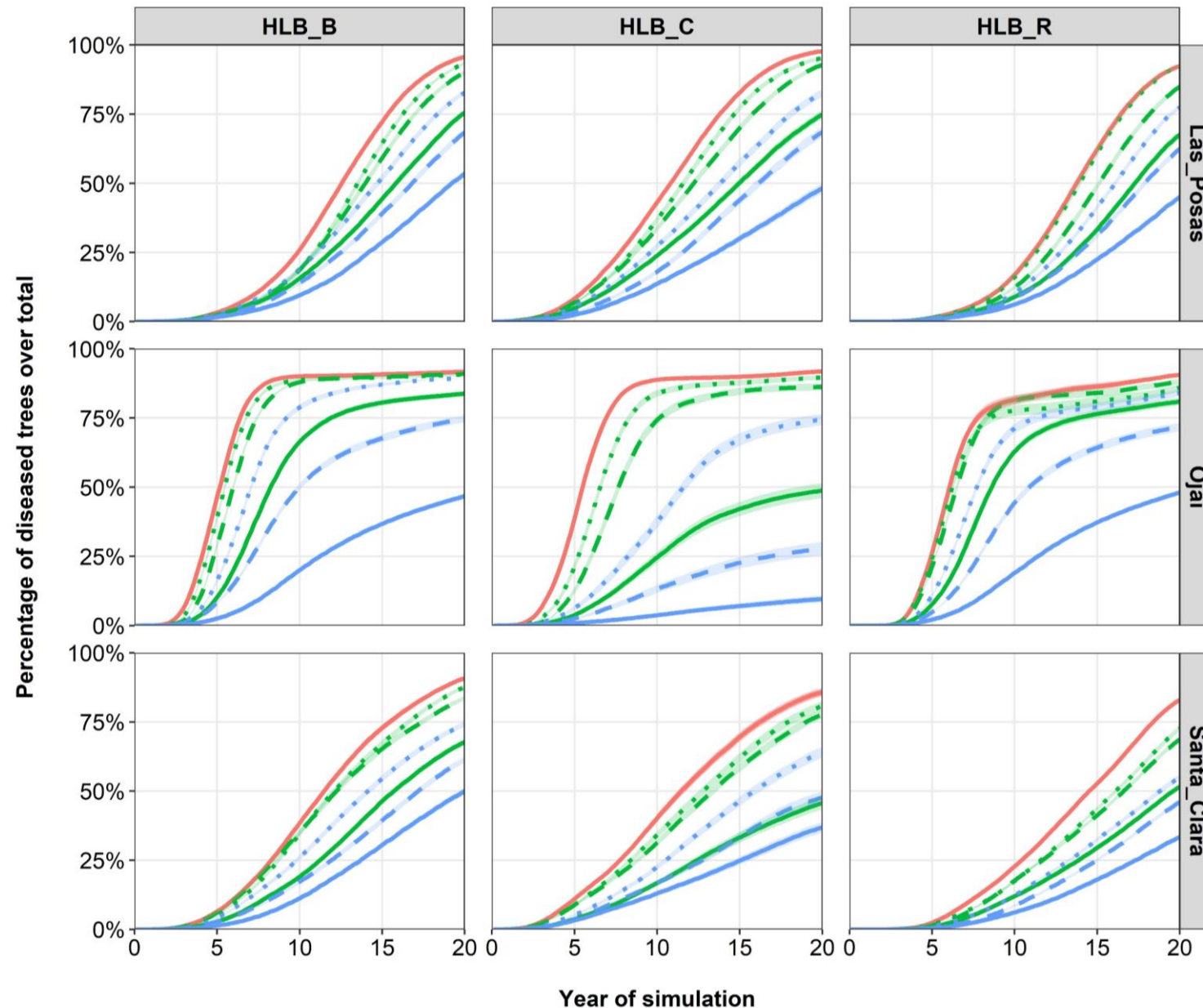


Is AWM beneficial? Simulation study

- 3 study areas in Ventura County
- Mixture of commercial citrus groves and residential properties
- ACP established
- No HLB-positive trees confirmed to date
- Different levels of participation in PMAs for area-wide management of ACP
- Simulations with agent-based model developed by Drew Posny and Weiqi Luo (USDA-ARS Fort Pierce, FL, NCSU)



Disease progress under different scenarios



- Three landscapes in Ventura
 - Las Posas
 - Ojai
 - Santa Clara
- Initial location of cryptically infected trees
 - HLB_B: Both commercial groves and residential properties
 - HLB_C: commercial
 - HLB_R: residential
- Insecticide treatment efficacy
 - 50%
 - 65%
 - 80%
- Scenario
 - NC: no control
 - 60d: 2-month treatment window (uncoordinated)
 - 21d: 3-week treatment window (coordinated)

Take-home messages

- HLB management creates a collective action problem.
- The institutional approach to HLB in California follows most of Ostrom's design principles for collective action: well-defined management areas, monitoring participation, grower involvement in rule making, having a multi-level governance network, grower liaisons, etc; and seems to have been more successful in achieving collective action than other areas.
- The adoption of HLB management practices is interdependent and will be impacted by perceived vulnerability to HLB, grove size and intentions to stay informed and communicate with grower liaisons and neighbors.
- PCDs are achieving higher participation than PMAs over time, but the number of people in each PMA/PCD, the average size of citrus groves and the heterogeneity in grove size are important factors.
- Agent-based model simulations in Ventura County suggest that insecticide treatments for ACP coordinated within a 21-day window can delay HLB spread, but only with high treatment efficacy. The structure of the landscape (mixture of residential and commercial properties) might condition disease spread.

Acknowledgements

- **PhD dissertation committee**

- Neil McRoberts
- Mark Lubell, UC Davis
- Bruce Babcock, UC Riverside

- **Collaborators**

- Holly Deniston-Sheets, DATOC & CRB
- Beth Grafton-Cardwell, UC Riverside
- Drew Posny, USDA-ARS Fort Pierce
- Weiqi Luo, USDA-ARS Fort Pierce
- Monique Rivera, UC Riverside

Many thanks to the CPDPC, CDFA, grower liaisons, grower liaison coordinator, growers, PCAs and all the people involved in HLB management that I've met during my years in California, it's been a wonderful experience!

- **Funding sources**

- Citrus Research Board #5300-192
- UC Davis Jastro-Shields Award
- Fulbright Spain doctorate scholarship



STATEWIDE COORDINATOR EXPECTATIONS

In order to educate commercial citrus growers, as defined by the Food and Agriculture Code Chapter 5 Section 8601, about the dangers of the Asian citrus psyllid and Huanglongbing, raise awareness of grove management best practices and accomplish the timely application of treatments over large geographical areas in a coordinated manner, a Statewide Coordinator is needed to work with the Grower Liaisons (GL) to coordinate statewide outreach and treatment activities so that program treatments are as effective as possible. Recognizing that most treatments are voluntarily done by citrus growers, it is imperative to have a coordinator in place who has good communication skills and a strong background in pest management to understand individual grower issues while getting the most effective treatments in place in a timely manner. The Statewide Coordinator must participate in the development and implementation of statewide and regional plans for responding to the presence of ACP or HLB in commercial groves. The Statewide Coordinator will be the lead over the Grower Liaisons, providing assistance, coordinating meetings and outreach materials, and providing direct supervision and support as needed.

Expectations

- 1)** Ongoing communication with CDFA and GLs regarding the progress of the project. Will set up regular meetings (in person, via webinar, online meetings, or conference call) with GLs to ensure proper messaging is being used to support the program. Will coordinate and report work activities as needed to the CPDPC and the CDFA Branch Chief, including the implementation of the response plan developed in cooperation with CDFA, University of California, and County Agricultural Commissioner's offices. This includes an onboarding process for new liaisons and providing periodic feedback based on direction from the committee, needs among the grower community and progress against regional expectations. A minimum of quarterly check-ins should be conducted with regional liaisons to ensure they're receiving the support, resources and guidance needed to fulfill their expectations and meet regional needs.
- 2)** Stay current on the latest ACP research and pesticide/treatment information by participating in meetings with industry, federal, state and county program officials and reading industry journals and newsletters. Collaborate with University of California experts on treatment recommendations and programs. In alignment with CPDPC direction, relevant information will be shared with the GLs and action items brought to appropriate subcommittees and CDFA.
- 3)** Attend the CPDPC meetings (in person, via webinar or conference call) when possible and as necessary, and relay sentiment, concerns, or opportunities to liaisons as appropriate. The Statewide Coordinator shall serve in a leadership capacity to help manage committee expectations and ensure committee members understand the purpose and scope of

liaisons' activities. Attend (in person, via webinar or conference call) Operations and Outreach Subcommittee meetings to provide updates to CDFA and the Committee on the status and effectiveness of the grower outreach and education program. Collaborate with outreach contractor to identify any broad grower outreach needs.

- 4) As stated in the Statewide Coordinator contract, facilitate communication between growers and project staff. Participate in citrus industry-related and various grower education programs including but not limited to California Association of Pest Control Applicators, Pesticide Applicators Professional Association, and the University of California Cooperative Extension, as time allows and as approved, to provide requested updates. Assist in mass outreach to industry members as needed.
- 5) Facilitate development of a statewide citrus mapping layer.
- 6) In conjunction with the GLs, help identify, locate, and gather grower information for the state, maintain contact with growers, farm/grove managers, and PCAs, and develop and maintain a recordkeeping system to identify where commercial pesticide treatments have occurred.
- 7) Participate in incident command calls for the counties that do not have a GL and acts as GL for those counties.
- 8) Participate in the decision-making process with the CPDPD Director, Biocontrol Manager, and the County Agricultural Commissioner to determine appropriateness of biocontrol releases in new counties.

Deliverables

- The Statewide Coordinator will participate in the coordination and development of GLs in various locations throughout California. Additionally, is expected to assist with the comprehensive ACP/HLB response plan as outlined above, and provide the following tangible items as evidence thereof:
 - Collaborative development of the regional response plans with the GLs, CDFA, UCs, and County Agriculture Commissioners.
 - Ensure regional response plan is implemented whenever ACP is detected in the county. Regular reporting of activities to CDFA and CPDPC.
 - Disseminate materials and information in coordination with CDFA and the UC Extension to help growers and Pest Control Advisors on the regional response plan.
 - Provide a monthly report of Statewide Coordinator activities.
 - Provide the program with an electronic file copy of necessary documents and spreadsheets developed by the Statewide Coordinator and the GLs to keep up with the changing situation regarding ACP/HLB.

- VII. Assist with appropriate research projects (with permission of Statewide Coordinator and through the Citrus Division) by obtaining grower cooperators, etc.

GL Roles/Expectations that are Regional

- I. Review and adjust the frequency of the actions listed above in this document to meet regional needs. Keep the Statewide Coordinator apprised of needed adjustments.
- II. In areas where Pest Management Area (PMA) Team Leaders are used - recruit Team Leaders when there are vacancies.
 - a. Provide/develop information for PMA Team Leaders to communicate with their growers (in counties where PMA Team Leaders are used).
- III. For areas under area-wide management: submit percentage treated for each PMA to CDFA after each coordinated area-wide treatment for the qualification of residential buffer treatments (only in areas where there are area-wide treatments).

GROWER LIAISON UNIVERSAL & REGIONAL GENERAL ROLES/EXPECTATIONS

Many of the Grower Liaison (GL) responsibilities are universal across all areas of the state but we also recognize there are differing needs from a GL in many of the regions or counties. These universal responsibilities mostly change in scope and frequency depending if the region has established levels of ACP and are in an area-wide treatment program versus areas where they are under eradication response for ACP or HLB. These roles and responsibilities of GL's have evolved over time (and usually as necessary) when new ACP and/or HLB priorities emerge in the county. As part of the development of a regional plan, GLs are expected to work with CDFA and the Statewide coordinator to determine the need/frequency of the following activities.

Roles/Expectations Universal for all Regional GL's throughout California

1) ACP/HLB ERADICATION RESPONSE

- I. Quickly respond to ACP and/or HLB detections affecting commercial citrus in areas where eradication efforts are in effect once location and grower information is supplied. Participate in CDFA incident command calls and/or crisis communications management team activities, as needed, when milestone detections occur.

2) OUTREACH/EDUCATION

- I. Email updates to growers and interested parties – minimum monthly. More often if/when needed.
 - (a) Pertinent local information for local growers.
 - (b) Communicate changing landscape of ACP & HLB locally and statewide.
 - (c) Maintain awareness and sense of urgency on the issues when growers start to lose focus.
 - (d) Other helpful information as necessary – for example, meeting dates and useful links.
- II. Maintain and update contact list of growers, Pest Control Advisors (PCA), grove managers, primary contacts, and other interested parties. Submit a copy of the contact list annually to Statewide Coordinator.
- III. Field grower/PCA calls with questions.
 - (a) Growers rely on GL's to be a one-stop information resource.
- IV. Give presentations/updates as requested and needed – For example, CAPCA, PAPA, UC meetings, Task Force, Pest Control Districts, general growers' outreach meetings.
 - (a) Host meetings or assist in hosting meetings when necessary. Share relevant information with the outreach contractor to help drive participation via Citrus Insider.
- V. Work with Task Force or Pest Control Districts, where present, and the University of California.

- (a) When necessary, develop area-wide treatment schedules, coordinated treatment areas, and treatment protocols.
- VI. Communications on Treatments when needed (Area-wide, Coordinated, or Responsive).
 - (a) Notifications, reminders, and follow-ups.
 - (b) Help small growers (including 25+ growers) in problem-solving treatment obstacles.
 - (c) Share relevant treatment information with the outreach contractor to amplify your message via Citrus Insider.
- VII. Liaison between Growers/PCA's, grove managers and CDFA, CPDPC, Task Force, local Farm Bureau, Pest Control Districts, County Agricultural Commissioner, Citrus Mutual, Citrus Research Board, University of California Cooperative Extension, and other appropriate and applicable groups.
- VIII. Work with the outreach contractor on messaging to growers and industry, and to help amplify any relevant requests, events, or notifications via Citrus Insider.

3) DATA & INFORMATION MANAGEMENT

- I. Obtain/maintain list of citrus sites – in some counties, the GL's have the most comprehensive and updated list. Work Closely with the local County Agricultural Commissioner's office and the Pest Control District to coordinate these records.
- II. Provide citrus site changes to CRB for the citrus layer when issues are encountered.
 - (a) Additions of new citrus plantings and deletions of sites pushed out.
 - (b) Changes in ownership, management, or primary contact.
- III. Obtain treatment protocols when needed from the University of California in conjunction with the Task Force or Pest Control District.
- IV. Collect Pesticide Use Reports (PUR) from growers after treatments (area-wide, coordinated, or responsive) which provide proof of treatment & holds growers accountable. GL's usually obtain PUR's more quickly. Request access from the County Agricultural Commissioner to gain access to CalAg Permit System to monitor PURs.
 - (a) Send reminders about PUR submittal when needed.
 - (b) Ground-truth Pesticide Use Report site i.d. and acreage with growers Permit acreage information.

4) ADDITIONAL EXPECTATIONS

- I. GL's should review the CDFA Action Plan quarterly and consult/provide input with CDFA and the Statewide Coordinator on any necessary changes to the plan.
- II. Assist in preparing the local citrus industry for future ACP or HLB outbreaks.
- III. Identify/obtain abandoned orchard information and submit location of abandoned orchards to the County Agricultural Commissioner. Maintain an inventory of such groves with the County Agricultural Commissioner.
- IV. Provide a written update approximately monthly for the Statewide Coordinator Update provided at the CPDPC Full Committee meetings and/or Operations subcommittee meetings.
- V. Submit required reporting monthly with invoice.
- VI. Liaise with the CPDPC Full Committee and the various subcommittees when necessary and as needed.

- VII. Assist with appropriate research projects (with permission of Statewide Coordinator and through the Citrus Division) by obtaining grower cooperators, etc.

GL Roles/Expectations that are Regional

- I. Review and adjust the frequency of the actions listed above in this document to meet regional needs. Keep the Statewide Coordinator apprised of needed adjustments.
- II. In areas where Pest Management Area (PMA) Team Leaders are used - recruit Team Leaders when there are vacancies.
 - a. Provide/develop information for PMA Team Leaders to communicate with their growers (in counties where PMA Team Leaders are used).
- III. For areas under area-wide management: submit percentage treated for each PMA to CDFA after each coordinated area-wide treatment for the qualification of residential buffer treatments (only in areas where there are area-wide treatments).

Statewide GL Coordinator Update for the 5/5/21 Operations Meeting

Staffing

The Riverside GL position is pending final insurance and paperwork clearance as is the Imperial GL position.

Fresno County – Sylvie Robillard

Sylvie is pleased to report there have been no ACP detections to date in 2021. Fresno County is approaching three years with no finds in commercial citrus. Sylvie continues with her normal liaison activities including monitoring groves that appear to be minimally farmed.

Northern Tulare County- Teri Blaser

Teri reports, as of this date there have been no new Asian citrus psyllid finds in Northern Tulare County. The last find was in Exeter in February of this year. Teri has not discovered any new neglected/abandoned groves. She works to keep Northern Tulare County growers updated on the status of ACP in the area.

Southern Tulare County – Jessica Leslie

For the month of April 2021, there have been no new ACP finds in Southern Tulare County.

There have not been any HLB trees found in SJV as of now. 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. In her email updates she also has been including information about bloom as well as the current citrus commodity survey CDFA conducted within Tulare County.

If anyone who is not currently receiving her monthly e-mail updates is interested, please e-mail or call Jessica.

Kern County – Judy Zaninovich

Judy is pleased to report no new ACP detections since March. So far in 2021, there have been a total of **3** ACP detections in Kern County – two of them in residential properties and one in commercial citrus. CDFA staff are continuing to make regularly scheduled releases of *Tamarixia* parasites in residential areas where ACP has been found.

Although the lack of recent detections is good, due to the high level of ACP detections last fall the San Joaquin Valley ACP/HLB Area-wide Task Force issued a recommendation to Kern County growers to add an ACP-effective material to their pre-bloom or spring foliar treatments – especially for orchards located east and south of Bakersfield. The recommendation included other suggestions for an effective treatment, the recommendation notification provided resource

links and examples from the University of California's UCIPM Guidelines of ACP-effective materials which also suppress katydids and materials that can be used during bloom. The Task Force will continue to closely monitor the situation in Kern County and will likely recommend a coordinated treatment in the late summer in the areas where there were ACP detections last fall.

Additionally, the Glassy-winged Sharpshooter Area-wide Management Program will be working with organic growers in some areas of Kern County, such as Highway 65 and Edison, to apply treatments in the next month in organic citrus blocks with higher populations of that pest. These treatments will also help in suppressing any un-detected ACP populations.

Judy continues to send out email updates with important information such as new ACP/HLB detections, treatment recommendations from the Task Force, bloom/petal-fall declarations, meeting notifications, and other appropriate outreach information for growers, PCA's, and interested stakeholders.

[San Luis Obispo County - Cressida Silver](#)

There have been no new detections in the county.

[Santa Barbara County - Cressida Silver](#)

Cressida is working with NST, UC, Master Gardeners, and the county to respond to a grower request for help with outreach to residential neighbors to improve understanding around ACP, HLB and management practices. The grower list is being updated, and hopefully the citrus layer will be as well.

Preliminary treatment percentages are in and it looks like 1 more PMA than usual has reached 90%, and another is very close. Cressida is just trying to finalize those last ones to make sure. Usually, we have 5 PMAs at or above 90%, although only one gets buffer treatments because of low trap numbers in the others. CDFA hasn't requested the final percentages yet, but she'll have them ready when they do

[Ventura County - Sandra Zwaal and Cressida Silver](#)

The annual ACP Task Force Grower Meeting is anticipated to occur in the next few months before the next 2021/2022 ACP area-wide treatment schedule. The winter ACP area wide treatment percentages have been calculated and final numbers will be provided when CDFA requests them.

Over the next couple of months, both grower liaisons will collaborate with the County Ag Commissioner's office and CRB to prepare the annual grove and grower data updates that make up the Ventura Co. citrus layer.

[San Bernardino County – Sandra Zwaal](#)

Additional outreach was requested by the San Bernardino Task Force with a specific request for Farmer's Market outreach, banners, and a billboard. As a result, Nuffer, Smith, and Tucker (NST) and grower liaison, Sandra Zwaal are collaborating to perform residential and commercial outreach at the Redlands Farmer's Market on Saturday, May 8. A booth has been secured for

NST to communicate and provide the public with ACP and HLB information. Sandra will be onsite to answer commercial grower questions and to provide education to the certified citrus producers. Banner (30' x 10') wording options were also provided to the task force.

The annual 2021/2022 ACP area-wide treatment schedule has been confirmed and distributed to all citrus growers. The schedule remains the same as the previous year. The annual grove and grower data updates are occurring. Sandra will collaborate with both the county and CRB for an updated citrus layer.

Riverside County – Vacant

Coachella – Riverside County Citrus Pest Control District No. 2 – Thanks to Tim Hoesterey
Coachella PCD Manager

The District manager is still working on processing the ACP reimbursements, and should have a compliance percentage for our Winter ACP area-wide treatment in the next few weeks. Results looks consistent to years past.

The District is planning to conduct another release of beneficial insects for the ACP. Dates for these releases are still to be determined, but should take place shortly. In the past, this was done immediately following the ACP sprays, but it was decided to release these in Spring time.

The District is finishing the last of the 2 organic red scale eradication treatments, and will then start on the 2nd application on the conventional groves. These sprays will continue through mid-June.

Lastly the District will continue our intensive tree removal program of citrus trees that are in close proximity to commercial groves and are difficult and costly to treat. To date the District has removed 3,589 citrus trees at 49 different locations.

Imperial County – Vacant

Thanks to Curtis Pate, PCD Manager

Curtis reports the ACP Canine detection team worked with CDFA and ICCPCD staff last week in Imperial Valley. The CDFA crew surveyed the southwest Brawley area in the buffer of GZ9. There were some finds but only heavy populations on one residential tree. We are trying to get details to see if any homeowners need additional information. Other locations that the detection dog worked included west of Calipatria in and around GZ10, and some properties near the border at the east port of entry near Calexico. There was good cooperation from residents and no detections of ACP populations.

San Diego County – Sandra Zwaal

The San Diego Pest Control District (SDPCD) has set the summer ACP area wide treatment schedule for May 17-31. Treatment is mandatory for citrus groves in the Pauma and San Pasqual areas of the SDPCD and considered an uncoordinated treatment for citrus groves outside the SDPCD.

Neglected and abandoned groves have been given a high priority focus by the County Ag, Weights, and Measures with goals of increasing resources to address reported groves. With current drought conditions and the high cost of water for irrigation, the risk of fire from dead and dying citrus is high. The University of California has plans to apply for a Cal Fire grant to remove dead and dying citrus trees.

Grove information and contacts near the Fallbrook area continue to be verified and updated by grower liaison, Sandra Zwaal.

Neglected/Abandoned Groves

No changes reported by the CACs. The GLs continue to work with the growers and CAC staff to address any suspected abandoned groves.

County	BOS Sup (Y/N)	Co Coun Sup (Y/N)	#Groves Report'd	#Groves Confrmd N/A	Total Acs (100 trees/ac) Confrmd	#owners contactd	#1st Letrs	#2nd Letrs	#3rd Letrs	#Heard	Hears won	#Hears lost	Groves Remvd	Total Acres Remvd	#Groves Rem'd	Acres Rem'd	#Groves Pndg	Total Acres Pndg			
Fresno																					
Kern	Y	Y	3	1	60.36	1											1	60.36			
Madera																					
SLO	Y	Y																			
Tulare	Y	Y	88	88	1148	88	44				1	1	0	66	908	9	79	13	161		
Subtotal			91	89	1208.36	89	44				1	1	0	66	908	9	79	14	221.36		
Imperial	Y	Y	1	1	6	1								1	6						
LA																					
OC																					
Coachella			48	48	34.12	48							48	34.12					Coachella is a PCD in Riverside		
Riverside	Y	Y	92		264.81	43	43	43	11				22				35				
San Brdo																					
SD	Y	Y	108	61	1693	61	39	28	24				37	774		71	919				
Sta Barb																					
Ventura	Y	Y																			
Subotal			108	110	1997.93	153	82	71	35	0	0	0	108	814.1	0	71	954	0			
Total			340	199	3206.29	242	126	71	35	1	1	0	174	1722	9	150	968	221.36			



CPDPP OUTREACH REPORT

May 12, 2021

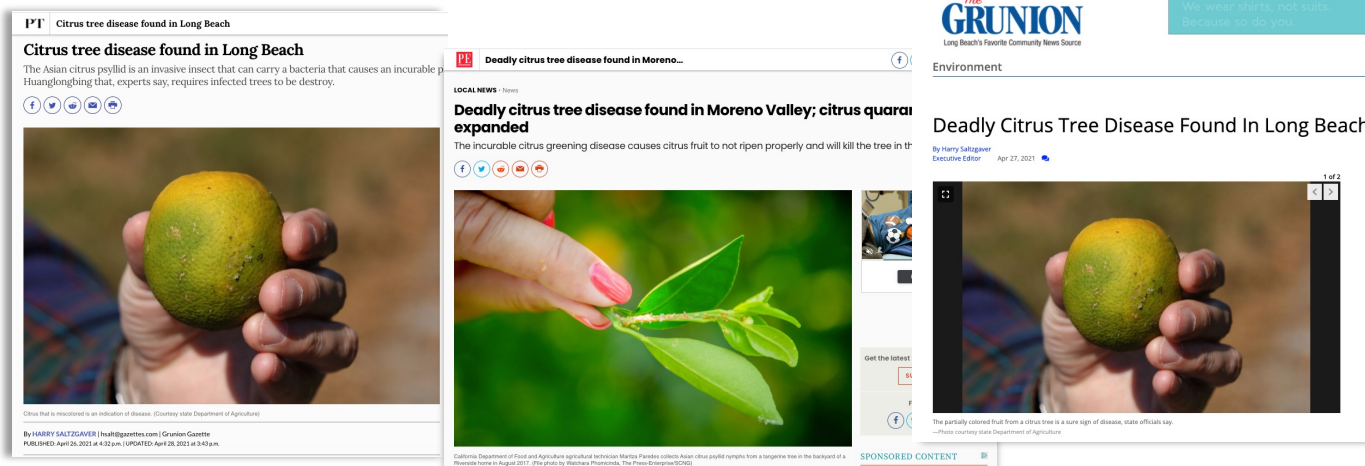
Homeowner Outreach Overview



HOMEOWNER OUTREACH

HLB Detection Media Outreach

- Moreno Valley
 - 8 stories secured online and in print
 - 242,616+ impressions
- Long Beach
 - 4 stories secured online and in print
 - 108,366+ impressions



Community Event Attendance

- May 8 Redlands Farmers Market with Sandra Zwaal



MEDIA OUTREACH

Audio News Release

- English and Spanish audio news release distributed to radio stations across the state
- 30.5 million impressions from 110 verified broadcasts – including 34 hits in top 10 DMA markets

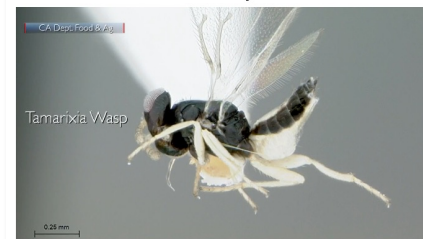


Ongoing Tamarixia Outreach

- Coordinated with media in Santa Barbara County on recent Tamarixia releases
- Three broadcast stories in Santa Barbara County
 - 38,000+ impressions



Wasps being used to help protect local orchards from deadly citrus disease



MULTICULTURAL OUTREACH

Spanish-Language Audiences

- Coordination with prominent Spanish-language media outlets
 - In-language interview with El Aviso magazine
 - Feature article in La Opinión, largest Spanish-language newspaper in the U.S.



Asian-Language Audiences

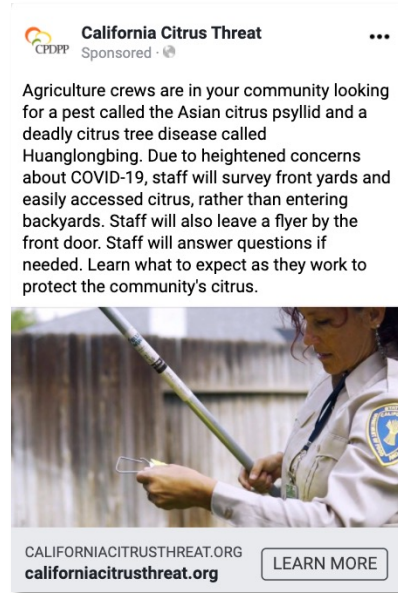
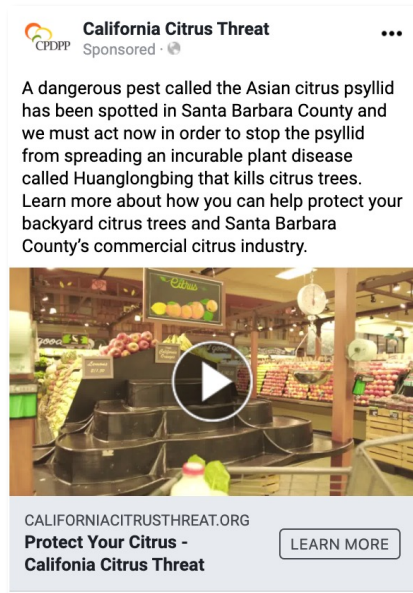
- Earned and paid media outreach focused on general messaging, educating homeowners on the pest and disease
 - 20 earned stories secured in Cantonese, Chinese, Mandarin and Vietnamese garnering 3.4 million+ impressions
 - Programmatic and social media ads garnering 2.7 million+ impressions



DIGITAL AND SOCIAL

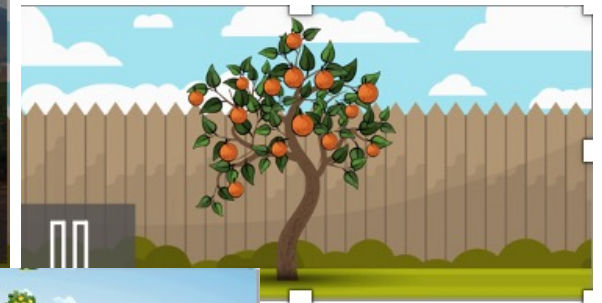
Targeted Facebook Ads

- Coordinated Facebook ads with messaging urging homeowners to coordinate with agricultural officials or pushing increased vigilance in inspecting their trees



Engaging Social Media Content

- Designed social media graphics for Earth Day and Arbor Day
- Boosting engagement through updated assets



Industry Outreach Overview



INDUSTRY OUTREACH

Annual Report 2019 - 2020



Virtual Grower Meetings

- Ventura County Grower Meeting
 - March 15
 - 111 RSVPs
- San Bernardino County Grower Meeting
 - March 20
 - Coordinated by San Bernardino's Task Force

MEDIA OUTREACH

Tarping Successes

- Secured three stories on DATOC tarping research findings
- 1k+ impressions



Tarping Proven to Reduce ACP Movement

MARCH 12, 2021 /



Data Shows that Citrus Tarping Having Positive Impact on ACP Movement

MARCH 10, 2021 / PEST UPDATE, RADIO REPORTS

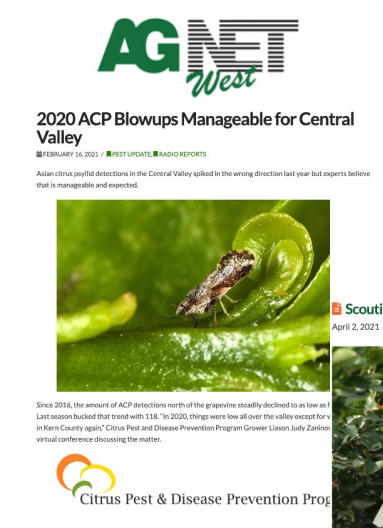
Data shows that regulated tarping practices for citrus are having a positive impact on mitigating the movement of Asian citrus psyllid (ACP). Researchers at the Data Analysis and Tactical Operations Center found positive results for ACP movement after taking a close look at trapping data. The team analyzed data collected along transportation routes before tarping regulations were put in place for bulk citrus and compared that to data collected after the mandates went into effect.

The data showed a clear tapering of ACP finds once the tarping rules were put in place. The California Department of Food and Agriculture implemented the bulk citrus tarping requirement in 2017 after a recommendation from the Citrus Pest & Disease Prevention Committee. Data shows that the regulation is accomplishing what it was intended to do. There has been a sharp decline in the rate of ACP finds in the San Joaquin Valley, where 70 percent of the state's packinghouses are located.



Connecting with Industry Audiences

- Secured three stories featuring mentions of the State of the Central Valley Meeting
- 2.8k+ impressions

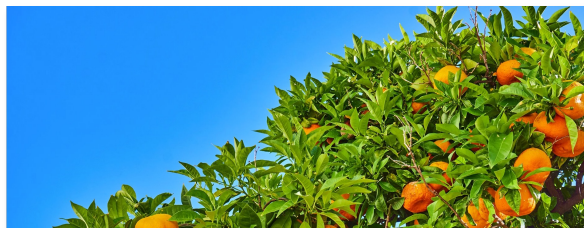


Elected Official Outreach Overview

CITY PRESENTATIONS AND COUNTY COLLABORATION

City Presentations

- City of Moreno Valley
- City of Long Beach



SAVE YOUR COMMUNITY'S CITRUS

Asian Citrus Psyllid & Huanglongbing



THE ISSUE

- The Asian citrus psyllid (ACP) has been found throughout California.
- The pest can transmit a disease called Huanglongbing (HLB) that kills citrus trees and has no cure.
- Local citrus trees, the commercial citrus industry and the thousands of jobs it supports are at risk.
- It's estimated that 60% of California residences have a citrus tree on their property.

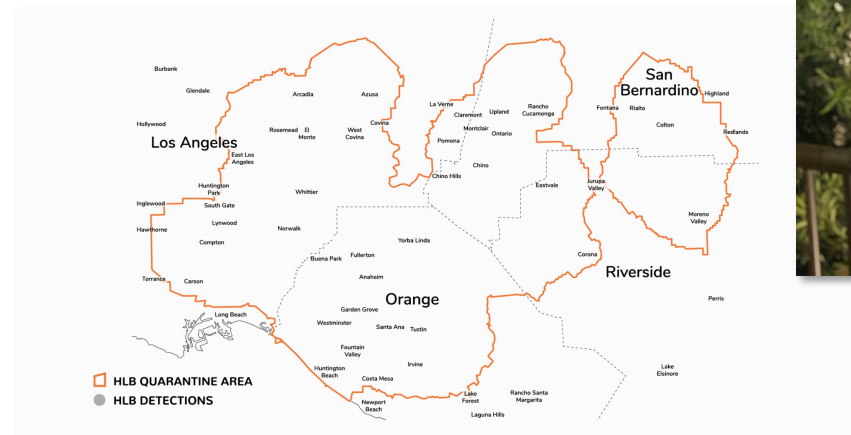


\$3.4 billion in sales \$7 billion in economic activity 22,000 jobs 3,900 farmers 292,000 acres of citrus production



Digital and Social

- Spring digital and social media content development
 - Focus on HLB quarantine
- Citrus Hero
 - City of West Covina



Results & Upcoming Activities



UPCOMING ACTIVITIES

- Elected official content distribution to officials in HLB quarantine cities, including social media and blog content educating homeowners on quarantine rules and regulations
- "Don't Move Citrus" homeowner paid and earned statewide media campaign
- Industry media advertising push showcasing program success stories, research and California's efforts to combat the pest and disease
- Retail nursery education: Exploring opportunities with Plant California Alliance's CCN Pro program