HLB DETECTION, DELIMITATION, AND TREE REMOVAL UPDATES

SOUTHERN DISTRICT

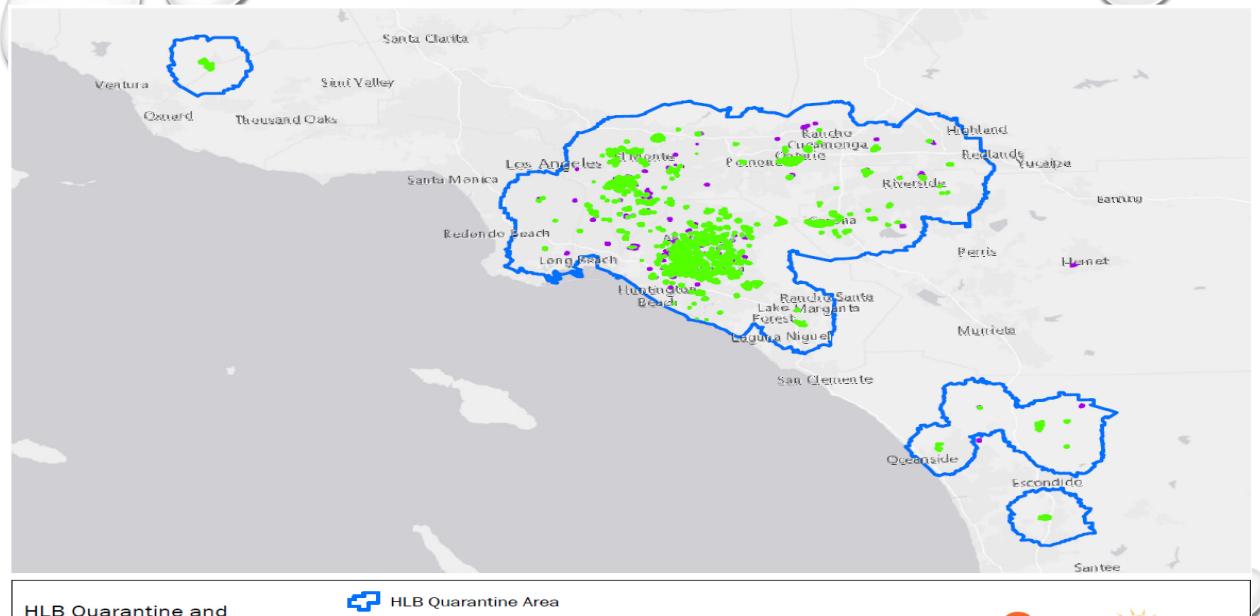


HLB Detection Updates

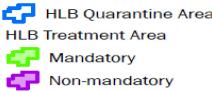
DETECTION OF THREE HLB-POSITIVE TREES IN VALLEY CENTER

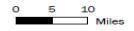
- THE FIRST DETECTION WAS PART OF THE MULTI-PEST SURVEY
- TWO TREES WERE REMOVED AND THE THIRD HAS BEEN SCHEDULED
- THE HLB QUARANTINE BOUNDARY EXPANDED TOWARDS THE SOUTH AND EAST OF THE CURRENT BOUNDARY IN SAN DIEGO
- A PUBLIC MEETING WAS CONDUCTED ON MARCH 27
 - THE TREATMENTS WILL START EFFECTIVE APRIL 7
- THE DELIMITATION SURVEY CONTINUES IN THE AREA

DELIMITATION SURVEY CONTINUES IN MISSION VEIJO, IRVINE, CORONA, ONTARIO, DUARTE, AND FONTANA



HLB Quarantine and Treatment Area 3/28/2025









HLB DELIMITATION SURVEY I

Areas	Total Properties	Properties Surveyed	No-Host Properties	Refusals/ Pending	Completion %
Valley Center (8-9)	48	24	5	0/24	50%
Duarte (12-13,15,18,20,45,50,66-72)	195	176	60	11/7	90%
Anaheim Hills (77,166- 169,171,176)	481	428	270	3/50	89%
Yorba Linda (38,40-47)	185	141	37	13/39	76%
Mission Viejo (1-2)	215	203	67	12/6	94%
Irvine (57-69,71)	405	324	162	27/72	80%

HLB DELIMITATION SURVEY II

Areas	Total Properties	Properties Surveyed	No-Host Properties	Refusals/ Pending	Completion %
Fontana (17)	161	85	18	0/76	53%
Montclair (6)	229	219	97	2/10	96%
Corona (49,62,80,82-83,85)	438	418	218	10/17	95%
Ontario (1-2,5,34,37,52,56,93,95-97)	431	417	211	10/18	97%
Riverside (12)	19	9	7	0/10	47%

DELIMITATION SURVEY - FIND SITE AND ADJACENT PROPERTIES

Areas	Properties Surveyed	No-Host Properties	Refusals	No Contact
Long Beach	27	22	3	1
Pico Rivera	32	9	1	0
Commerce	3	1	1	1
Montebello	4	4	0	0
Whittier	22	4	1	2
La Puente	15	0	1	4
Anaheim	73	17	0	12
Santa Ana	10	2	0	2

HLB POSITIVE TREES (JANUARY THRU MARCH)

County	Detected	Removed	Cumulative Pending
Los Angeles	105	77	96
Orange	281	250	149
San Bernardino	40	92	37
Riverside	50	52	40
San Diego	3	2	1
TOTAL	479	473	323

Executed five (5) rounds of abatement warrants in the last three months to remove trees from the refusal properties in different HLB areas.



California Department of Food & Agriculture
Plant Pest Diagnostics Center
HLB Testing Program
2025

Total number of plant and ACP samples per month – Fig. 1a, Fig1b

Number of samples tested for HLB per year from 2008 –2025 – Fig. 2

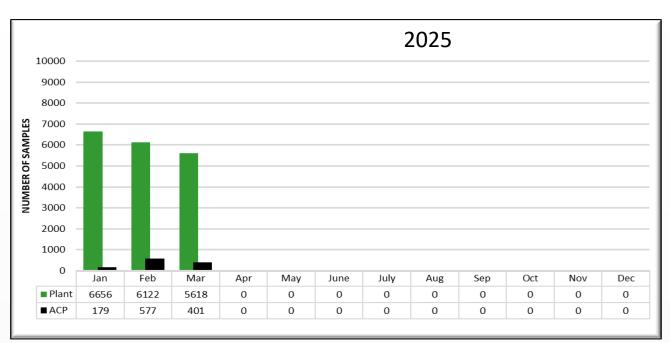
Tally of positive detections by county and city – Tables 1a-1d.

Number of detections yearly from 2012-2025– Table 2

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

Fig 1a. 2025 - Total number of plant and ACP samples submitted per month.

Fig 1b. 2024 - Total number of plant and ACP samples submitted per month.



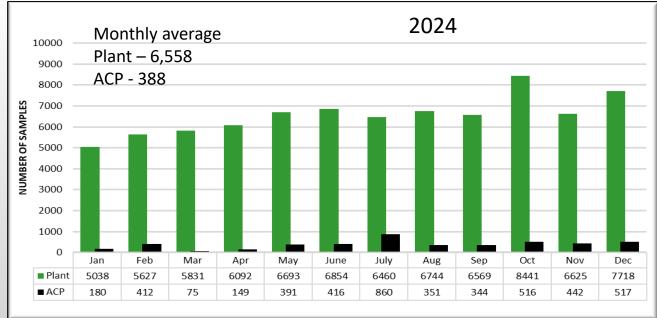
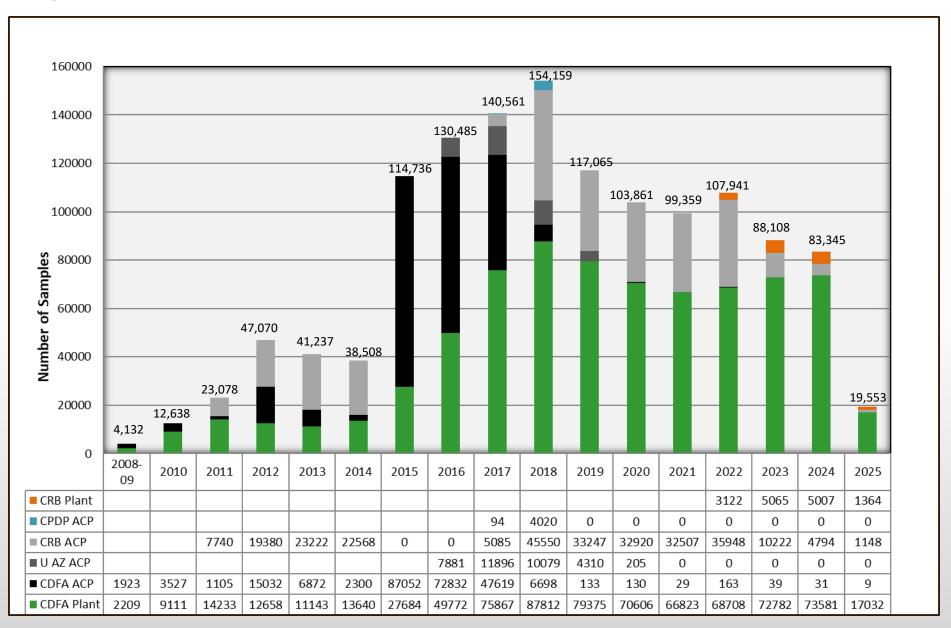


Fig 2. Number of samples tested for HLB per year from 2008 - 2025.



Combined total of plant and ACP samples tested from 2008 – 2025 is 1,325,904

Tables 1a-1d. Tally of positive sites, positive trees, and CLas+ ACP samples by city and county as of 3/28/2025.

2012-2025	# Sites	# Trees	# ACP samples
Grand Total	6236	9819	887

Orange County Positives					
City	# Sites	# Trees	# ACP samples		
Garden Grove	751	1310	124		
Santa Ana	750	1230	98		
Anaheim	1058	1845	174		
Westminster	368	630	23		
Orange	343	509	45		
Tustin	51	65	10		
Fountain Valley	15	22	3		
Huntington Beach	27	30	2		
Placentia	93	128	15		
La Habra	13	20	1		
Fullerton	19	23	10		
Yorba Linda	83	214	17		
Irvine	169	216	5		
Costa Mesa	113	159	4		
Brea	34	53	1		
Buena Park	9	16	2		
Cypress	5	1	5		
Stanton	5	6	1		
Midway City	12	26	0		
Los Alamitos	1	0	1		
Villa Park	3	6	0		
Newport Beach	4	4	0		
Mission Viejo	18	22	4		
Total	3944	6535	545		

Riverside County Positives					
City	# Sites	# Trees	# ACP samples		
Corona	268	395	37		
Riverside	39	46	10		
Eastvale	2	2	0		
Jurupa Valley	40	68	4		
Moreno Valley	1	1	0		
Norco	6	11	0		
Hemet	1	0	1		
Total	357	523	52		
San B	ernardino C	ounty Positiv	/es		
Rancho Cucamonga	6	7	5		
Montclair	23	23	9		
Colton	6	11	3		
San Bernardino	2	1	1		
Ontario	329	511	22		
Fontana	30	47	9		
Chino	20	30	3		
Total	416	630	52		
Sar	n Diego Cour	nty Positives			
Fallbrook	2	1	1		
Oceanside	4	9	4		
Pauma Valley	1	0	1		
Vista	1	0	1		
San Diego	47	75	0		
Valley Center	8	22	2		
Total	63	107	9		
Ve	entura Coun	ty Positives			
Santa Paula	50	86	6		
Total	50	86	6		

Los Angeles County Positives					
City	# Sites	# Trees	# ACP samples		
Whittier	231	282	52		
Pico Rivera	339	513	73		
Montebello	82	113	2		
San Gabriel	93	125	9		
Rosemead	50	69	7		
Paramount	28	35	5		
La Mirada	53	72	6		
La Puente	57	69	9		
Norwalk	16	13	5		
Cerritos	7	9	5		
Hacienda Heights	5	5	1		
Lakewood	5	6	0		
Duarte	174	268	7		
El Monte	73	106	8		
South El Monte	22	43	4		
Alhambra	6	7	0		
Temple City	12	11	2		
Compton	1	1	0		
Glendora	1	0	1		
South Gate	10	10	6		
Long Beach	14	23	3		
Los Angeles	8	6	2		
Downey	28	35	5		
Carson	4	3	1		
Monrovia	42	61	0		
Rowland Heights	2	0	2		
Pomona	10	13	2		
Artesia	7	8	0		
Bellflower	5	5	0		
Monterey Park	1	1	0		
West Covina	1	0	1		
City of Industry	1	2	0		
Claremont	1	0	1		
Santa Fe Springs	2	1	1		
Azusa	8	16	2		
Covina	2	1	1		
Commerce	4	5	0		
San Dimas	1	1	0		
Total	1406	1938	223		

Table 2. Positive detections by year as of 3/28/2025

Po	ACP Sur	vey Type			
Year	# Sites	# Trees	# ACP samples	RS	HLBR
2012	1	1	1	1	0
2013	0	0	0	0	0
2014	0	0	0	0	0
2015	10	10	3	0	3
2016	13	19	3	3	0
2017	295	269	116	39	77
2018	422	699	82	29	53
2019	532	756	75	50	25
2020	362	488	44	29	15
2021	385	598	59	20	39
2022	884	1342	166	115	51
2023	1817	2965	229	202	27
2024	1226	2189	90	42	48
2025	289	483	19	4	15
Total	6236	9819	887		



Statewide Huanglongbing (HLB) Quarantine Discussion

Commercial Fruit

Statewide Quarantine – Pro

- Likely one, or no, mitigation required to move fruit to any location within the state. Lower costs and damage to fruit due to applying a mitigation(s).
- Simplified compliance requirements and closer alignment with federal regulations. California would be treated more similarly to Florida, Texas, and other citrus producing states.

Statewide Quarantine - Con

- Non-infested areas would have no protection.
 - Regular replacement of diseased and dying trees.
- Reduced or loss of ability to enforce the state exterior quarantine to exclude citrus pests, including HLB, SOS, and canker.
- Reduced or loss of eradication authority to respond to localized HLB detections.
- Likely decrease in, or loss of, federal Citrus Health Response Program funding.
- Potential decrease in trade market value.
- Irreversible. Cannot return to localized quarantine.



Nursery

Statewide Quarantine – Pro

- Outdoor grown plants, moved into a structure, would be eligible for sale statewide rather than within a 5-mile radius quarantine area.
- May force changes to intrastate sale and movement of nursery stock

Statewide Quarantine – Con

- Complete loss of outdoor citrus nursery stock. Production and wholesale nurseries may go out of business with reduced clientele.
- Outdoor nursery stock becomes ineligible for interstate sale to noncitrus producing states.
- If nursery stock regulations are amended, HLB could quickly spread within California on infested nursery stock.

Safeguarding in Transit Discussion

Removing Safeguarding Requirement within a Zone

Pros

- Cost reduction: no safeguarding or tarps needed to move fruit within a quarantine zone.
- Likely fewer Cal/OSHA-related concerns.

Cons

- Safeguarding is a statistically proven way to reduce satellite ACP infestations and eradication resources.
- Inequal levels of infestation throughout quarantine zones.
 - Fruit would move without cover from Orange County to Riverside.
 - ACP outbreaks in SJV would require no mitigation (e.g. Kern to Fresno)
- Lack of clarity for drivers will lead to violations and penalties.
- Enforcement nightmare.

HLB TREATMENT UPDATES

SOUTHERN DISTRICT

APRIL 9, 2025

UPDATES

- DELIMITATION TREATMENTS WERE CONDUCTED IN THE FOLLOWING AREAS:
 - MISSION VIEJO, ANAHEIM HILLS, COSTA MESA, IRVINE, DUARTE, PICO RIVERA, WHITTIER, CORONA, MONTCLAIR, FONTANA, AND ONTARIO.

- PUBLIC MEETINGS HELD TO CONDUCT TREATMENTS:
 - RIVERSIDE AND SAN BERNARDINO COUNTIES: JANUARY 8, FEBRUARY 11, MARCH 11, AND APRIL 9, 2025.
 - LOS ANGELES AND ORANGE COUNTIES: JANUARY 7, FEBRUARY 4, MARCH 3, AND APRIL 1, 2025.
 - SAN DIEGO COUNTY: MARCH 27, 2025.

HLB DELIMITATION TREATMENTS I

Areas	Total Properties	Properties Treated	No Host Properties	Refusal/ No Contact	Completion
Mission Viejo (1-2)	215	124	66	22/3	88%
Irvine (45-50,53-56)	256	78	160	16/4	93%
Anaheim Hills (169,171)	85	12	70	2/3	96%
Costa Mesa (32-34,36)	421	184	200	30/4	91%
Duarte (2-6,8-9,12-20,24,27,29,45,50,66-68)	464	259	150	29/28	88%

HLB DELIMITATION TREATMENTS II

Areas	Total Properties	Properties Treated	No Host Properties	Refusal/ No Contact	Completion
Fontana (17)	87	60	14	6/9	85%
Corona (42,49,62,80,83,88)	466	178	256	12/17	93%
Montclair (6)	229	117	99	2/10	94%
Ontario (1,5,10,18,21,30,34,37,40,46, 50,52,93-97)	527	229	251	10/44	91%

HLB DELIMITATION TREATMENTS— FIND SITE AND ADJACENT

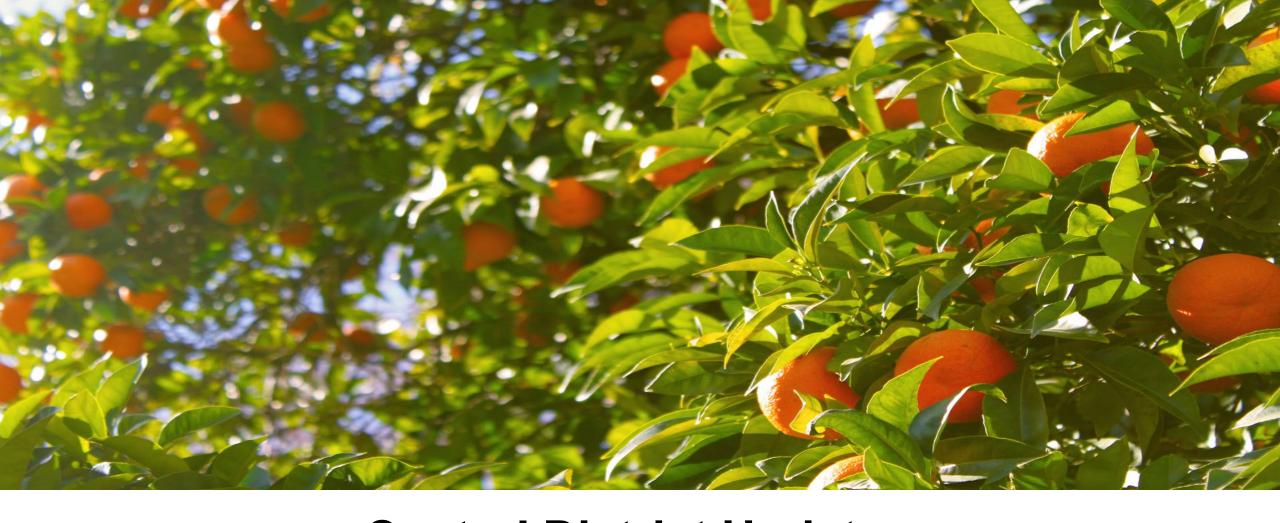
Areas	Total Properties	Properties Treated	No Host Properties	Refusal/ No Contact
La Puente	3	1	2	0/0
Commerce	2	0	1	0/1
Long Beach	18	5	11	2/0
Pico Rivera	224	102	98	11/7
San Gabriel	21	13	5	1/0
Whittier	46	30	14	1/1

SOUTHERN DISTRICT STAFFING UPDATES

County	Permanent	Seasonal	Vacant Positions	Status
Los Angeles	24	0	One PPA II and Two PPA I	Vacant positions will be eliminated
Orange	17	0	_	
Riverside and San Bernardino	18	0	-	
San Diego and Imperial	16	0	One PPA I	Vacant position will be eliminated

STAFF DISTRIBUTION BY ACTIVITIES

Counties	Surveys	Treatments and Tree Removal	Regulatory
Los Angeles and Orange	23	14	2
Riverside and San Bernardino	10	4	4
San Diego and Imperial	8	4	3



Central District Update Operations Subcommittee Meeting April 9, 2025



Central District Update

- Since January 22, there have not been any new ACP detections!
- Detection, delimitation, and grove trapping remains status-quo.
- Multi-pest risk survey is on-going.
- Citrus commodity surveys are on-going as weather permits.
- Four staff will assist with Japanese beetle for April and May, salaries/benefits paid by Plant Division.
- The two Visalia offices are now located at: 7401 W. Sunnyview Ave, Suite A, Visalia.





Total	Total	Total	Total	Total HLB+	Total HLB+	Total Tree
Properties	Survey	Properties	Treatment	Trees	Trees	Removal
Surveyed	Refusals	Treated	Refusals		Removed	Refusals
2,677	10	1,009	21	86	81	5

Central District Update – Project Staffing

Office	Survey	Trapping	Treatment
Fresno	5	7	0
Visalia	4	4	1
Shafter	3	2	1
Camarillo	8	0	2

Central District Update - Staffing

County	Total Perm Staff (current)	Pending Hiring (vacancies)	Hiring Status
Fresno County (Fresno)	12	N/A	1 PPA I vacancy eliminated
Kern County (Shafter)	6	N/A	1 PPA I vacancy eliminated; 1 PPA I swept; 1 PPAII vacancy eliminated
Tulare County (Visalia)	9	N/A	Fully Staffed
Tulare County (Visalia Regulatory)	1	N/A	Fully Staffed
Ventura County (Camarillo)	10	N/A	1 PPA I & PPA III vacancies eliminated



Northern District Update
Operations Subcommittee Meeting
April 9, 2025

Northern District Update | ACP Trapping

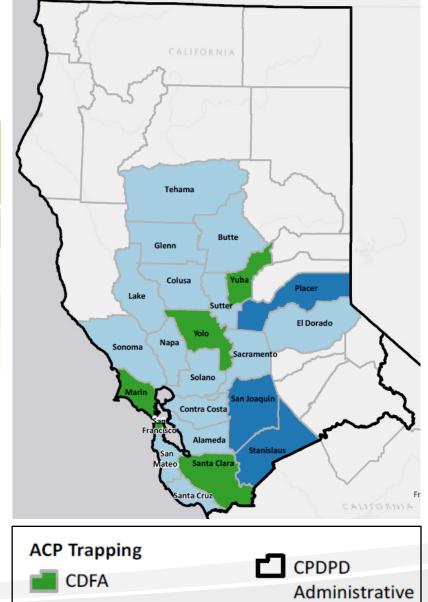


General Detection

Entity	Type	Number of Counties	Number of Traps
County	Commercial	3	135
County	Residential (YR)	3	1351
County	Residential (W)	12	3090
State (CDFA)	Residential (W)	5	1358

Started process of preparing new agreements with counties beginning October 1, 2025

Further reduced agreement amounts by a total of 20% (~\$220,000)





Northern District Update | HLB Risk-Based Survey

2024 Cycle 2 Counties			
*Alameda	San Joaquin		
Butte	San Mateo		
*Contra Costa	*Santa Clara		
Glenn	Solano		
Marin	Sonoma		
Placer	Stanislaus		
Sacramento			

^{*}Three counties remaining

Overall, 83% of Cycle 2 is complete in Northern District



Northern District Update | Delimitation and Treatment

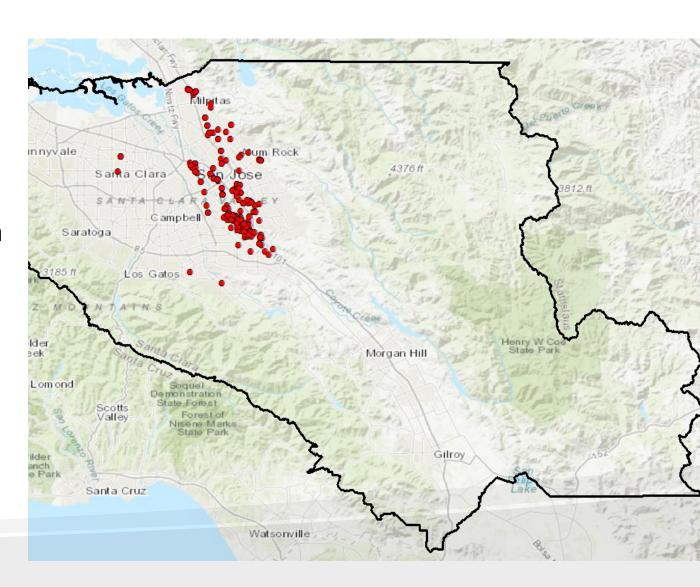


Santa Clara County

8 new detections since last Operations Subcommittee meeting on January 22, 2025 – detections did not trigger any expansions

Completed removal of 493 delimitation traps (~50%) in core hotspot area

Will continue delimitation trapping in reduced and bordering grids around core hotspot area



Northern District Update | Staffing

Classification	Total Perm Staff (current)	Vacancies
Senior Environmental Scientist (Supervisory)	3	0
Senior Environmental Scientist (Specialist)	2	0
Environmental Scientist	6	0
Research Data Specialist I	1	0
APC Supervisor	1	0
APC Specialist	1	0
Pest Prevention Assistant II	3	0
Pest Prevention Assistant I	3	0

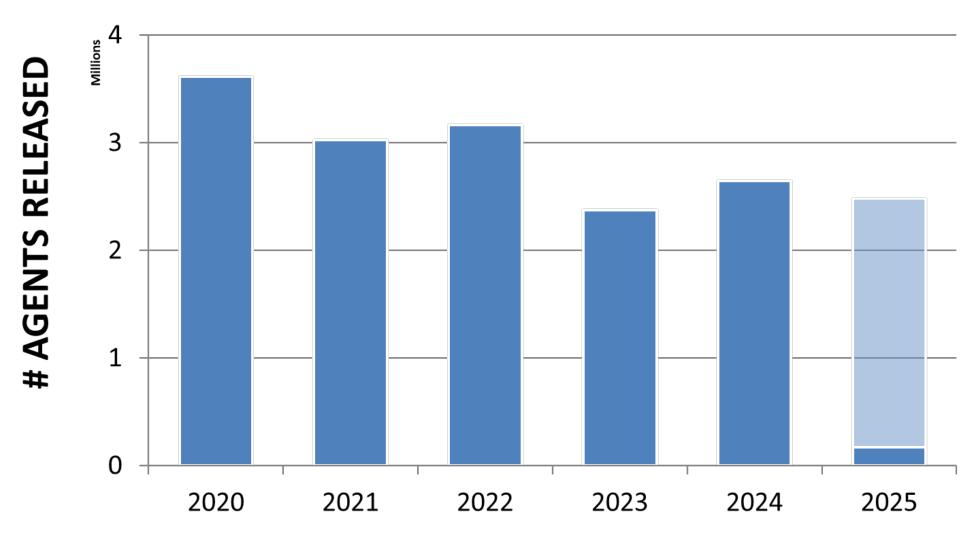


Biological Control Agent Releases

	Releases Previous Month	Releases, 2025 Releases 2011-2		2025
County	March	T. radiata	T. radiata	D. aligarhensis
	2025	Released	Released	Released
Imperial	6,400	26,200	739,543	10,295
Los Angeles	46,300	136,600	8,947,684	107,734
Orange	60,100	142,200	7,092,916	71,179
Riverside	50,000	62,600	4,422,302	127,739
San Bernardino	17,200	45,600	2,560,715	57,252
San Diego	15,500	45,700	3,522,964	86,403
Ventura	12,400	34,600	2,671,106	16,830
Santa Barbara	0	7,400	460,582	12,012
Kern	0	6,400	423,664	0
Santa Clara	5,800	16,000	379,037	0
Placer	0	0	3,400	0
San Luis Obispo	0	0	142,200	0
Tulare	0	0	71,800	0
Fresno	0	0	35,000	0
Monterey	0	0	29,000	0
Madera	0	0	5,600	0
Arizona	0	0	253,500	0
Mexico	0	0	306,000	0
TOTAL	213,700	523,300	32,067,013	489,444
	TOTAL (2011-2025):			32,556,457



Biological Control Agent Releases

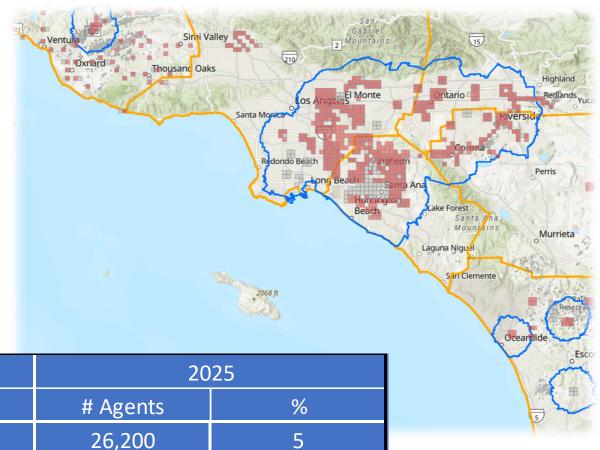




Biological Control Agent Release Areas

Releases in:

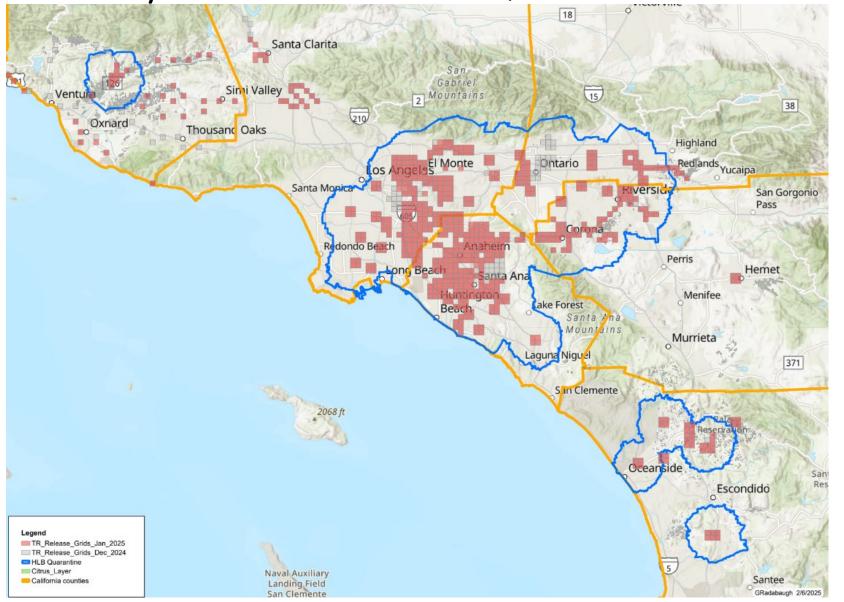
- HLB Quarantine areas
- Borders
- Trade routes
- Area-wide management
- Newly established ACP



Release Type	2024		2025	
	# Agents	%	# Agents	%
Borders	57,800	2	26,200	5
HLB	2,216,860	84	432,700	83
New	105,200	4	22,400	4
Routes	263,800	10	42,000	8

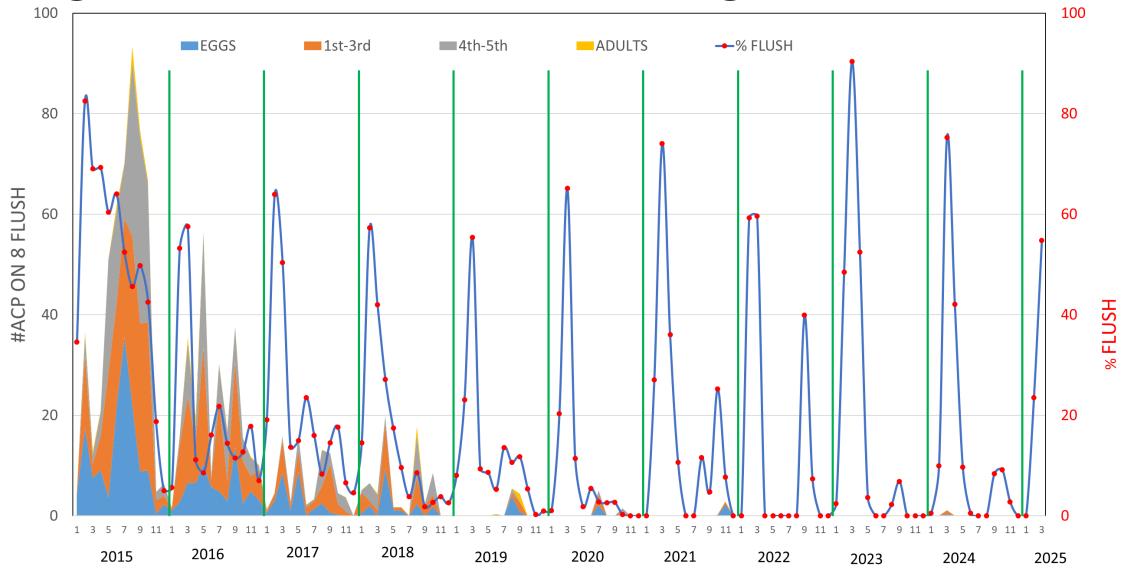


Releases within / around HLB Quarantine areas





Region-Wide Urban Monitoring 2015 - Present





ACP Biological Control

Why is Tamarixia Production so Expensive?

- 1. The production process is expensive Plant production, environmental control, manpower, etc.
- 2. California is expensive Importing from an HLB infested state is inadvisable
- 3. Cost of quantity and quality
 Isolines to maintain genetic variability, sampling to maximize female sex ratio, collection method
- 4. ACP BC is not just production
 Optimal release strategies, post release monitoring, active adaptive management
- 5. Other activities that ACP BC Group perform

 Outreach Schools, master gardeners, academia, CAPCA, PAPA, CACASA, TV, Radio, national, international Research support insects, plants, expertise, protocols to help develop and improve pest management International relations Brazil, Israel, Cyprus ACP BC programs; Workshops in Fiji, Samoa, Tonga; tours
- 6. Is it really that expensive?

 Less than 3% of CPDPD operations





Strategic Priorities and Activities

- Southern
 - Detect and remove HLB in and near commercial groves
 - Conduct own treatment and removal when feasible
- Central
 - Detect and remove HLB near commercial groves (Ventura)
 - Find and eradicate ACP
- Northern
 - Find and eradicate ACP in priority counties

*The above does not represent all activities or strategic priorities (i.e. biocontrol, regulatory, outreach, etc.)



Right-Sizing the Citrus Division Projected Staffing

District	# of Staff	Proposed # of Positions to Move	New Position Count
Southern District	83	19	64
Central District	49	10	39
Northern District	23	8	15
Admin	13	1	12
Seasonals and Limited-Term	13	13	0
Total Perm Staff (Seasonals + LT)	168 (13)	38 (13)	130 (0)



