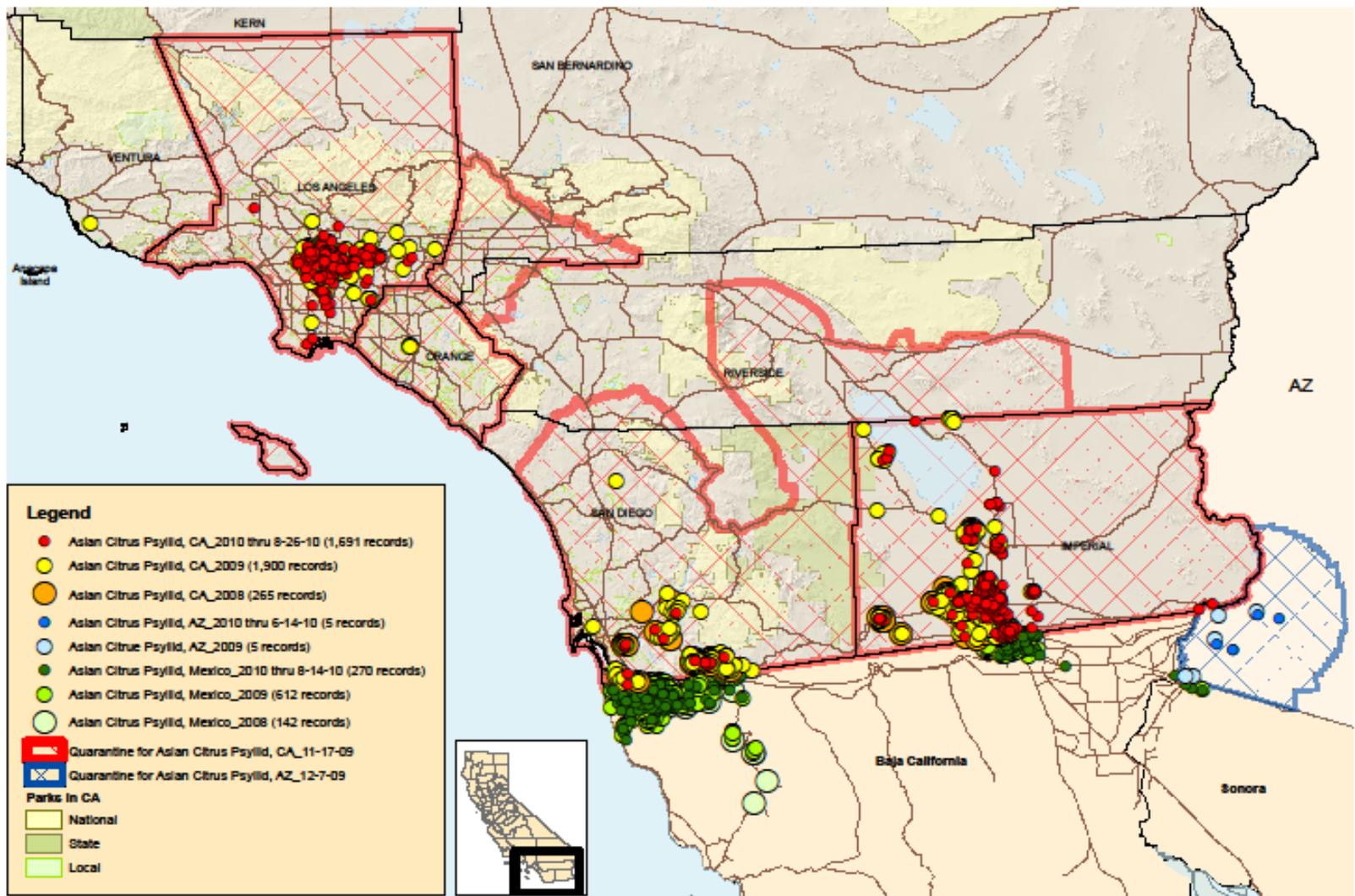


ASIAN CITRUS PSYLLID SITUATION IN CALIFORNIA

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Kris Godfrey, Ph.D.
California Dept. of Food and Agriculture**

Asian Citrus Psyllid Cooperative Project California, Arizona, and Baja California



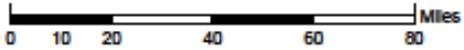
Legend

- Asian Citrus Psyllid, CA_2010 thru 8-25-10 (1,691 records)
- Asian Citrus Psyllid, CA_2009 (1,900 records)
- Asian Citrus Psyllid, CA_2008 (265 records)
- Asian Citrus Psyllid, AZ_2010 thru 6-14-10 (5 records)
- Asian Citrus Psyllid, AZ_2009 (5 records)
- Asian Citrus Psyllid, Mexico_2010 thru 8-14-10 (270 records)
- Asian Citrus Psyllid, Mexico_2009 (612 records)
- Asian Citrus Psyllid, Mexico_2008 (142 records)
- Quarantine for Asian Citrus Psyllid, CA_11-17-09
- Quarantine for Asian Citrus Psyllid, AZ_12-7-09
- Parks in CA**
- National
- State
- Local

USDA, APHIS, PPO
Western Region GIS Specialist
650 Capitol Mall, Suite 6-400
Sacramento, CA 95814

Coordinate System:
CA Teale Albers, NAD83
Date Created: August 31, 2010
Time Created: 14:52 hrs PST

Date Source:
CA Dept of Food & Agric.
AZ Dept of Agriculture
USDA, APHIS, IS
TeleAtlas Dynamap



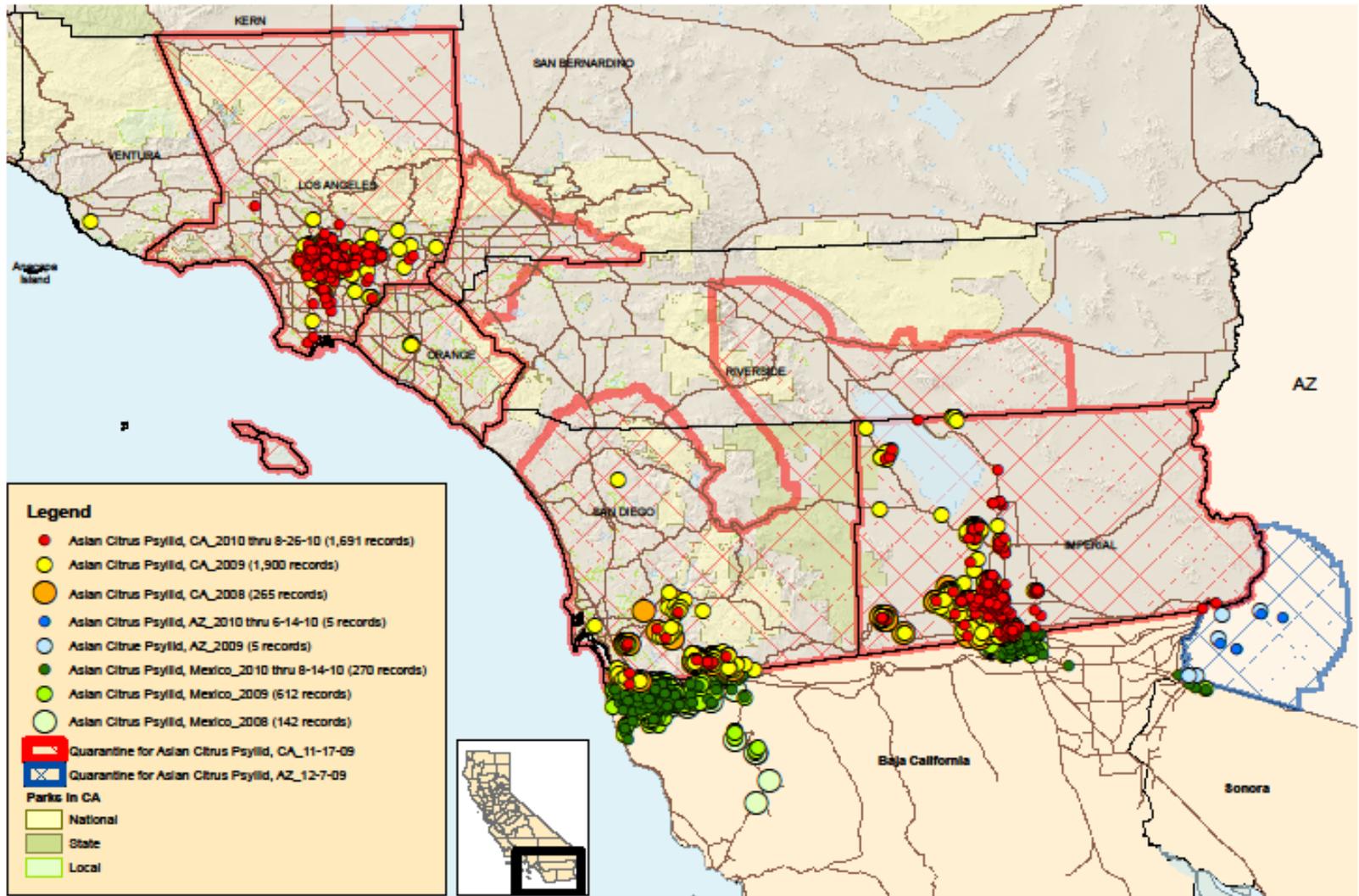
The U.S. Department of Agriculture's Animal and Plant Health Inspection Service collected the data displayed for internal agency purposes only. These data may be used by others; however, they must be used for their original intended purpose.

QUARANTINE

- Either a 20 mile radius or the entire county. In the eastern U.S., entire counties are regulated. However, some of California's counties are much larger than those back east, so USDA also agreed to recognize a 20 mile radius combined with a countywide trapping system, in lieu of quarantining the entire county, which is more biologically sound than using political boundaries. This worked for a while in San Diego County to keep most commercial production out of quarantine, but an unintended consequence is that portions of two counties (Riverside and San Bernardino) have been quarantined because of finds in neighboring counties, even though no psyllids have been found in either of the two counties.



Asian Citrus Psyllid Cooperative Project California, Arizona, and Baja California



Legend

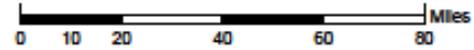
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TREATMENT HISTORY

- On September 17, 2008, treatment of host plants began on find properties with PyGanic 5.0 (pyrethrins) as a weekly foliar spray and Merit 2F (imidacloprid) as a one-time soil application.
- On November 17, 2008, treatment of host plants began in a 400 m radius around find properties with Tempo SC Ultra (cyfluthrin) as a one-time foliar application and Merit 2F or CoreTect (imidacloprid) as a one-time soil application.
- In November 2009, treatments were reduced to find properties and adjacents due to lack of resources, except at outlying detections, which continued to be treated in a 400 m radius.
- In June 2010, treatments in Imperial County increased back to a 400 m radius using CPDPC funds.
- In July 2010, treatments in San Diego County increased back to a 400 m radius using CDFA funds.
- In July 2010, treatments in part of Los Angeles County (East L.A.) increased back to a 400 m radius temporarily using one-time CDFA funds. Treatment now returning back to find properties and adjacents due to exhaustion of funds.



LOS ANGELES COUNTY SITUATION STATISTICS

- Detection density is 10 traps per sq. mile which are relocated every 6 weeks.
- Traps at find properties remain in place.
- One delimitation in San Fernando Valley of 25 traps in the core and 25 per sq. mile going west to Ventura County line (about 9 miles).
- Approximately 700 sq. mile block potentially infested. Housing density in Los Angeles is 2850 per sq. mile and about 50% of properties have citrus; therefore about 1 million properties are potentially infested.
- Initial one time treatments consisted of 400 meter radius with cyfluthrin and imidacloprid.
- Decreased to find property and adjacents in November 2009 due to limited resources (except around find property in San Fernando Valley).
- Increased to 400 meter radius in July 2010 in East L.A. only.
- Entire county under quarantine.



LOS ANGELES COUNTY SITUATION STATISTICS

Totals

Find Dates	# of Cities / Communities	# of Find Properties	# of Treated Properties
8/24/09 – 8/30/10	40	1357	21,644

- 270 find properties between 8/24 – 9/30/2009.
- 164 of 269 find properties (61%, finds) which were treated in a 400 meter radius have not had a detection in 2010. One find property was never treated due to homeowner refusal – ACP trapped on 7 occasions in 2010.



ORANGE COUNTY SITUATION STATISTICS

- Detection density is 10 traps per sq. mile piggybacked onto fruit fly trapping sites, which are relocated every 6 weeks.
- Traps at find properties remain in place.
- Delimitation of 100 traps in the core and 50 in the surrounding 8 sq. miles around all detections (1.5 mile radius).
- Approximately 1/4 sq. mile infested.
- Treatment was 400 meter radius with cyfluthrin and imidacloprid.
- Retreatment of find properties only with cyfluthrin after 6 weeks due to new finds in late October and early November.
- No finds in 2010.
- Entire county under quarantine.

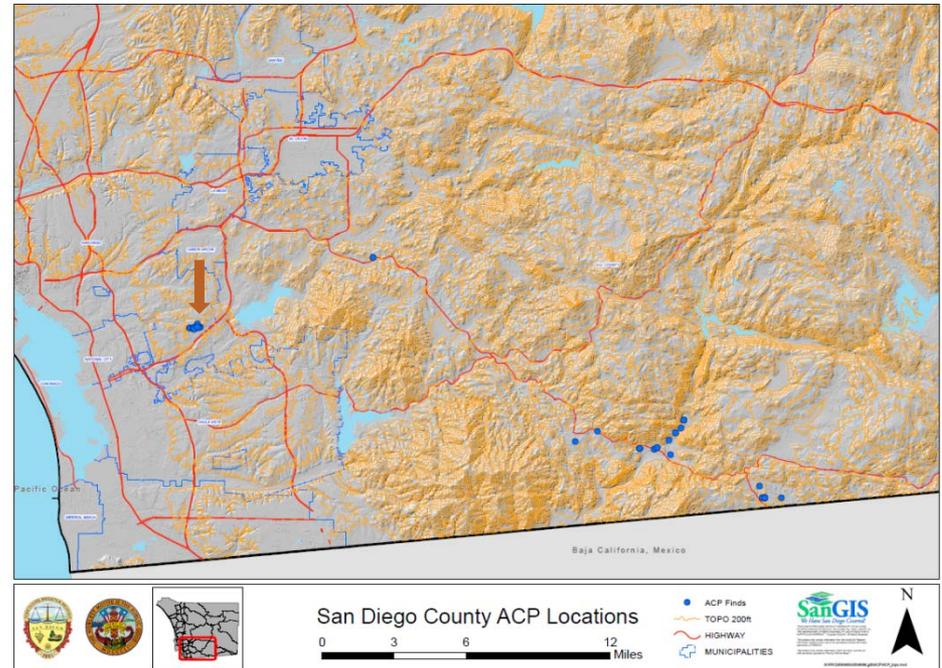
Totals

Find Dates	# of Cities / Communities	# of Find Properties	# of Treated Properties
8/18/09 – 11/2/09	1	7	534

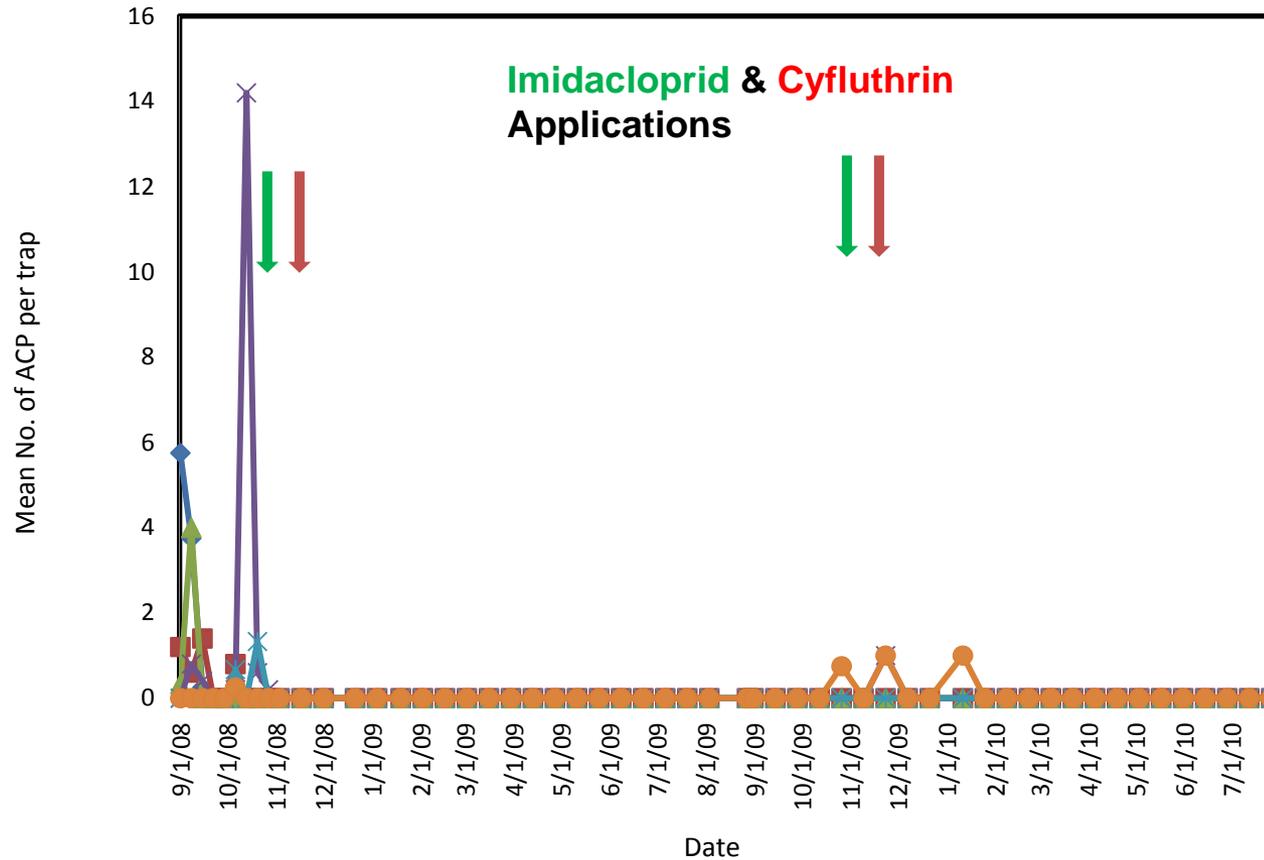


SOUTH BAY TERRACE – SAN DIEGO

- South Bay Terrace, the neighborhood where the first Asian citrus psyllids were found is a typical urban neighborhood.
- It is about 10 -12 miles from the international border.
- Most of the properties have 1-4 ACP host plants.
- 30 find sites (8/27/08 – 3/23/10), 3 sites in 2010.

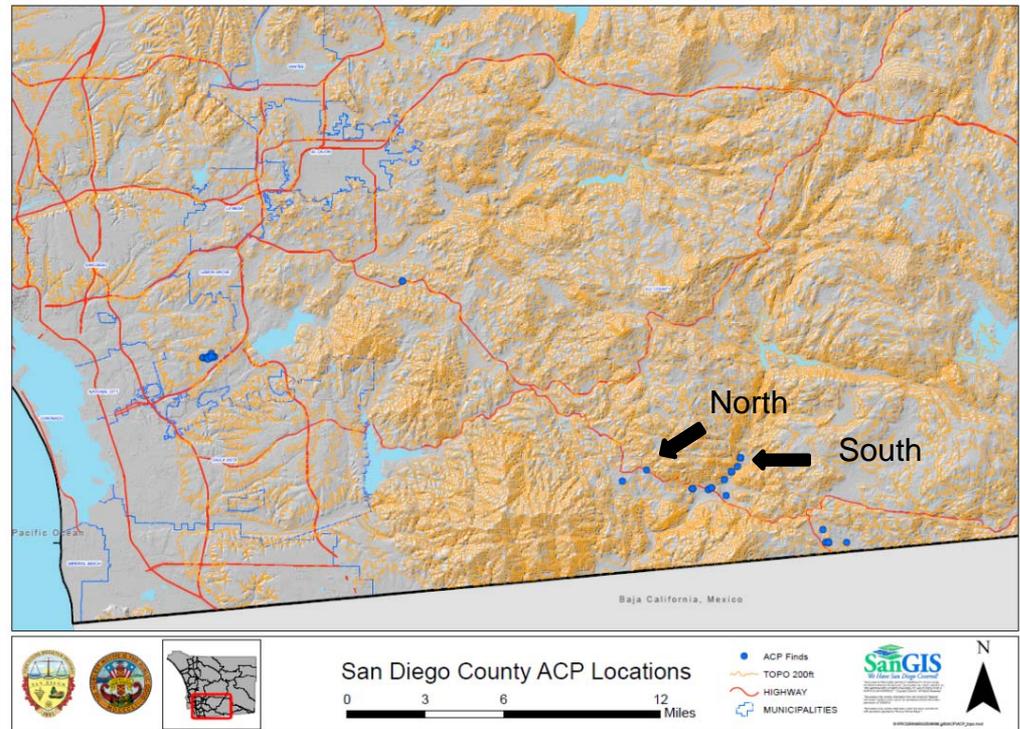


TRAP CATCHES – SOUTH BAY TERRACE

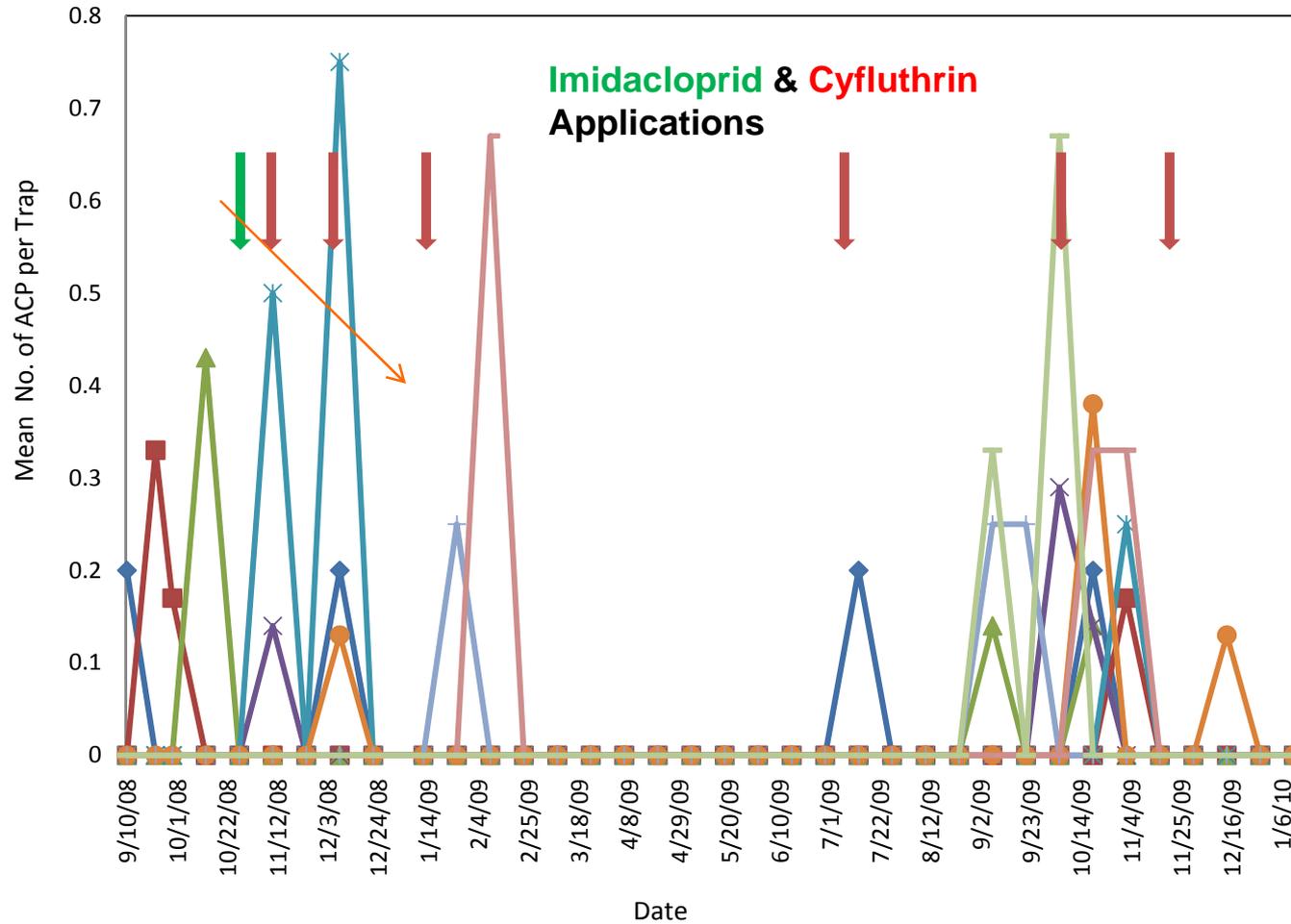


DULZURA

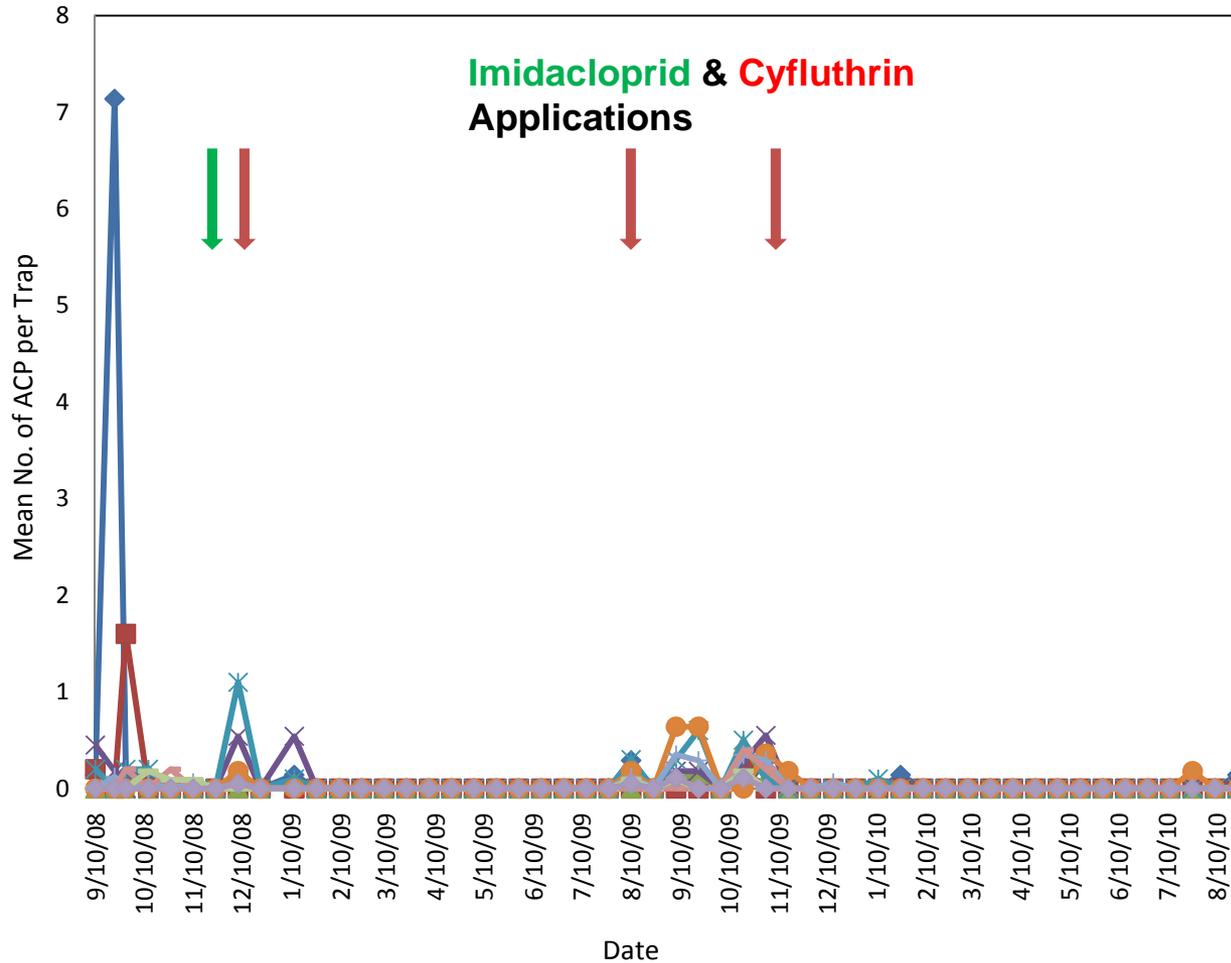
- Dulzura is a small community located about 5-8 miles north of the international border. A line of hills separates the city. Hwy 94 runs from border through town.
- Most of the properties are small acreages, and average about 10 ACP hosts per property, although some properties have more than 20 ACP host plants.
- 48 find sites (9/10/08 – 8/31/10), 6 sites in 2010.



TRAP CATCHES DULZURA - NORTH

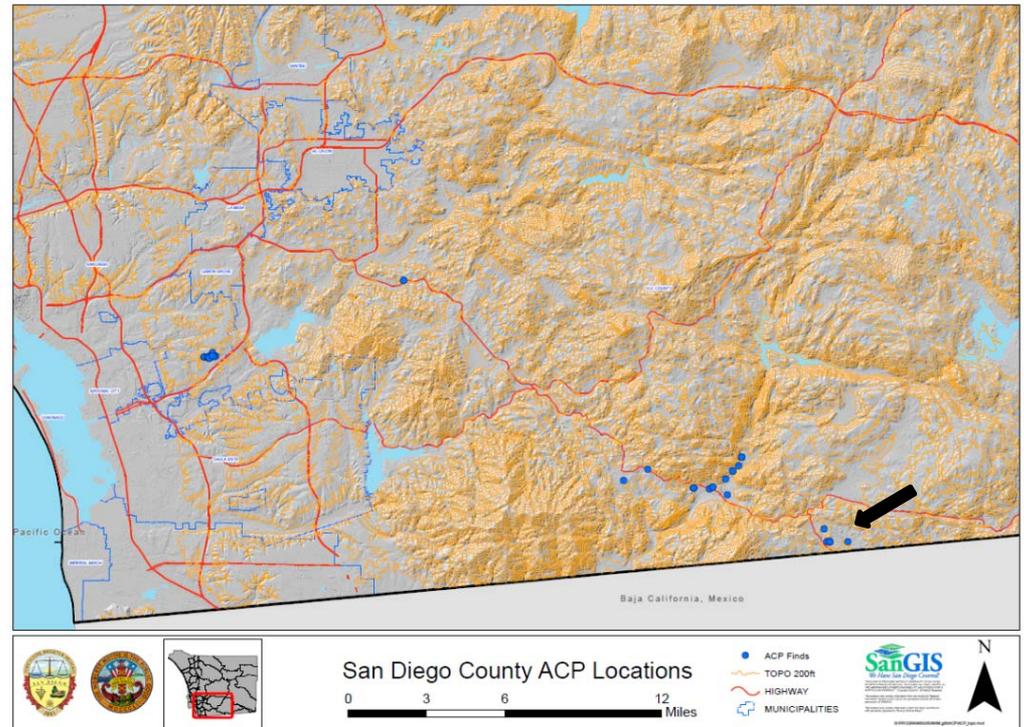


TRAP CATCHES DULZURA - SOUTH

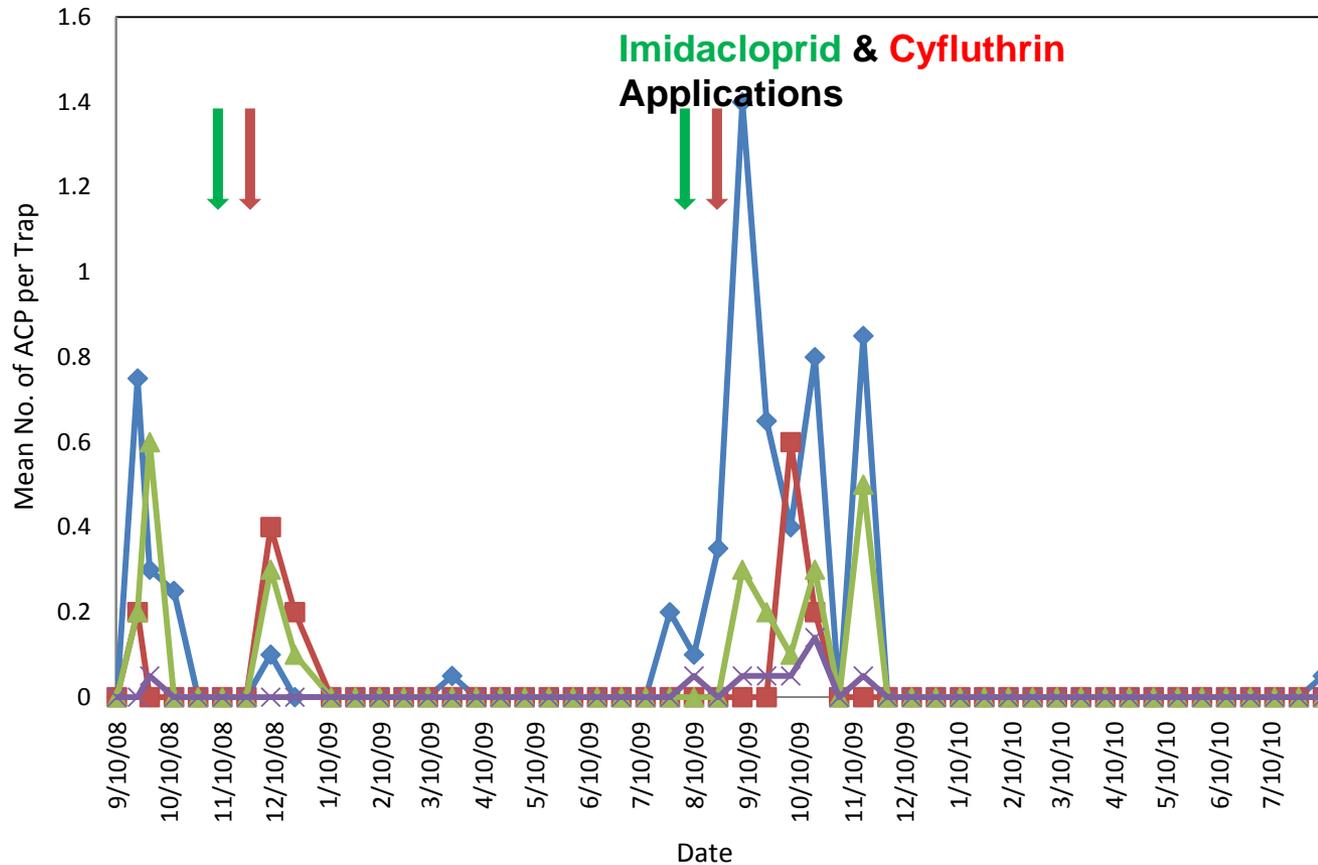


TECATE, CALIFORNIA

- Tecate is a small community on the international border.
- The properties are small acreages and the number of ACP hosts per property varies from 1 to 21 host plants.
- 5 find sites (9/12/08 – 8/30/10), 1 site in 2010.



TRAP CATCHES TECATE



SUMMARY

- The currently used treatment is approved for intra-quarantine movement of nursery stock for three months.
- In the environment, the coverage of the foliar treatment and the uptake of the soil treatment are expected to be more variable, but treatment generally seems to keep psyllid populations below detectable levels for as long as several months, and in some cases longer.
- The geographical closeness of many repeat properties in Imperial and San Diego counties to infested areas in northern Mexico argues for at least some of these repeats to be the result of migrations over the border.
- Similarly, in Los Angeles County, only parts of this area have been treated and therefore movement of psyllids from untreated areas back into treated areas is likely occurring.



SUMMARY, PART 2

- None of the treated areas have reached the recommended time period to declare eradication of the population. In April and May, 2009, both the California HLB Task Force Science and Technology Advisory Committee and the National ACP Technical Working Group recommended a period of 24 months (2 years) before an infestation can be declared eradicated. Because the 400 meter areawide treatments did not start until November 17, 2008, there are currently no areas that qualify under this recommendation. Probably the closest area to eradication consists of two isolated trailer parks in northern Imperial County that have now gone 18 months without additional finds.
- Suppression reduces the frequency of spread. The lower the population, the fewer psyllids are available to disperse, so the probability of a new colony being started outside the infested area is lessened.



THE END QUESTIONS?

