

ASIAN CITRUS PSYLLID AND HUANGLONGBING DISEASE KIM WILSON, UC MASTER GARDENER

Asian Citrus psyllid (ACP) and the devastating citrus disease Huanglongbing (HLB) are serious concerns for all California residents who enjoy citrus whether from their yards or the market. Understanding this threat and participating in the eradication of the pest from our county is crucial for the maintenance of both backyard and commercial citrus.

Asian Citrus Psyllid (ACP)- the Pest

- ACP is a tiny winged insect that can vector the deadly citrus tree disease Huanglongbing (HLB).
- Not all ACP carry the disease. They have to feed on an infected tree to acquire the bacteria. Once the insect gets this infection, it will transmit to all trees it feeds on for the rest of its life.
- ACP is present in SLO County in both residential and commercial trees, but it is not established.

Huanglongbing (HLB)-The Disease

- HLB is transmitted by feeding of an infected ACP or grafting of infected scion wood. It is one of the most devastating diseases of citrus as there is no cure.
- Citrus trees show symptoms 2-3 years after infection, thereby serving as a reservoir for HLB.
- ACP can feed on an asymptomatic infected tree and transmit the disease for the remainder of its life when feeding on other citrus trees.
- Infected trees will die in 5-10 years.

Current Status

- ACP has been found in 27 counties in California total and is considered established in Ventura, Orange, Los Angeles, Riverside and San Bernardino counties.
- HLB has been found in residential trees (269 trees in 2017 and 699 in 2018) in L.A, Orange and Riverside and San Bernardino Counties. All these trees have been removed.
- In 2018, HLB was found in 699 CA residential citrus trees, most in L.A. and Orange Counties, confirming the serious threat HLB poses to California citrus both commercial and residential.
- HLB has not been found in any commercial citrus groves in California.
- Currently, ACP is not widespread or established in San Luis Obispo County and HLB has not been found.
- In 2018, CDFA released 11,500 tiny parasitic wasps that help control ACP. This year the parasitic wasps have been released in southern SLO county.
- See chart for findings in SLO County. So far in 2019 only 1 adult ACP has been found in the County.

YEAR	ADULTS	NYMPHS
2014	65	42
2015	78	51
2016	200	0
2017	1	0
2018	105	39

Monitoring

Department of Food and Agriculture (CDFA) in conjunction with county agriculture offices has an intensive monitoring program to track the pest and disease which involves placement of yellow sticky traps in residential and commercial citrus trees. Results guide quarantine zones and residential chemical and biological control measures.

Course of Action When ACP Found in a Residential Trap in SLO County

- Counties, such as SLO, where the pest (ACP) is not established and eradication is the goal, chemical treatments of the pest are necessary. No physical, cultural or biological control methods have so far been found that will achieve eradication of ACP.
- Treatment programs are tailored depending on the number of insects found. Chemical treatment involves the target tree and neighboring properties ranging from 50 to 800 meters.
- Chemical treatment consists of a foliar pyrethroid contact insecticide (cyfluthrin), most effective on adult ACP, and a systemic soil treatment of imidacloprid which attacks the nymphs.
- Foliar treatments are not applied when citrus is in bloom, to protect the flowers and pollinating insects. Only citrus tree foliage is sprayed. Tarps are used to protect surrounding vegetation. There is no preharvest interval for the spray.
- Imidacloprid has been shown to move systemically to leaves but not to fruit or flowers.
- The treatment program is optional, but it is strongly recommended to help prevent the establishment of the pest and, therefore, the devastating HLB disease into this county.

How Can We Help Save Our Citrus?

- Call (805) 781-5910 and volunteer to have a trap placed in your citrus trees. More traps mean we have a better chance to detect and eradicate the pest.
- DO NOT MOVE CITRUS within or out of SLO County. Do not remove or share citrus trees, clippings, grafts or scion wood in quarantine areas.
- If you have a potted citrus you want to move within SLO County, call the SLO Ag office and they will send an inspector to evaluate if it is safe to move (805) 781-5910.
- BUY LOCAL: buy citrus trees from reputable sources selling trees inspected by County Agriculture Inspectors.
- Use only registered bud wood with source documentation when grafting citrus trees. Clean citrus stock information is available online from the **Citrus Clonal Protection Program**.
- Check your citrus trees monthly. Examine new feather flush growth with a hand lens for ACP.
- If you suspect ACP is present or have questions concerning ACP or HLB, contact **CDFA pest hotline at 1-800-491-1899** for verification and advice. Do not take suspicious samples to a nursery, Master Gardener Helpline or County Agriculture office.
- Control ants on citrus trees with Tanglefoot. Ants protect insects like ACP from beneficial insects.

Asian Citrus Psyllid/Huanglongbing. Notice of Treatment. CDFA https://www.cdfa.ca.gov/plant/acp/treatment_maps.html

Asian Citrus Psyllid Update, SLO County Farm Bureau. <u>http://www.slofarmbureau.org/news/article/asian-</u> <u>citrus-psyllid-update</u>

Asian Citrus Psyllid and Huanglongbing Disease Management Guidelines--UC IPM. http://ipm.ucanr.edu/PMG/PESTNOTES/pn74155.html

California Citrus Threat. *Protect Your Citrus - California Citrus Threat*. <u>https://californiacitrusthreat.org/protect-your-citrus</u>

Grafton-Cardwell, Elizabeth and Matthew Daugherty. *Asian Citrus Psyllid and Huanglongbing Disease*. Pest Notes, Publication 74155. UCIPM. <u>http://ipm.ucanr.edu/PDF/PESTNOTES/pnasiancitruspsyllid.pdf</u>

Lowerison, Karen. Deputy Agricultural Commissioner SLO County. Interview. August 12, 2019.

Residential ACP Management. UCANR. <u>http://ucanr.edu/sites/ACP/Homeowner_Options/Homeowner_Management/</u>

UC MASTER GARDENERS 2156 SIERRA WAY, SUITE C SAN LUIS OBISPO, CA 93401 email: anrmgslo@ucanr.edu

GARDENING QUESTIONS? ASK THE MASTER GARDENERS - HELPLINE: 805-781-5939



Website: Master Gardeners San Luis Obispo

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