



A Tale of Two Troubles: The Asian Citrus Psyllid and Huanglongbing Disease

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Meet ACP and HLB. The Asian citrus psyllid (ACP, *Diaphorina citri*) is a tiny, mottled brown insect the size of an aphid. It feeds on citrus, including oranges, grapefruit, lemons, mandarins, and related ornamentals such as box orange, Indian curry leaf, and orange jasmine.

It directly damages citrus by feeding on new leaf growth, called “flush.” The nymph sucks plant sap, and then excretes a sugary liquid (honeydew) onto leaves through a waxy tubule at its rear end. The tubule's shape -- a curly tube with a bulb at the end -- is unique to the ACP and can be used to identify the insect.

It gets worse. This psyllid is the carrier for a disease of citrus called huanglongbing (HLB), which is caused by bacteria called *Candidatus liberibacter* spp. Symptoms of infection, such as twig die-back, appear in about two years and the tree dies in five.

HLB disease spreads when infected psyllids feed on citrus trees and when infected branches are grafted onto healthy trees.

So what? Currently California produces 15 percent to 40 percent of the citrus grown in the US. The largest producer, however, is Florida, with almost 75 percent of the US market.

In 1998, ACP was discovered on backyard citrus trees in Palm Beach, Florida. By 2001 it had spread to 31 counties in Florida, mainly by psyllid-infested nursery plants. Since then it has spread to the Texas, Louisiana, Alabama, Georgia, Mississippi, South Carolina, Arizona, Hawaii, and Mexico. And California.

November 30, 2016

By 2005 it was found that HLB disease had spread to nearly all commercial citrus orchards in Florida. Officials believe the disease was already present in backyard citrus trees and the psyllid, when it arrived, spread it to the commercial groves.

In California the ACP is found throughout Southern California and is spreading through the Central Valley and Central Coast. It has been found as far north as the Bay Area and Sacramento.

As for HLB disease, it was detected in 2012 in a backyard orange tree in Hacienda Heights, near Los Angeles. More than a dozen infected trees were removed from there and the surrounding area is under quarantine for movement of citrus trees and grafting.

In El Dorado County, citrus is not grown commercially because of our winter freezes. However, our talented gardeners do cultivate citrus in home orchards.

There is no cure for HLB. Our best hope is controlling psyllid populations and eliminating infected trees. Home gardeners are key to this effort. Here is what we need to do:

- Monthly inspections. Slowly walk around each citrus tree and inspect new “flush” growth. Look for twisted leaves, waxy tubules, honeydew, and sooty mold.
- Avoid moving citrus plants to new sites.
- Cooperate with agricultural program staff in their control efforts.
- Only plant citrus trees from reputable nurseries. Only graft with registered budwood and source documentation.
- Control ants on the citrus trees. They “farm” ACP and interfere with beneficial insects.
- If you spot ACP or HLB, please contact the CDFA Exotic Pest Hotline (1-800-491-1899) or County Farm Advisor (lrwunderlich@ucanr.edu, 530-621-5505). The staff can help you confirm your ID and advise about next steps.

For more information about ACP and HLB disease, download UC ANR Publication 74155 from <http://ipm.ucanr.edu/PMG/PESTNOTES/pnasiancitruspsyllid.pdf>.

Join Master Gardener Dave Hale for this Saturday’s free Master Gardener class, Growing Grapes in the Sierra Foothills. Come see how you can grow grapes in our county; now is the time to prepare for a successful spring planting. We’ll discuss variety selection along with how to propagate, plant, cultivate and prune grapes. Class is from 9:00 a.m. to noon at the Government Center Hearing Room, Building C, 2850 Fairlane Court in Placerville.

Master Gardeners of El Dorado County are available to answer home gardening questions Tuesday through Friday, 9:00 a.m. to noon, by calling [\(530\) 621-5512](tel:5306215512). Walk-ins are welcome at our office, located at 311 Fair Lane in Placerville. For more information about our public education classes and activities, go to our UCCE Master Gardeners of El Dorado County website at <http://mgeldorado.ucanr.edu>. Sign up to receive our online notices and e-newsletter at [http://ucanr.edu/mastergardener e-news](http://ucanr.edu/mastergardener-e-news). You can also find us on Facebook.