

Asian Citrus Psyllid and Huanglongbing (HLB) Disease

*Ask Laura, Steve Tjosvold
July 2013*

Question:

What is the latest news on the Asian citrus psyllid?

Answer:

The aphid-sized Asian citrus psyllid (ACP) was first identified in California in 2008 and is currently found in Imperial, San Diego, Los Angeles, Orange, Riverside, and San Bernardino counties. Asian citrus psyllid injects a toxin when it feeds on citrus leaves or stems, causing shoot deformation and plant stunting. Of greater concern is the fact that it vectors the bacterium associated with huanglongbing (HLB) disease. Every tree infected with the pathogen will suffer a premature death, sometimes in as little as 3 years. In March 2012 officials confirmed the State's first detection of HLB. The multigrafted citrus tree in a Los Angeles County backyard was destroyed, but it is likely there are more infected trees nearby or in other areas. The disease is also spreading northward in Mexico toward California.

Question:

What is being done about this?

Answer:

Officials with the U.S. Department of Agriculture and California Department of Food and Agriculture (CDFA) to wage an all-out battle. They aim to contain psyllid populations, catch the infection early in order to rapidly remove infected trees.

UC is actively mapping, monitoring and working on management strategies to keep the Southern California populations in check. Entomologists at UC Riverside are evaluating the efficacy of systemic pesticides to protect citrus trees in nurseries. Other researchers are evaluating organic pesticides. Mark Hoddle, a UCCE entomologist at UC Riverside, collected two natural enemies of Asian citrus psyllid in Pakistan. The first is a tiny wasp, *Tamarixia radiata*, which lays eggs underneath late-stage nymphs. The hatching larvae eat the nymphs, killing them. The other, *Diaphorencyrtus aligarhensis*, is a small wasp that lays eggs in younger psyllid nymphs. *Tamarixia* is being released in urban areas of Southern California to help reduce Asian citrus psyllid populations.

Question:

What should be done locally?

Answer:

Let's be clear, the citrus psyllid and the associated HLB disease have not been found in Santa Cruz County or any nearby counties. However, the psyllid and/or bacteria could be transported here on imported host plants or plant parts used in propagation. The psyllid

feeds on all varieties of citrus (e.g. oranges, grapefruit, lemons, and mandarins) and a few very closely related ornamental plants in the family Rutaceae (e.g. calamondin, box orange, Indian curry leaf, and orange jessamine or orange jasmine). Buy only certified disease-free trees from a reputable nursery. Learn to recognize the pest and disease symptoms, and report your findings to County Agricultural Commissioner or CDFA officials.

Question:

Where can I get more information?

Answer:

See the UC Davis IPM website

<http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn74155.html> and CDFA website

<http://www.cdfa.ca.gov/plant/acp/>

This article was adapted partly from a California Agriculture article, "Asian citrus psyllid and huanglongbing disease threaten California citrus" Oct-Dec 2012 , available at:

<http://californiaagriculture.ucanr.edu>