Asian Citrus Psyllid and Huanglongbing Disease

Information for nurseries and garden centers.

The Asian citrus psyllid and the deadly bacterial disease it spreads, Huanglongbing (HLB), threaten citrus trees in backyards and on farms. The psyllid arrived in Southern California in 2008, and HLB disease was first detected in Los Angeles in 2012. All types of citrus are affected—including oranges, lemons, kumquats, and mandarins—as well as closely related ornamentals (orange jessamine, Indian curry leaf).

What are the concerns?

- The Asian citrus psyllid can damage leaves, but it doesn't kill trees by itself.
- The psyllid carries the HLB pathogen from tree to tree, which can kill trees in as little as five years.
 There is no cure.
- The psyllid and disease can spread rapidly, especially if infested plants or cuttings are moved.

Inspect citrus nursery stock for psyllids.

- Inspect plants at least monthly, when new shipments arrive, and at the cash register.
- Look for psyllid eggs, nymphs, and adults, especially on newly forming leaves.
- Adults are about the size of an aphid and have brownish mottled wings. They feed with their head down and their "tail" in the air.
- Nymphs are tiny and yellowish and excrete white waxy tubules.
- If you find the psyllid, contact your agriculture commissioner's office or call the California Department of Food & Agriculture Exotic Pest Hotline (800-491-1899) to confirm.

Manage the psyllid in your store.

- If possible, protect citrus from psyllids by housing in insect-proof structures.
- Ensure turnover of citrus stock. Plants are usually protected for up to three months by insecticides applied at the production source. Plants held for long periods are at increased risk of psyllid infestation. Encourage their sale or consider retreating these plants.
- Use appropriate watering practices. Excessive watering can limit pesticide effectiveness and contribute to runoff.
- Double bag citrus prunings before disposal to prevent psyllid spread.

- Don't "prune-out" psyllid infestations. This encourages more plant growth and attracts more psyllids. Instead, isolate those plants to limit movement onto other plants and treat with a psyllid-effective insecticide. Only return infested plants into retail areas after all psyllids are killed.
- Insecticides for psyllid control include oils, soaps, carbaryl, or the systemic imidacloprid. Oils and soaps need to be reapplied every few weeks. Carbaryl and imidacloprid are longer lasting, but because of toxicity to bees, should not be used when citrus is in bloom. Make sure foliar-applied insecticides reach the new growth where young psyllids hide.

Educate customers about the steps they should take.

- Tell them about the psyllid, HLB, and quarantines. Plants can't be moved out of infested areas due to the risk of spreading the insect and disease. A map can be found at: www.ucanr.edu/sites/ACP/.
- Let them know that once planted, trees should be inspected whenever new flush is present and any sightings of the insect or disease should be reported.
- Provide information about psyllid-effective insectides and tips for their application.

See Pest Notes: Asian Citrus Psyllid and Huanglongbing Disease at www.ipm.ucanr.edu for more details.





Brownish adult, yellow nymphs, and white wax of Asian citrus psyllids (left).

Tiny psyllid eggs and young nymphs on new developing leaves (right).

4. Lewis, UCR

Minimize the use of pesticides that pollute our waterways. Use nonchemical alternatives or less toxic pesticide products whenever possible. Read product labels carefully and follow instructions on proper use, storage, and disposal.

For more information about managing pests, contact your **University of California Cooperative Extension office** listed under the county government pages of your phone book or visit the UC IPM Web site at **www.ipm.ucanr.edu**.

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