

SUMMARY/BACKGROUND

- The Asian citrus psyllid (ACP), an aphid-like insect, is a serious pest of all citrus and closely-related plants because it can transmit the disease huanglongbing (HLB) when it feeds on the plants' leaves and stems.
- HLB is the most devastating disease of citrus in the world. Symptoms of HLB include yellow shoots, leaf mottle, small upright leaves and lopsided fruit with a bitter flavor. Infected trees decline in health, produce inedible fruit and eventually die. There is no cure for the disease and infected trees must be removed and destroyed to prevent further spread of HLB.
- The states of Mississippi and Alabama have detected the ACP but not the HLB disease. Florida, Georgia, Louisiana, South Carolina, and Texas have detected both the pest and the disease. HLB infected psyllids have already caused devastation in Asia, India, parts of the Middle East, and South and Central America. The psyllids have also been detected in Hawaii, and both the pest and disease have been detected in Mexico. ACP was first detected in California in 2008 and is in 7 southern counties, and HLB was detected in Los Angeles County in 2012.
- California has a \$1.8 billion citrus industry. Establishment of both ACP and HLB in California would cause economic losses via direct damage to citrus plants and quarantine restrictions designed to mitigate the spread of the two. Recent studies in Florida have shown that the presence of HLB increases citrus production costs by up to 40 percent and has resulted in a loss of over \$7 billion and 6600 jobs over the last five years.
- California's citrus industry ranks first in the U.S. in terms of value and second (after Florida) in terms of production. California's total citrus production has averaged 3.2 million tons per season over the past three seasons, about 24 percent of the nation's total. California is the nation's main source (80 percent) of fresh market oranges, while Florida grows oranges mainly for juice. California also supplies 87 percent of the nation's lemons (source: USDA Economic Research Service).

LIFE CYCLE

- Female ACPs lay their eggs on the tips of growing shoots on and between unfurling leaves.
- 300 to 800 eggs may be produced by each female during her lifetime.
- Nymphs pass through five instars. The total life cycle requires from 15 to 47 days, depending on environmental factors such as temperature and season.
- Adults may live for more than a month and there are typically 9 to 10 generations per year, with up to 16 under observation in field cages.

ERADICATION PROGRAM

- Yellow panel traps are placed throughout the state at densities of 5 to 16 per square mile, and these may be increased to up to 100 traps in the core and 50 traps per square mile in the surrounding eight square miles of an ACP find.
- Within 200 to 800 meters of an ACP find, citrus trees and host plants are treated with a foliar application of Tempo[®] (active ingredient cyfluthrin), which eliminates the ACP on contact.
- Within 200 to 800 meters of an ACP find, citrus trees and host plants will also receive a soil drench or soil injection with either Merit[®] or CoreTect[®] (active ingredient imidacloprid), a systemic treatment which kills developing nymphs and that will remain active to guard against psyllids for an extended period of time.

MORE INFORMATION IS AVAILABLE

CDFA - www.cdfa.ca.gov/phpps

CDFA Pest Hotline: 800-491-1899

USDA - www.saveourcitrus.org

Citrus Research Board - www.californiacitrusthreat.org

