Public Meeting Information

Asian Citrus Psyllid and Huanglongbing Response Program



Asian Citrus Psyllid (ACP)
Life Cycle

- Up to 10 generations per year
- 5 nymph stages
- Life cycle is 15 47 days
- Eggs can reach the adult stage in
 2 weeks

Life Stages



Eggs

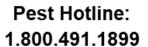
Adult

Picture Credits: UCANR



Nymphs with waxy tubules

Adult feeding with nymphs





Huanglongbing (HLB)



Lopsided fruit



Asymmetric leaf mottling



Blotchy mottling



Yellow, corked veins

- HLB is a bacterial disease of citrus and citrus relatives, caused by the bacteria Candidatus Liberibacter asiaticus.
- HLB can be spread by ACP feeding or grafting with infected budwood.
 ACP ingest the bacteria when feeding and can spread it to other trees.
- Symptoms include yellow shoots, asymmetric leaf mottle, thick or woody leaf veins, and lopsided, inedible fruit.
- There is no known cure for HLB. Once a tree is infected with HLB, it will die.
- If you suspect you have a citrus tree with HLB, please contact the California Department of Food and Agriculture at 1-800-491-1899.



Survey

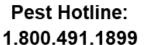
CDFA staff will survey the area for all host plants and look for ACP and HLB disease symptoms.







- CDFA surveyors will collect leaf samples and any ACP life stages from all host plants.
- Host plants include all citrus varieties and hybrids (kumquat, mandarin, grapefruit, orange, lemon, and lime) and closely related plants like curry leaf and ornamental orange-jasmine.
- All plant samples are shipped to the CDFA Plant Pest Diagnostics Center laboratory in Sacramento and ACP samples are shipped to the Citrus Research Board laboratory in Riverside for analysis.
- If a sample is confirmed positive for ACP or the HLB disease, the resident will be notified.





Treatment

- CDFA will be treating citrus trees to eradicate possibly infected ACP in the area.
- Treatment will be applied by a professional applicator or CDFA staff.









Active Ingredients

- The ACP treatment program uses products containing the active ingredients imidacloprid and beta-cyfluthrin.
- Imidacloprid is an insecticide that provides lasting protection to trees. It is available in a variety of home garden products and flea treatments for dogs and cats.
- Beta-cyfluthrin is an insecticide used for the control of ACP adults and nymphs. It is similar
 to a natural compound found in chrysanthemum flowers. Beta-cyfluthrin products are used
 in homes, restaurants, hospitals, food processing plants and gardens.



Tempo SC Ultra Beta-cyfluthrin product



Merit 2F Imidacloprid product

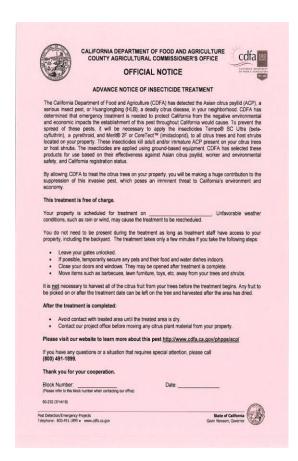


CoreTect Imidacloprid product

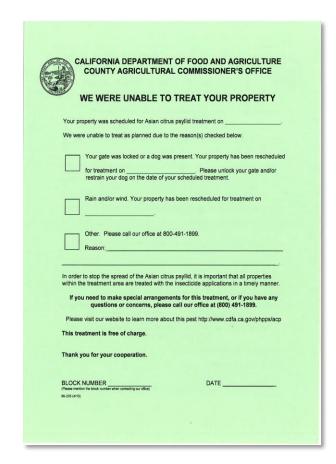




Notifications



48-hour Pre-treatment notification



Reschedule notification

| | CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE COUNTY AGRICULTURAL COMMISSIONER'S OFFICE |
|---|--|
| | NOTICE OF INSECTICIDE TREATMENT |
| The Californ | nia Department of Food and Agriculture (CDFA) has detected the Asian citrus psyllid (ACP), act pest, or Huanglongbing (HLB), a deadly citrus disease, in your neighborhood. |
| citrus trees which pose | at approximately with the insecticide(s) checked below. By allowing CDFA to perform emergency treatment on your properly, you have made a huge contribution to the suppression of this invasive pes a an imminent threat to California's emirrorment and economy. If you have any questions he Project Office at (800, 491-189). |
| | To learn more about the ACP and HLB, please visit the CDFA website: http://www.cdfa.ca.gov/phpps/acp/ |
| | Tempo® SC Ultra (beta-cyfluthrin) is a formulation of a pyrethroid contact insecticide for controlling Asian citrus psyllid adults and nymphs. This material will b applied a minimum of one time to the foliage of host plants on designated residentic properties. |
| | Merit® 2F (imidacloprid, a systemic insecticide) applied to the soil of all host plants a designated residential properties. The material is taken up into the plant via the roc system and provides approximately 12 months of protection against the pest, dependin on the soil conditions. |
| | CoreTect™ (imidacloprid, a systemic insecticide), tablets were applied below th soil surface of host plants at designated residential properties. The material is taken u into the plant via the root system and provides approximately 12 months of protectio against the pest, depending on the soil conditions. |
| CDFA has s environmen | elected the insecticide products above based on their effectiveness against ACP, worker an tal safety, and California registration status. |
| | Once the area has dried, you may use your property as you normally would. |
| • | To prevent the spread of this pest, please do not move plant material off your property without contacting our project office. |
| | For best results, please irrigate the plants that were treated within 24 hours of treatment. |
| | u are experiencing health problems after this application, call the California Poison Control ine at (800) 222-1222(voice), or consult with your physician. |
| Thank you | for your cooperation. |
| BLOCK NL (Please mention the 60-234 (3/14/18) | MBER_ DATE: |
| Pest Detection/Emer Telephone: 800.49 | rgency Projects State of California 1.1999 • www.cdfa.ca.gov Gawin Newsom, Covernor |

Post-treatment notification



Pest Hotline: 1.800.491.1899

CITRUS PEST & DISEASE PREVENTION DIVISION CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

Tree Removal

- There is no cure for HLB; once a tree is infected it will die.
- If an HLB positive tree is confirmed, the tree will be removed to prevent spread of the HLB disease to other citrus trees.







Quarantine

- ACP and HLB quarantines help prevent the spread of citrus pests.
- Avoid sharing fruit, if possible.
 - Homegrown fruit without stems and leaves maybe moved within the quarantine (25 pounds or less).
- Do not move potted citrus plants, budwood, cuttings, and other host plants from your property.
- Only graft using plant parts received from an approved source.
- Only nurseries with a CDFA approved structure may sell citrus plants with a red HLB quarantine tag.
- Contact CDFA for questions about moving citrus plants or fruit.





www.cdfa.ca.gov/citrus/pests_diseases /hlb/regulation



Biological Control

- Tamarixia radiata is an effective biocontrol agent and a natural enemy of ACP.
- This method alone is not enough to stop the spread of ACP.
- Strategic releases, along with treatment applications, help suppress ACP.
- Tamarixia are not a threat to humans or pets.



ACP Mummy



Tamarixia radiata



Tamarixia and ACP



Tamarixia laying eggs on an ACP nymph

Pest Hotline: 1.800.491.1899



Protecting Pollinators

- Protecting native bees and managed hives is essential to maintaining our food supply and the environment.
- CDFA staff actively look for foraging bees and take precautions to prevent pesticide drift.
- The program follows all pesticide labels and instructions for bee safety.
- CDFA will not treat if bees are present.





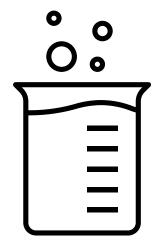


More info online at www.cdfa.ca.gov/plant/pollinators



Environmental Consultation and Monitoring

- Consultations are conducted with other State agencies prior to beginning any activity.
- Monitoring is conducted when activities move into new counties.
 - Air, soil, leaf and fruit samples are collected and tested for pesticide levels before and after applications.

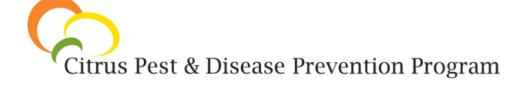








https://californiacitrusthreat.org







A Threat to California Citrus

A plant disease that kills citrus trees has been found in California. The disease, called Huanglongbing or citrus greening disease, isn't harmful to humans, but it is fatal for citrus trees and has no cure. The disease is spread by a pest called the Asian citrus psyllid as it feeds on citrus tree leaves. Until researchers find a solution, California homeowners who enjoy growing fresh citrus fruit in their yards, and



PEST & DISEASE PROTECT YOUR CITRUS CALIFORNIA CITRUS NEWS RESOURCES

Public Meetings

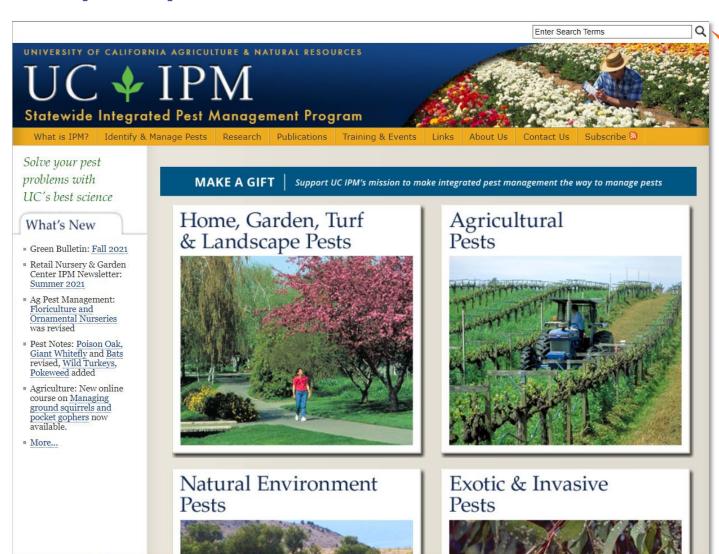
In addition to being available on <u>CDFA's website</u>, presentations for recent public meetings are av CaliforniaCitrusThreat.org. Presentations include information the pest and disease, upcoming ac agricultural officials in specific communities and regulations in place to limit the spread of the ps

Learn More





http://ipm.ucanr.edu/

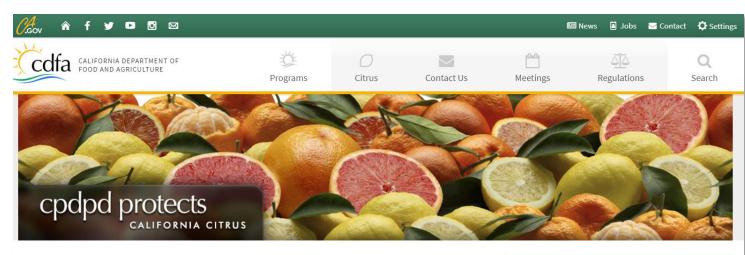




Pest Hotline: 1.800.491.1899



https://www.cdfa.ca.gov/citrus/



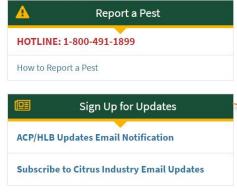
CDFA Home | Citrus Pest and Disease Prevention Division

Citrus Pest and Disease Prevention Division

1220 "N" Street, Sacramento, CA 95814 • 916-274-6300 • cdfa.cpdpd@cdfa.ca.gov

A Pest Hotline: 1-800-491-1899

The California Department of Food and Agriculture (CDFA) established the Citrus Pest and Disease Prevention Program (CPDPP) in 2009 to sustain and protect California citrus in accordance with the Food and Agriculture Code, section 5911-5940. In response to increasing pest and disease pressure, the Citrus Pest and Disease Prevention Committee recommended that CDFA seek dedicated resources to implement the CPDPP. Dedicated resources were secured in the 2019 Budget Act and the Citrus Pest and Disease Prevention Division (CPDPD) was established in July 2019. CPDPP activities previously carried out by the CDFA Plant Health and Pest Prevention Services Division have been transitioned



Hot Topics

- What to Expect when CDFA is Inspecting, Trapping and Treating
- ▶ Health Questions and Answers CoreTect®
- ▶ Health Questions and Answers Merit® 2F
- ▶ Health Questions and Answers Tempo® SC Ultra
- Analyses regarding the state of ACP and HLB in California



Pest Hotline: 1.800.491.1899



Thank you for attending!

- https://californiacitrusthreat.org
- http://ipm.ucanr.edu/
- https://www.cdfa.ca.gov/citrus/
- https://www.cdfa.ca.gov/plant/reportapest/

