Public Meeting Information

Asian Citrus Psyllid and Huanglongbing Response Program



Picture Credit: UCANR

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

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



Nymphs with waxy tubules



Adult



Adult feeding with nymphs

Pest Hotline:
1.800.491.1899

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

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.

Pest Hotline:
1.800.491.1899

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

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.

Pest Hotline:
1.800.491.1899

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

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

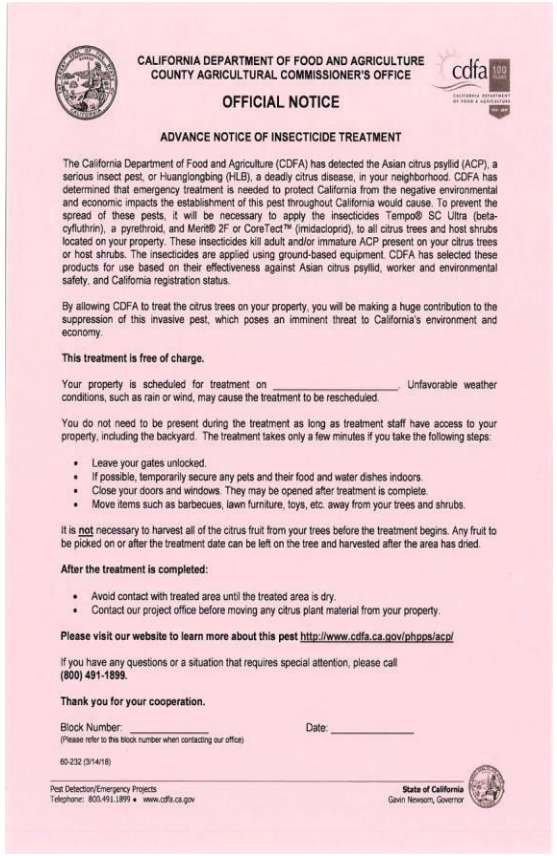


CoreTect
Imidacloprid product

Pest Hotline:
1.800.491.1899

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

Notifications



CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
COUNTY AGRICULTURAL COMMISSIONER'S OFFICE

OFFICIAL NOTICE

ADVANCE NOTICE OF INSECTICIDE TREATMENT

The California Department of Food and Agriculture (CDFA) has detected the Asian citrus psyllid (ACP), a serious insect pest, or Huanglongbing (HLB), a deadly citrus disease, in your neighborhood. CDFA has determined that emergency treatment is needed to protect California from the negative environmental and economic impacts the establishment of this pest throughout California would cause. To prevent the spread of these pests, it will be necessary to apply the insecticides Tempo® SC Ultra (beta-cyfluthrin), a pyrethroid, and Merit® 2F or CoreTect™ (imidacloprid), to all citrus trees and host shrubs located on your property. These insecticides kill adult and/or immature ACP present on your citrus trees or host shrubs. The insecticides are applied using ground-based equipment. CDFA has selected these products for use based on their effectiveness against Asian citrus psyllid, worker and environmental safety, and California registration status.

By allowing CDFA to treat the citrus trees on your property, you will be making a huge contribution to the suppression of this invasive pest, which poses an imminent threat to California's environment and economy.

This treatment is free of charge.

Your property is scheduled for treatment on _____. Unfavorable weather conditions, such as rain or wind, may cause the treatment to be rescheduled.

You do not need to be present during the treatment as long as treatment staff have access to your property, including the backyard. The treatment takes only a few minutes if you take the following steps:

- Leave your gates unlocked.
- If possible, temporarily secure any pets and their food and water dishes indoors.
- Close your doors and windows. They may be opened after treatment is complete.
- Move items such as barbecues, lawn furniture, toys, etc. away from your trees and shrubs.

It is not necessary to harvest all of the citrus fruit from your trees before the treatment begins. Any fruit to be picked on or after the treatment date can be left on the tree and harvested after the area has dried.

After the treatment is completed:

- Avoid contact with treated area until the treated area is dry.
- Contact our project office before moving any citrus plant material from your property.

Please visit our website to learn more about this pest http://www.cdfa.ca.gov/phpps/acp/

If you have any questions or a situation that requires special attention, please call **(800) 491-1899.**

Thank you for your cooperation.

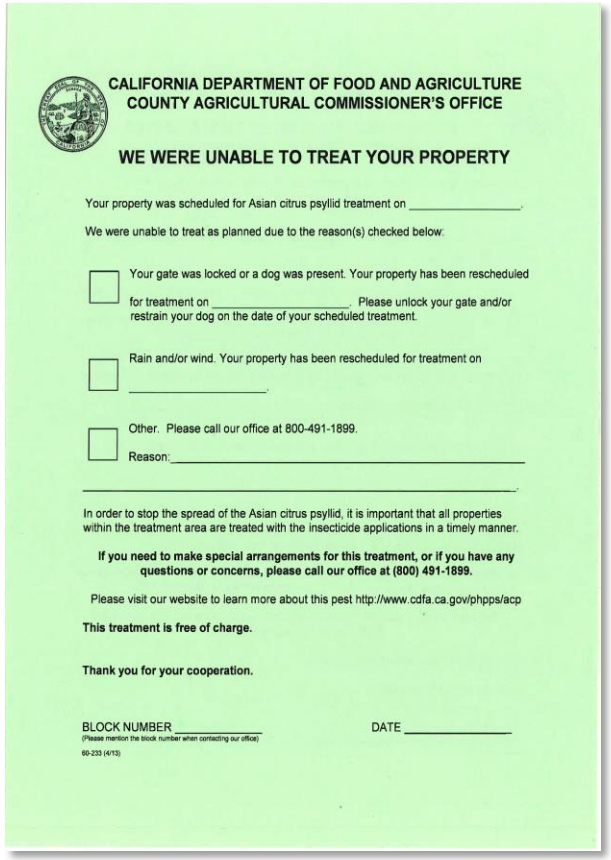
Block Number: _____ Date: _____
(Please refer to this block number when contacting our office)

60-232 (3/14/18)

Pest Detection/Emergency Projects
Telephone: 800.491.1899 • www.cdfa.ca.gov

State of California
Gavin Newsom, Governor

48-hour Pre-treatment notification



CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
COUNTY AGRICULTURAL COMMISSIONER'S OFFICE

WE WERE UNABLE TO TREAT YOUR PROPERTY

Your property was scheduled for Asian citrus psyllid treatment on _____.

We were unable to treat as planned due to the reason(s) checked below:

☐ Your gate was locked or a dog was present. Your property has been rescheduled for treatment on _____. Please unlock your gate and/or restrain your dog on the date of your scheduled treatment.

☐ Rain and/or wind. Your property has been rescheduled for treatment on _____.

☐ Other. Please call our office at 800-491-1899.
Reason: _____

In order to stop the spread of the Asian citrus psyllid, it is important that all properties within the treatment area are treated with the insecticide applications in a timely manner.

If you need to make special arrangements for this treatment, or if you have any questions or concerns, please call our office at (800) 491-1899.

Please visit our website to learn more about this pest http://www.cdfa.ca.gov/phpps/acp

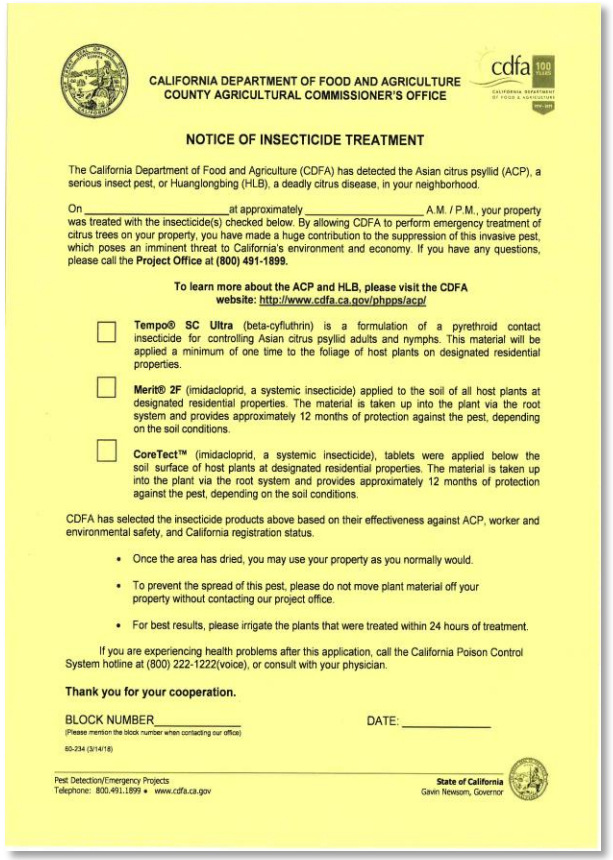
This treatment is free of charge.

Thank you for your cooperation.

BLOCK NUMBER _____ DATE _____
(Please mention the block number when contacting our office)

60-233 (4/13)

Reschedule notification



CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
COUNTY AGRICULTURAL COMMISSIONER'S OFFICE

NOTICE OF INSECTICIDE TREATMENT

The California Department of Food and Agriculture (CDFA) has detected the Asian citrus psyllid (ACP), a serious insect pest, or Huanglongbing (HLB), a deadly citrus disease, in your neighborhood.

On _____ at approximately _____ A.M. / P.M., your property was treated with the insecticide(s) checked below. By allowing CDFA to perform emergency treatment of citrus trees on your property, you have made a huge contribution to the suppression of this invasive pest, which poses an imminent threat to California's environment and economy. If you have any questions, please call the **Project Office** at **(800) 491-1899.**

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 be applied a minimum of one time to the foliage of host plants on designated residential properties.

☐ **Merit® 2F** (imidacloprid, a systemic insecticide) applied to the soil of all host plants at designated residential properties. The material is taken up into the plant via the root system and provides approximately 12 months of protection against the pest, depending on the soil conditions.

☐ **CoreTect™** (imidacloprid, a systemic insecticide), tablets were applied below the soil surface of host plants at designated residential properties. The material is taken up into the plant via the root system and provides approximately 12 months of protection against the pest, depending on the soil conditions.

CDFA has selected the insecticide products above based on their effectiveness against ACP, worker and environmental 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.

If you are experiencing health problems after this application, call the California Poison Control System hotline at (800) 222-1222(voice), or consult with your physician.

Thank you for your cooperation.

BLOCK NUMBER _____ DATE: _____
(Please mention the block number when contacting our office)

60-234 (3/14/18)

Pest Detection/Emergency Projects
Telephone: 800.491.1899 • www.cdfa.ca.gov

State of California
Gavin Newsom, Governor

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.

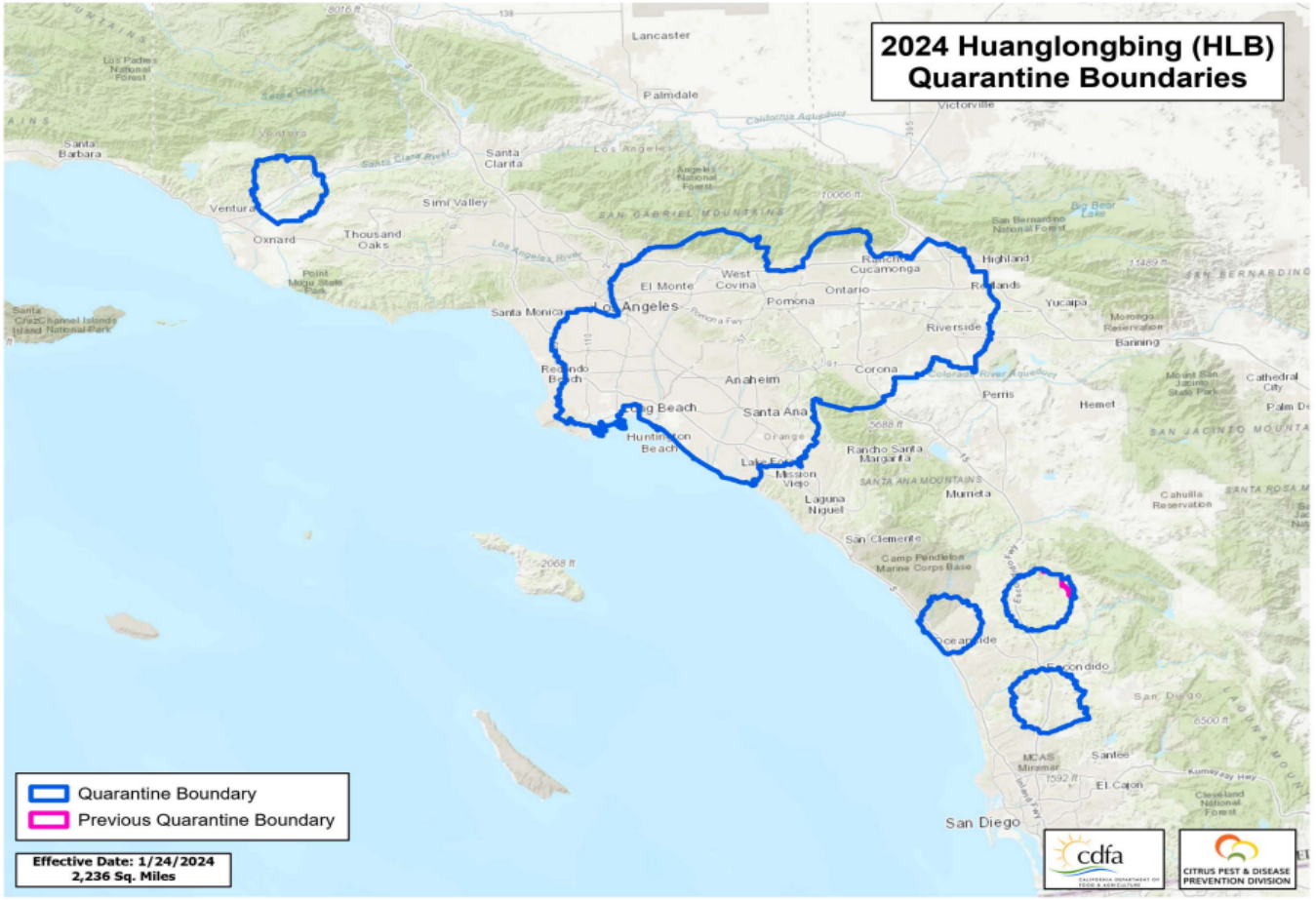




Quarantine

- 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.





For more quarantine information:
www.cdfa.ca.gov/citrus/pests_diseases/hlb/regulation

Pest Hotline:
1.800.491.1899

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

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

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

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

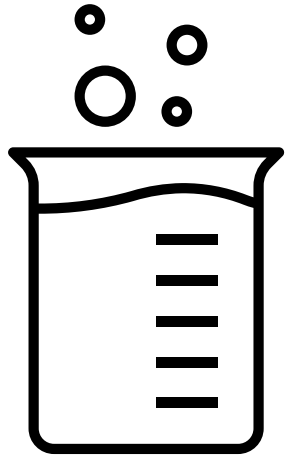
Pest Hotline:
1.800.491.1899

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

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

Citrus Pest & Disease Prevention Program

SEASE PROTECT YOUR CITRUS CALIFORNIA CITRUS NEWS RESOURCES CONTACT



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

Citrus Pest & Disease Prevention Program

PEST & DISEASE PROTECT YOUR CITRUS CALIFORNIA CITRUS NEWS RESOURCES

Public Meetings

In addition to being available on CDFA's website, 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

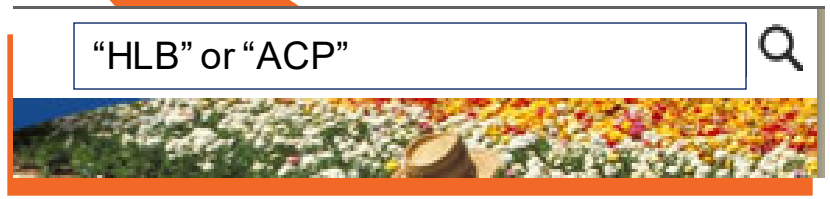
Learn More

Pest Hotline:
1.800.491.1899

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

http://ipm.ucanr.edu/





Pest Hotline:
1.800.491.1899

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

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



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

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

Thank you for attending!

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