# Public Meeting Information

Asian Citrus Psyllid 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

Nymphs with waxy tubules

Adult

Adult feeding with nymphs



## **Huanglongbing (HLB)**







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 only collect leaf samples if HLB symptoms are present.
- 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 samples are shipped to the CDFA Plant Pest Diagnostics Center laboratory in Sacramento 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



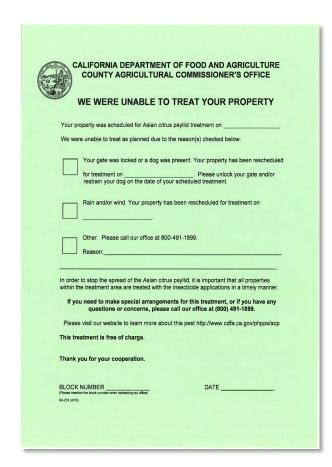
CoreTect Imidacloprid product



#### **Notifications**



48-hour notification



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 Huanglonghing (HLB), a deadly citrus disease, in your neighborhood.  On	
The California Department of Food and Agriculture (CDFA) has detected the Asian citrus psyllid (ACP), a serious insect pest, or Huanglonghing (HLB), a deadly citrus disease, in your neighborhood.  On	
serious insect pest, or Huanglongbing (HLB), a deadly citrus disease, in your neighborhood.  On	NOTICE OF INSECTICIDE TREATMENT
was treated with the insectiode(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) 443-1898.  To learn more about the ACP and HLB, please visit the CDFA website: <a href="http://www.cdfa.ca.gov/phpsa/acp/">http://www.cdfa.ca.gov/phpsa/acp/</a> Tempo® SC Ultra (beta-cyfluthrin) is a formulation of a pyrethroid contact insecticide for controlling Asian citrus psylind adults and mymphs. This material will be applied a minimum of one time to the foliage of host plants on designated residential properties.  Merit® 2F (midacloprid, a systemic insecticide) applied to the soil of all host plants at designated residential properties.  Merit® 2F (midacloprid, a systemic insecticide) applied to the soil of all host plants at designated residential properties.  CoreTect" (midacloprid, 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 with with 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  Press DetectoryEmegen	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.
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.    CoreTex™ (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 wia 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.    DATE:	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,
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.    DATE:	
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.** (Inidacloprid, 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 prinsis 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 (600) 2222-1222(voice), or consult with your physician.  Thank you for your cooperation.  BLOCK NUMBER  Please mentor be too nursee when collecting our office)  Post Detector/Emergency Projects  State of California  Pest Detector/Emergency Projects	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
soil surface of host plants at designated residential properties. The material is taken up into the plant with 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:	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
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  Phase reside the box support when contacting or office)  BLOCK NUMBER  Phase reside the box support when contacting or office)  BLOCK PLANTING THE STATE OF THE STAT	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
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  Please mentor be too survive when contexing our office)  DATE:  DATE:  DESCRIPTION OF THE PROPERTY	CDFA has selected the insecticide products above based on their effectiveness against ACP, worker and environmental safety, and California registration status.
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 Polson Control System hotline at (800) 222-1222(voice), or consult with your physician.  Thank you for your cooperation.  BLOCK NUMBER	Once the area has dried, you may use your property as you normally would.
If you are experiencing health problems after this application, call the California Poison Control System holline at (800) 222-1222(voice), or consult with your physician.  Thank you for your cooperation.  BLOCK NUMBER  Please mention the Boot number when contenting our office) 6-234 (SYVI) Press Detection/Emergency Projects  State of California	
System holline at (800) 222-1222(voice), or consult with your physician.  Thank you for your cooperation.  BLOCK NUMBER Please medium the state number when contacting our office) 6-234 (5)-410  Pest Detection/Emergency Projects  State of California	<ul> <li>For best results, please irrigate the plants that were treated within 24 hours of treatment.</li> </ul>
BLOCK NUMBER	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.
Please motion the Stock number when contacting our office) 60-2M (Sh4H8) Pect ColeCition/Emergency Projects State of Califfornia	Thank you for your cooperation.
	(Please mention the block number when contacting our office)

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 the spread of the HLB disease to other citrus trees.







#### Quarantine

- ACP and HLB quarantines help prevent the spread of citrus pests and protect California's citrus.
- Avoid sharing fruit, if possible.
  - Homegrown fruit without stems and leaves may be moved within the quarantine (under 25 pounds).
- 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.

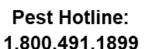


- Only buy citrus nursery stock from reputable sources within your ACP quarantine zone.
- Contact CDFA for questions about moving citrus plants or fruit.



#### For more quarantine information:

www.cdfa.ca.gov/citrus/pests\_diseases /acp/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



#### **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.





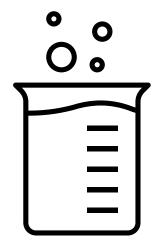


More info online at www.cdfa.ca.gov/plant/pollinators



## **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.

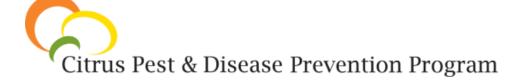








### https://californiacitrusthreat.org

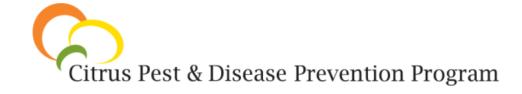


PROTECT YOUR CITRUS CALIFORNIA CITRUS NEWS RESOURCES



#### 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

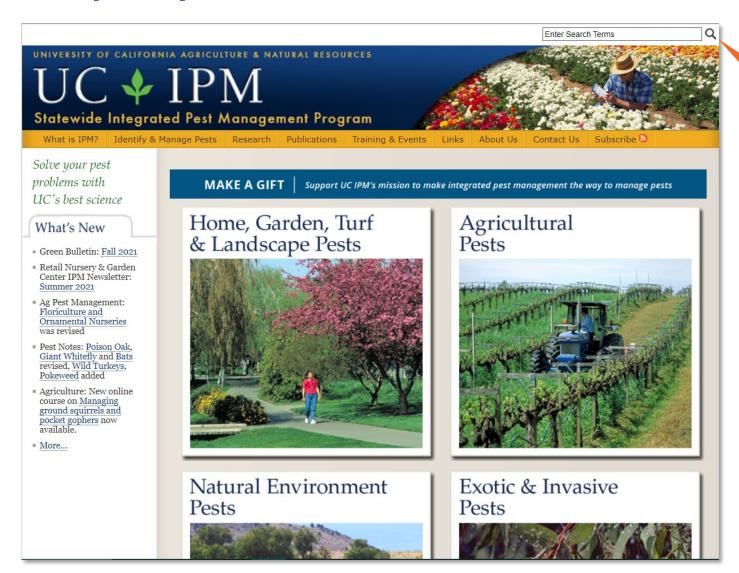
Learn More







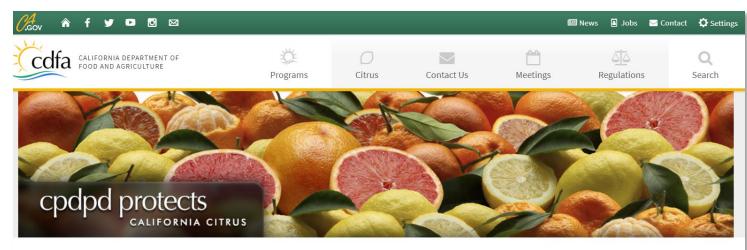
#### http://ipm.ucanr.edu/







### 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





California





## Thank you for attending!

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

