# What to Expect in Response to a Confirmed Asian Citrus Psyllid Detection

The Asian citrus psyllid (ACP), *Diaphorina citri*, is an aphid-sized insect (1/8<sup>th</sup> inch) that feeds on citrus. The insect causes little damage, but can carry a bacterium, *Candidatus* Liberibacter asiaticus, that causes the disease huanglongbing (HLB). Once infected, the plant will decline in health and die. HLB is one of the most serious citrus diseases in the world and there is no cure. HLB is not harmful to human or animal health.

As a resident in the community where an ACP detection is confirmed, you can expect to see the California Department of Agriculture (CDFA) and/or your local County Agricultural Commissioner's office (CAC) staff surveying ACP host plants (primarily citrus trees) in the area, placing, and servicing yellow panel traps, conducting insecticidal treatments and/or releasing biological control agents (sterile wasps) to control ACP populations.

Due to the serious nature of ACP and HLB, you can expect these activities to be ongoing for many years. Your cooperation with the program will help protect your citrus trees, your neighbor's trees, and those of your entire community.

CDFA's Citrus Pest and Disease Prevention Division has authority under the Food and Agriculture Code and California Code of Regulations to inspect, treat for, and eradicate invasive pests and diseases that cause harm to plants.

All activities associated with this project are offered free of charge to residents in the project area. CDFA staff or others associated with the program will never ask for money for any activities conducted.

CDFA in collaboration with local CAC staff perform several activities to detect, suppress or eradiate ACP populations in the state.

#### Activities that CDFA may conduct in your community, including on your property:

#### Survey

## **Detection Survey – Multi-Pest Survey (MPS)**

CDFA staff conduct MPS to determine the presence of ACP and other citrus pests and diseases in an area. This survey is risk-based and both insect and symptomatic plant samples may be collected. Staff will visually inspect citrus trees and other closely related hosts for ACP and symptoms of HLB.

- Upon arriving, staff will make contact with an adult resident to request permission to survey the front and/or backyard host plants.
- Surveyors may work alone or in pairs.
- The surveyor(s) will <u>never</u> ask to enter your home.
  - The surveyor(s) will be identified by a CDFA-issued identification badge and may wear shirts or hats with a patch or with the words "Department of Agriculture" or "State Agriculture."

- If the property owner is not home, the surveyor will leave an informational flyer and may return at a later time to initiate contact.
- If trees are in the front yard and unfenced, the surveyor will inspect trees that are accessible and leave a post-survey notice to explain what was done.

## **Delimitation survey**

When ACP has been confirmed, the following visual delimitation survey will be conducted. The survey is free of charge.

- All find sites and adjacent properties are visually surveyed for ACP and symptomatic plant material.
  - o ACP host plants include all citrus varieties and hybrids, including kumquat, mandarin, grapefruit, orange, lemon, and lime.
  - Closely related plants like curry leaf and ornamental orange-jasmine will also be surveyed.
- The surveyor(s) will collect any ACP they see and any symptomatic plant samples.
  - All ACP samples are placed in a vial, labeled and shipped to the CDFA Plant Pest Diagnostic Center in Sacramento, California for analysis.
  - All host plant samples are bagged, labeled and shipped to the CDFA Plant Pest Diagnostic Center in Sacramento, California for analysis.

Below are pictures showing examples of CDFA surveyors:





## **Trapping**

#### **Detection Trapping**

CDFA staff place yellow panel traps (YPT) on ACP suitable host plants in your community. YPTs are yellow colored cardboard with transparent adhesive/glue on both sides. The yellow color mimics the color of new growth on a tree and is attractive to ACP.

- CDFA will attempt to make contact with the property owner by knocking on the door or ringing the doorbell.
  - Trappers may work alone or in pairs.
  - o The trapper(s) will **never** ask to enter your home.
  - The trapper(s) will be identified by a CDFA-issued or CAC issued identification badge and may wear shirts or hats with a patch or with the words "Department of Agriculture," "State Agriculture" or "County Agriculture."
  - Trapper(s) will seek permission to place traps in trees on the property.
- CDFA and/or CAC staff will only communicate with and seek permission from an adult. Staff will explain the purpose of the traps, the service/relocation schedule and answer questions to the best of their knowledge. Staff may refer the resident to the CDFA Exotic Pest Hotline (1-800-491-1899) for more information. They will also leave an ACP/HLB flyer with the resident.
- After receiving permission, trappers will place a trap on a suitable host plant.
- If staff are unable to make contact, and the host plant is easily accessible (ex. in the front yard), they will place the trap and leave a "Trap Placement" notice in a conspicuous location on the property, preferably at the front door.
- Traps are replaced biweekly or monthly.

#### **Delimitation Trapping**

If an ACP was detected on a property, then delimitation trapping occurs. There will be a greater number of traps placed in the four-square miles surrounding the detection (usually 50 traps per square mile). Delimitation trapping follows all of the same steps as outlined above. Concurrently, CDFA will conduct a delimitation survey and treatment.

Below are pictures showing examples of CDFA trappers:





# **ACP Suppression Treatment**

In areas where ACP have been detected, CDFA may conduct residential treatments to suppress ACP populations. The treatment protocol consists of all ACP host plants within the delimitation boundary (between 50 and 400 meters) of a confirmed ACP detection. The treatment will consist of both a foliar and systemic insecticide application.

A public meeting (held virtually) may be conducted prior to initiating any treatment activities in the area.

- Residents will be notified about the public meeting via mailed or hand-delivered postcards generally one week prior to the meeting.
- Host plants on the find site and adjacent properties may be treated with homeowner permission prior to the public meeting.

**<u>Foliar treatment</u>** is conducted for the immediate reduction of the adult ACP populations and to prevent the adults from dispersing to the adjacent areas.

- CDFA staff and/or treatment contractor staff will conduct treatments. The foliage of host plants within the delimitation boundary will be treated with a pyrethroid contact insecticide, Tempo® SC Ultra (B-Cyfluthrin).
- This will occur using a hydraulic sprayer or a backpack hand sprayer.

**Soil treatment** is applied as a systemic application of Merit® 2F to kill the sedentary ACP nymphs and provide long-term protection against reinfestation.

 CoreTect™ pellets may be used in place of Merit® 2F in situations where there are environmental concerns about soil surface runoff, host plants growing next to ponds or in small pots, and/or other environmentally sensitive areas.

Below are examples of what you might see during treatment:



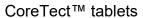


CDFA treatment truck

Tarping to protect nonhost plants and property

Foliar application







Soil application

An official notice of insecticide treatment will be provided to the resident or left at the property at least 48 hours in advance of the scheduled treatment date.

- On the day of treatment, staff will make contact with an adult resident to notify them that CDFA is ready to conduct treatment on the front and/or backyard host plants. There may be treatment contractor staff on site with CDFA.
  - Staff will identify suitable host plants for treatment and cover any non-host plants and/or household items, as needed.
- Following treatment, staff will remove tarps covering non-host plants and/or household items and close gates behind them. Completion notices are left with the homeowners detailing precautions to take and post-harvest information applicable to any fruit on the property.

Below are examples of notices (provided in both English and Spanish) you might receive as part of the treatment process:



Advance notice of treatment

Post-treatment notice

# **Biological Control**

*Tamarixia radiata*, is a tiny parasitoid wasp that lay eggs and/or feed on ACP nymphs. *T. radiata* only targets ACP and is its natural predator. CDFA staff release *T. radiata* parasitoid wasps throughout the year to aid in reducing ACP populations.

- CDFA staff release *T. radiata* in easily accessible ACP host plants near ACP detection sites.
- CDFA staff carry required documents with them such as release permits, release logs, and basic program information pamphlets.
- Staff will not knock on doors to ask for homeowner permission to conduct releases.

Below are pictures showing examples of *Tamarixia radiata* releases:



