



## CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

### OFFICIAL NOTICE FOR THE CITY OF ARVIN, KERN COUNTY PLEASE READ IMMEDIATELY

#### NOTICE OF TREATMENT REGARDING THE ASIAN CITRUS PSYLLID

On October 1, 2015, one Asian citrus psyllid (ACP), *Diaphorina citri* Kuwayama, a serious exotic pest, was identified from the city of Arvin, Kern County. This detection indicates that a breeding population exists in the area. The infestation is sufficiently isolated and localized to be susceptible to the California Department of Food and Agriculture's (CDFA) ACP treatment work plan, which includes treatment with foliar and soil-applied insecticides.

A Program Environmental Impact Report (PEIR) has been certified which analyzes the ACP treatment program in accordance with Public Resources Code, Sections 21000 et seq. The PEIR is available at <http://www.cdfa.ca.gov/plant/peir/>. The treatment activities described below will be consistent with the PEIR.

In accordance with integrated pest management principles, the CDFA has evaluated possible treatment methods and determined that there are no physical, cultural, or biological control methods available to eliminate the ACP from this area.

The treatment plan for the ACP infestation will be implemented within a 400- to 800-meter radius of each detection site, as follows:

- Tempo® SC Ultra (cyfluthrin), a contact insecticide for controlling the adults and nymphs of ACP, will be applied from the ground using hydraulic spray equipment to the foliage of host plants; and
- Merit® 2F or CoreTect™ (imidacloprid), a systemic insecticide for controlling the immature life stages of ACP, will be applied to the soil underneath host plants. Merit® 2F is applied from the ground using hydraulic spray equipment, whereas CoreTect™, if used in place of Merit® 2F, is applied by inserting the tablets into the ground and watering the soil beneath the host plants.

#### Public Notification:

Residents of affected properties may be invited to a public meeting where officials from CDFA, the Department of Pesticide Regulation, the Office of Environmental Health Hazard Assessment, and the county agricultural commissioner's office will be available to address residents' questions and concerns. Residents are notified in writing at least 48 hours in advance of any treatment in accordance with the Food and Agricultural Code, Section 5779 and 5401-5404. Following the treatment, completion notices are left with the residents detailing precautions to take and post-harvest intervals applicable to the citrus fruit on the property. Treatment information is posted at [http://cdfa.ca.gov/plant/acp/treatment\\_maps.html](http://cdfa.ca.gov/plant/acp/treatment_maps.html). Press releases, if issued, are prepared by the CDFA information officer and the county agricultural commissioner, in close coordination with the program leader responsible for treatment. Either the county agricultural commissioner or the public information officer serves as the primary contact to the media.

For any questions related to this program, please contact the CDFA toll-free telephone number at 800-491-1899 for assistance. This telephone number is also listed on all treatment notices.

Enclosed are the findings regarding the treatment plan and a map of the treatment area.

## FINDINGS REGARDING A TREATMENT PLAN FOR THE ASIAN CITRUS PSYLLID

On October 1, 2015, one Asian citrus psyllid (ACP), *Diaphorina citri* Kuwayama, was identified from the city of Arvin, Kern County. This detection indicates that a breeding population exists in the area.

ACP is an exotic insect that is originally from Asia. It has been introduced into Central and South America, the Caribbean, and Mexico. In the United States, ACP has been found in Alabama, Arizona, Florida, Georgia, Hawaii, Louisiana, Mississippi, South Carolina, Texas, and California (Fresno, Imperial, Kern, Los Angeles, Madera, Orange, Riverside, San Benito, San Bernardino, San Diego, San Joaquin, San Luis Obispo, Santa Barbara, Santa Clara, Tulare, and Ventura counties). ACP feeds on members of the plant family Rutaceae, primarily on *Citrus* and *Murraya* species, but is also known to attack several other genera. The psyllids cause injury to their host plants via the withdrawal of large amounts of sap as they feed and via the production of large amounts of honeydew, which coats the leaves of the tree and encourages the growth of sooty mold, which blocks sunlight from reaching the leaves. However, the most serious damage caused by ACP is due to its vectoring the phloem-inhabiting bacteria in the genus *Candidatus Liberibacter*, the causal agents of Huanglongbing (HLB). HLB is considered one of the most devastating diseases of citrus in the world, because it causes trees to produce inedible fruit and results in the eventual death of infected trees. Symptoms of HLB include yellow shoots with mottling and chlorosis of the leaves, misshapen fruit, fruit that does not fully color, and fruit that has a very bitter taste making it inedible for human consumption. HLB is in some southeastern U.S. states such as Florida and Texas, as well as in central Mexico.

This pest presents a major threat to citrus grown within the State. California is the top citrus-producing state in the U.S., with total production valued at over \$2.2 billion. Additionally, the establishment of ACP in currently uninfested areas of California would increase the need for pesticide use by commercial and residential citrus producers, as well as require enforcement of quarantine restrictions. 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 6,600 jobs over the last five years. HLB has only been found in Los Angeles County and the infected trees were destroyed, but the threat of reintroduction is ongoing and allowing the establishment of ACP in currently uninfested areas of California could pave the way for HLB to spread rapidly once it reappears in the state. HLB would have severe consequences to both the citrus industry and to the urban landscape via the decline and the death of citrus trees.

This decision to proceed with treatment is based upon a realistic evaluation that it may be possible to eliminate the ACP from this area and prevent its spread using currently available technology in a manner that is based on an action plan developed by the United States Department of Agriculture (USDA), the CDFA and other scientists on the ACP Science Advisory Panel. In making this decision, the CDFA has evaluated possible treatment methods. In accordance with integrated pest management principles, the following is the list of options that I have considered for the treatment of this ACP infestation: 1) physical controls; 2) cultural controls; 3) biological controls; and 4) chemical controls.

Based upon input from my professional staff, including memorandums from the Primary State Entomologist and Primary State Plant Pathologist, and the input of experts familiar with ACP, I have concluded that there are no physical, biological, or cultural control methods that are effective to treat the ACP that allow the CDFA to meet its statutory obligations. To treat ACP in this area, I am ordering ground applications of pesticides be made to all ACP hosts within a 400- to 800-meter radius around the detection sites. The option selected is a chemical control measure that involves the use of insecticides targeting both the adult and immature stages of ACP. This option was selected based upon biological effectiveness, minimal public intrusiveness, cost, and minimal impacts to the environment.

A Program Environmental Impact Report (PEIR) has been prepared which analyzes the ACP treatment program in accordance with Public Resources Code (PRC), Sections 21000 et seq. The PEIR was

certified in December 2014, and is available at <http://www.cdfa.ca.gov/plant/peir/>. The PEIR addresses the treatment of the ACP at the program level and provides guidance on future actions against the ACP. It identifies feasible alternatives and possible mitigation measures to be implemented for individual ACP treatment activities. The ACP program has incorporated the mitigation measures and integrated pest management techniques as described in the PEIR. In accordance with PRC Section 21105, this PEIR has been filed with the appropriate local planning agency of all affected cities and counties. No local conditions have been detected which would justify or necessitate preparation of a site specific plan.

### **Sensitive Areas**

The treatment area has been reviewed by consulting the California Department of Fish and Wildlife's California Natural Diversity Database for threatened or endangered species. The CDFA also consults with the United States Fish and Wildlife Service, the National Marine Fisheries Service and the California Department of Fish and Wildlife when rare and endangered species are located within the treatment area. Mitigation measures will be implemented as needed. The CDFA will not apply pesticides to bodies of water or undeveloped areas of native vegetation. All treatment will be applied to residential properties, common areas within residential development, non-agricultural commercial properties, and right-of-ways.

### **Work Plan**

The proposed program area encompasses those portions of Kern County which fall within a nine-square-mile area around the property on which the ACP has been detected and any subsequent detection sites within the program boundaries. A map of the program boundaries is attached. The work plan consists of the following elements:

1. Delimitation. Yellow panel traps will be placed throughout the program area to delimit the infestation and to monitor post-treatment ACP populations. Yellow panel traps are placed at a density of up to 100 traps in the core square mile and 50 traps per square mile in the surrounding eight square miles. Additional traps may be added to further delimit the infestation and to determine the efficacy of treatments. These traps will be serviced on a regular schedule for a period equal to two years beyond the date of the last ACP detection.
2. Visual survey of host plants and tap sampling. All host plants will be inspected at all locations where traps are placed. Host plants at other properties may be surveyed within a 400- to 800-meter radius around each detection site.
3. Treatment. Properties within 400 to 800 meters of each detection site will be treated according to the following protocol. Treatments will be repeated, if necessary, as per label instructions.
  - a. Tempo® SC Ultra, containing the contact pyrethroid insecticide cyfluthrin, will be applied by ground-based hydraulic spray equipment to the foliage of host plants for controlling the adults and nymphs of ACP. Treatment may be re-applied up to six times annually if additional ACPs are detected
  - b. Either Merit® 2F or CoreTect™, containing the systemic insecticide imidacloprid, will be applied to the root zone beneath host plants for controlling developing nymphs and providing long term protection against reinfestation. Merit® 2F is applied as a soil drench, while CoreTect™ tablets are inserted two to five inches below the soil surface and watered in to initiate tablet dissolution. CoreTect™ is used in place of Merit® 2F in situations where there are environmental concerns about soil surface runoff of the liquid Merit® 2F formulation, such as host plants growing next to ponds and other environmentally sensitive areas. Treatment may be re-applied once annually if additional ACPs are detected.

### Public Information

Residents of affected properties may be invited to a public meeting where officials from the CDFA, the California Department of Pesticide Regulation, the Office of Environmental Health Hazard Assessment, and the county agricultural commissioner's office will be present to address residents' questions and concerns. Residents are notified in writing at least 48 hours in advance of any treatment in accordance with the Food and Agricultural Code (FAC), Section 5779. After treatment, completion notices are left with the residents detailing precautions to take and post-harvest intervals applicable to the citrus fruit. Information concerning the ACP program will be conveyed directly to local and State political representatives and authorities via letters, emails, and/or faxes. Treatment information is posted at [http://cdfa.ca.gov/plant/acp/treatment\\_maps.html](http://cdfa.ca.gov/plant/acp/treatment_maps.html). Press releases, if issued, are prepared by the CDFA information officer and the county agricultural commissioner, in close coordination with the program leader responsible for treatment. Either the county agricultural commissioner or the public information officer serves as the primary contact to the media.

For any questions related to this program, please contact the CDFA toll-free telephone number at 800-491-1899 for assistance. This telephone number is also listed on all treatment notices.

### Duty to Act

Under my statutory authority, as Secretary of the California Department of Food and Agriculture, I have decided, based upon the likely environmental and economic damage that would be inflicted by an established infestation of the ACP in this area, that it is incumbent upon me to attempt to address this threat.

My duty to act, and this decision, is based upon authority set forth in Sections 24.5, 401.5, 403, 407, 408, 5401-5405, and 5761-5764 of the FAC, authorizing and mandating the Secretary to: thoroughly investigate the existence of the pest; determine the probability of the pest spreading to other areas; adopt regulations (Title 3 of the California Code of Regulations, Section 3591.21) as are reasonably necessary to carry out the provisions of this code; abate a pest from the established treatment area; and, to prevent further economic damage. The project work plan above describes the CDFA's actions that are necessary to mitigate the effects of this pest.



Karen Ross, Secretary



Date

## **Asian Citrus Psyllid (ACP) Work Plan**

### **I. Urban and Rural Residential Detection Trapping and Visual Survey**

The California Department of Food and Agriculture (CDFA) maintains a cooperative State/county trapping program for ACP to provide early detection of any infestation in the county. Traps are serviced by agricultural inspectors. The trap used for ACP detection is the yellow panel trap, which is a two-sided board coated with stickum. ACP becomes entangled on the sticky capture surface. Yellow panel traps have proven successful at detecting infestations of ACP. At all locations where traps are placed, the host plant is visually inspected for ACP. If there is evidence that ACP exists, the host will be visually surveyed for ACP samples.

#### **1) Yellow Panel Traps**

- a) Trap Density: Five to 16 traps/square mile.
- b) Trap Servicing Interval: Every two to four weeks.
- c) Trap Relocation and Replacement: Traps should be replaced and relocated every four to six weeks to another host at least 500 feet away if other hosts are available.

#### **2) Visual and Tap-Sample Survey**

- a) Trap Sites: Visual surveys and tap sampling should be conducted once at each trapping site when the trap is placed or relocated at that site.
- b) Detection Survey: Twenty sites per square mile should be visually inspected and tap sampled each month. These sites should be rotated each month if hosts are available at alternate sites.

### **II. Delimitation Trapping and Visual Survey**

The protocols below may be used upon the detection of a single psyllid. Any detection of ACP not associated with a regulatory incident shall trigger a delimitation survey. This survey shall continue for two years past the last psyllid found.

#### **1) Yellow Panel Traps**

- a) Trap Density: 100 traps per square mile in the core square mile (0.5 mile radius from detection site), and 50 traps per square mile in the first buffer (1.5 mile radius from detection site).
- b) Trap Servicing Interval: First week: daily in the core, twice a week in the buffer. Second week and longer: weekly for all traps.
- c) Trap Relocation and Replacement: Traps do not need to be relocated. Traps should be replaced every six weeks or sooner if needed.
- d) Post-Treatment Monitoring: Trap densities will remain at this level for two years past the last psyllid detected.

#### **2) Visual and Tap Sample Survey**

All properties within 400 to 800 meters of the initial detection may be surveyed. Initial surveys should be door-to-door, moving outward in all directions from each detection site. Additional detection locations shall be used as new epicenters to expand survey boundaries.

#### **3) Transect Survey**

If high or scattered ACP populations are found in the initial inspections, a transect survey may be implemented to rapidly determine the extent of the infestation. This involves inspecting a minimum of 20 properties per square mile and/or placing 20 traps per

square mile along eight radii in the cardinal directions (e.g., north, northeast, etc.). Transect surveys extend between five and 20 miles beyond a detection site, depending on the situation.

### III. Treatment

**Trigger:** Treatment is warranted upon the detection of one or more psyllids.

**Treatment Area:** Treatments are normally 400 meters around each detection site, but may extend to 800 meters depending on number of specimens, proximity to previous finds, etc. Only host plants are treated.

**Treatment Plan:** Both foliar and systemic insecticides will be applied. Foliar insecticides are useful for immediate reduction of the adult population in order to eliminate dispersal, while systemic insecticides are necessary to kill the sedentary nymphs and provide long term protection against reinfestation. The frequency of the treatments is dependent on the insecticide applied and severity of the infestation. Treatments will end no later than two years after the last psyllid detection in the treatment area.

#### 1) Foliar Treatment

**Tempo® SC Ultra** (cyfluthrin) is a pyrethroid contact insecticide. Treatment will initially occur once, and may subsequently re-occur up to six times annually if additional psyllids are detected. This material will be applied to the foliage of all host plants using hydraulic spray or hand spray equipment. Affected properties will be notified in writing at least 48 hours prior to treatment. Following treatment, completion notices are left with the homeowners detailing precautions to take and post-harvest intervals applicable to any fruit on the property.

#### 2) Soil Treatment

a) **Merit® 2F** (imidacloprid), is a neonicotinoid systemic insecticide. Treatment will initially occur once, and may subsequently re-occur once on an annual basis if additional psyllids are detected. This material will be applied as a soil drench to the root zone beneath host plants. Affected properties will be notified in writing at least 48 hours prior to treatment. Following treatment, completion notices are left with the homeowners detailing precautions to take and post-harvest intervals applicable to any fruit on the property.

b) **CoreTect™** (imidacloprid) is a neonicotinoid systemic insecticide. It is used in place of Merit® 2F in situations where there are environmental concerns about soil surface runoff of the liquid Merit® 2F formulation, such as host plants growing next to ponds and other environmentally sensitive areas. Treatment will initially occur once, and may subsequently re-occur once on an annual basis if additional psyllids are detected. This material will be inserted as tablets into the root zone beneath host plants, two to five inches below the soil surface, and the soil watered to initiate tablet dissolution. Affected properties will be notified in writing at least 48 hours prior to treatment. Following treatment, completion notices are left with the homeowners detailing precautions to take and post-harvest intervals applicable to any fruit on the property.

#### **IV. Sensitive Areas**

The treatment area has been reviewed by consulting the California Department of Fish and Wildlife's California Natural Diversity Database for threatened or endangered species. The CDFA also consults with the United States Fish and Wildlife Service, the National Marine Fisheries Service and the California Department of Fish and Wildlife when rare and endangered species are located within the treatment area. Mitigation measures will be implemented as needed. The CDFA will not apply pesticides to bodies of water or undeveloped areas of native vegetation. All treatment will be applied to residential properties, common areas within residential development, non-agricultural commercial properties, and right-of-ways.

#### **V. Public Notification**

Residents of affected properties are invited to a public meeting where officials from the CDFA, the California Department of Pesticide Regulation, the Office of Environmental Health Hazard Assessment, and the county agricultural commissioner's office will be present to address residents' questions and concerns. Residents are notified in writing at least 48 hours in advance of any treatment in accordance with Food and Agricultural Code 5779. After treatment, completion notices are left with the residents detailing precautions to take and post-harvest intervals applicable to the citrus fruit. Information concerning the ACP project will be conveyed directly to local and State political representatives and authorities via letters, emails, and/or faxes. Press releases, if issued, are prepared by the CDFA information officer and the county agricultural commissioner, in close coordination with the project leader responsible for treatment. Either the county agricultural commissioner or the public information officer serves as the primary contact to the media.

## PEST PROFILE

Common Name: Asian Citrus Psyllid

Scientific Name: *Diaphorina citri* Kuwayama

Order and Family: Hemiptera, Psyllidae

Description: The Asian citrus psyllid (ACP) is 3 to 4 millimeters long with a brown mottled body. The head is light brown. The wings are broadest in the apical half, mottled, and with a dark brown band extending around the periphery of the outer half of the wing. The insect is covered with a whitish waxy secretion, making it appear dusty. Nymphs are generally yellowish orange in color, with large filaments confined to an apical plate of the abdomen. The eggs are approximately 0.3 millimeters long, elongated, and almond-shaped. Fresh eggs are pale in color, then, turn yellow, and finally orange at the time of hatching. Eggs are placed on plant tissue with the long axis vertical to the surface of the plant.

History: Asian citrus psyllid was first found in the United States in Palm Beach County, Florida, in June 1998 in backyard plantings of orange jasmine. By 2001, it had spread to 31 counties in Florida, with much of the spread due to movement of infested nursery plants. In the spring of 2001, Asian citrus psyllid was accidentally introduced into the Rio Grande Valley, Texas on potted nursery stock from Florida. It was subsequently found in Hawaii in 2006, in Alabama, Georgia, Louisiana, Mississippi, and South Carolina in 2008. ACP was first found in California on August 27, 2008 in San Diego County. Subsequent to this initial detection in San Diego County, the ACP has been detected in Fresno, Imperial, Kern, Los Angeles, Madera, Orange, Riverside, San Bernardino, San Joaquin, San Luis Obispo, Santa Barbara, Santa Clara, Tulare, and Ventura counties. The ACP has the potential to establish itself throughout California wherever citrus is grown.

Distribution: ACP is found in tropical and subtropical Asia, Afghanistan, Saudi Arabia, Reunion, Mauritius, parts of South and Central America, Mexico, the Caribbean, and in the U.S. (Alabama, Arizona, California, Florida, Georgia, Hawaii, Louisiana, Mississippi, South Carolina, and Texas).

Life Cycle: Eggs are laid on tips of growing shoots; on and between unfurling leaves. Females may lay more than 800 eggs during their lives. Nymphs pass through five instars. The total life cycle requires from 15 to 47 days, depending on environmental factors such as temperature and season. The adults may live for several months. There is no diapause but populations are low in the winter or during dry periods. There are nine to ten generations a year, with up to 16 noted under observation in field cages.

Hosts and Economic Importance: ACP feeds mainly on *Citrus* spp., at least two species of *Murraya*, and at least three other genera, all in the family Rutaceae. Damage from the psyllids occurs in two ways: the first by drawing out of large amounts of sap from the plant as they feed and, secondly, the psyllids produce copious amounts of honeydew. The honeydew then coats the leaves of the tree, encouraging sooty mold to grow which blocks sunlight to the leaves. However, the most serious damage caused by ACP is due to its ability to effectively vector three phloem-inhabiting bacteria in the genus *Candidatus Liberibacter*, the most widespread being *Candidatus Liberibacter asiaticus*. These bacteria cause a disease known as huanglongbing, or citrus greening. In the past, these bacteria have been extremely difficult to detect and

characterize. In recent years, however, DNA probes, electron microscopy, and enzyme-linked immunosorbent assay tests (ELISA) have been developed that have improved detection. Symptoms of huanglongbing include yellow shoots, with mottling and chlorosis of the leaves. The juice of the infected fruit has a bitter taste. Fruit does not color properly, hence the term "greening" is sometimes used in reference to the disease. Huanglongbing is one of the most devastating diseases of citrus in the world. Once infected, there is no cure for disease and infected trees will die within ten years. The once flourishing citrus industry in India is slowly being wiped out by dieback. This dieback has multiple causes, but the major reason is due to HLB.

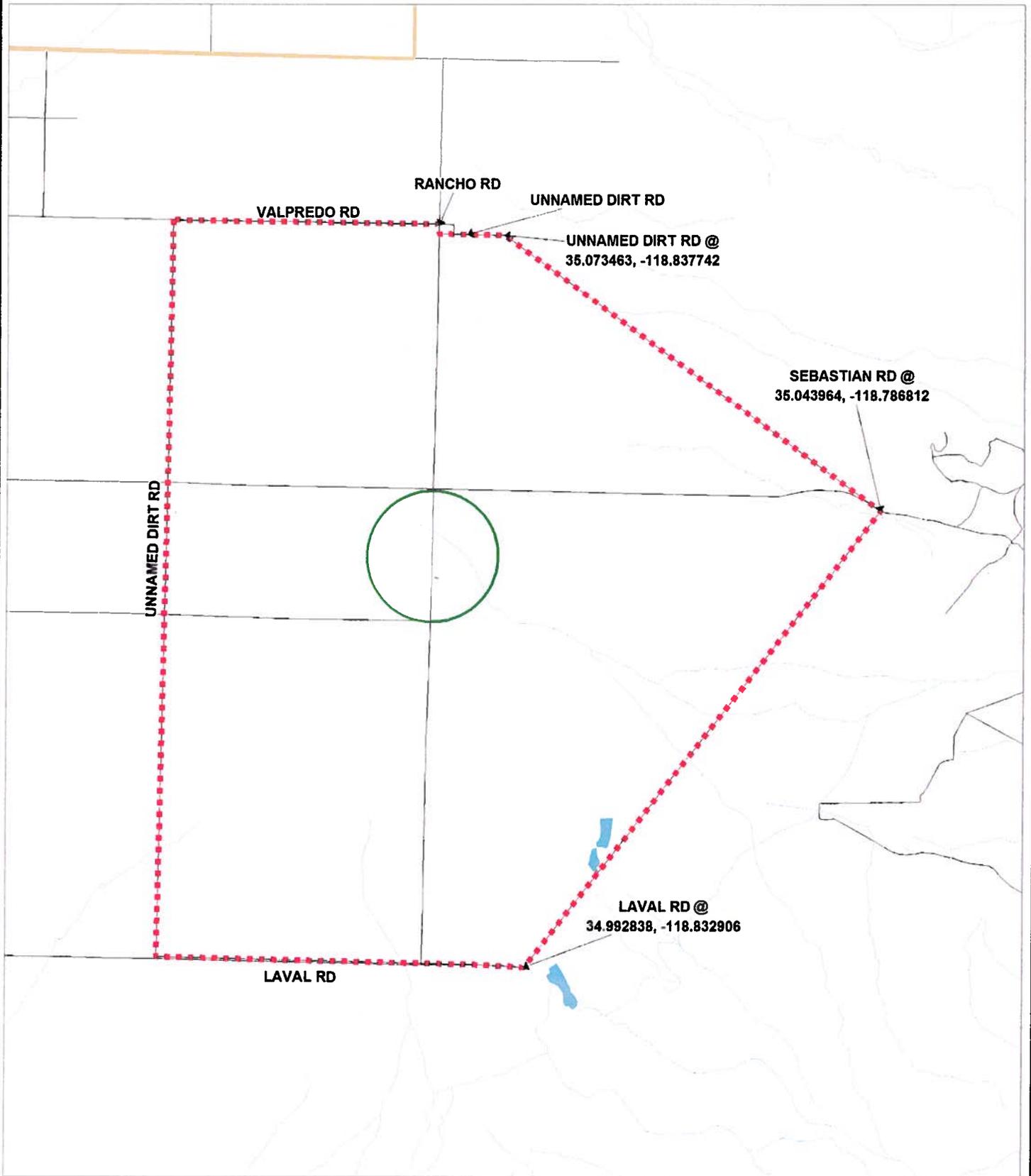
### Host List

<b>SCIENTIFIC NAME</b>	<b>COMMON NAMES</b>
<i>Aegle marmelos</i>	bael, Bengal quince, golden apple, bela, milva
<i>Aeglopsis chevalieri</i>	Chevalier's aeglopsis
<i>Afraegle gabonensis</i>	Gabon powder-flask
<i>Afraegle paniculata</i>	Nigerian powder-flask
<i>Amyris madrensis</i>	mountain torchwood
<i>Atalantia monophylla</i>	Indian atalantia
<i>Atalantia spp.</i>	
<i>Balsamocitrus dawei</i>	Uganda powder-flask
<i>Bergia (=Murraya) koenigii</i>	curry leaf
<i>Calodendrum capense</i>	Cape chestnut
<i>X Citroncirus webberi</i>	
<i>Choisya arizonica</i>	Arizona orange
<i>Choisya ternate</i>	Mexican or mock orange
<i>Citropsis articulata</i>	Katimboro, Muboro, West African cherry orange
<i>Citropsis gillettiana</i>	cherry-orange
<i>Citropsis schweinfurthii</i>	African cherry-orange
<i>Citrus aurantiifolia</i>	lime, Key lime, Persian lime, lima, limón agrio, limón ceuti, lima mejicana, limero
<i>Citrus aurantium</i>	sour orange, Seville orange, bigarde, marmalade orange, naranja agria, naranja amarga
<i>Citrus hystrix</i>	Mauritius papeda, Kaffir lime
<i>Citrus jambhiri</i>	rough lemon, jambhiri-orange, limón rugoso, rugoso
<i>Citrus limon</i>	lemon, limón, limonero
<i>Citrus madurensis</i>	calamondin
(=X <i>Citrofortunella microcarpa</i> )	
<i>Citrus maxima</i>	pummelo, pomelo, shaddock, pompelmous, toronja
<i>Citrus medica</i>	citron, cidra, cidro, toronja
<i>Citrus meyeri</i>	Meyer lemon, dwarf lemon
<i>Citrus × nobilis</i>	king mandarin, tangor, Florida orange, King-of-Siam
<i>Citrus × paradisi</i>	grapefruit, pomelo, toronja
<i>Citrus reticulata</i>	mandarin, tangerine, mandarina
<i>Citrus sinensis</i>	sweet orange, orange, naranja, naranja dulce
<i>Citrus spp.</i>	
<i>Clausena anisum-olens</i>	anis
<i>Clausena excavata</i>	clausena
<i>Clausena indica</i>	clausena
<i>Clausena lansium</i>	wampi, wampee

*Clymenia polyandra*  
*Eremocitrus glauca*  
*Eremocitrus hybrid*  
*Esenbeckia berlandieri*  
*Fortunella crassifolia*  
*Fortunella margarita*  
*Fortunella polyandra*  
*Fortunella spp.*  
*Limonia acidissima*  
*Merrillia caloxylon*  
*Microcitrus australasica*  
*Microcitrus australis*  
*Microcitrus papuana*  
*X Microcitronella spp.*  
*Murraya spp.*  
*Naringi crenulata*  
*Pamburus missionis*  
*Poncirus trifoliata*  
*Severinia buxifolia*  
*Swinglea glutinosa*  
*Tetradium ruticarpum*  
*Toddalia asiatica*  
*Triphasia trifolia*  
*Vepris (=Toddalia) lanceolata*  
*Zanthoxylum fagara*

a-mulis  
Australian desert lime  
  
Berlandier's jopoy  
Meiwa kumquat  
Nagami kumquat, oval kumquat  
Malayan kumquat  
  
Indian wood apple  
flowering merrillia  
finger-lime  
Australian round-lime  
desert-lime  
  
curry leaf, orange-jasmine, Chinese-box, naranjo jazmín  
naringi  
  
trifoliate orange, naranjo trébol  
Chinese box-orange  
tabog  
evodia, wu zhu yu  
orange climber  
trifoliate limeberry, triphasia  
white ironwood  
wild lime, lime prickly-ash

**ASIAN CITRUS PSYLLID  
ARVIN, KERN COUNTY  
2015**



MAXIMUM PROGRAM  
BOUNDARY

PROPOSED  
800M TREATMENT  
BOUNDARY



SENSITIVE ENVIRONMENTAL  
AREA / TREATMENT  
MITIGATIONS IN PLACE