

**FINDINGS REGARDING A TREATMENT PLAN FOR
THE ASIAN CITRUS PSYLLID
Los Angeles County
Program CE-6723**

Between March 30, 2012 to August 17, 2021, the California Department of Food and Agriculture (CDFA) confirmed the presence of the causative bacterial agent of the citrus disease huanglongbing (HLB) in citrus tree tissue and insect vectors collected in the cities of Cerritos, Compton, Duarte, El Monte, Glendora, Hacienda Heights, La Mirada, La Puente, Lakewood, Long Beach, Los Angeles, Montebello, Norwalk, Paramount, Pico Rivera, Rosemead, San Gabriel, South Gate, Temple City, and Whittier in Los Angeles County. HLB is a devastating disease of citrus and is spread through feeding action by populations of the Asian citrus psyllid (ACP), *Diaphorina citri* Kuwayama.

Additional surveys were conducted by CDFA in order to determine the extent of the infestation in Los Angeles County and to define an appropriate response area. Each survey took place for several days over a 250-meter radius area, centered on the following detections: March 30, 2012, Hacienda Heights; December 29, 2016, Cerritos; March 29, 2018, Rosemead; October 4, 2018, Duarte; April 12, 2019, Compton; May 31, 2019, Temple City; July 19, 2019, La Puente; August 21, 2019, Glendora; October 4, 2019, Montebello; February 28, 2020, El Monte; June 22, 2020, South Gate; September 18, 2020, La Mirada; April 9, 2021, San Gabriel; April 12, 2021, Los Angeles; April 16, 2021, Long Beach; July 2, 2021, Lakewood; July 13, 2021, Norwalk; August 6, 2021, Paramount; August 13, 2021, Whittier; August 17, 2021, Pico Rivera. Based on these surveys, pest biology, findings and recommendations from California's HLB Task Force, the Primary State Entomologist, the Primary State Plant Pathologist, United States Department of Agriculture (USDA) experts on HLB and ACP, county agricultural commissioner representatives who are knowledgeable on HLB and ACP, and experience gained from USDA's control efforts in the southeastern United States, I have determined that an infestation of HLB exists and it poses a statewide imminent danger to the environment and economy.

The results of the additional surveys also indicated that the local infestation is amenable to CDFA's ACP and HLB emergency response strategies, which include chemical control treatment. This option was selected based upon minimal impacts to the natural environment, biological effectiveness, minimal public intrusiveness, and cost.

HLB is considered one of the most devastating diseases of citrus in the world. The bacterium that causes the disease, *Candidatus Liberibacter asiaticus*, blocks the flow of nutrients within the tree and causes the tree to starve to death within two to five years of infection. There is no cure. 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, which makes it inedible for human consumption. These symptoms often do not appear until two years after infection, making this particular disease difficult to contain and suppress. These undesirable symptoms of HLB-infected trees result in the trees' loss of commercial and aesthetic value while at the same time such trees are hosts for spreading HLB.

ACP is an insect pest that is native to Asia. It has appeared in Central and South America. In the United States, ACP has been found in Alabama, Arizona, Florida, Georgia, Hawaii, Louisiana, Mississippi, South Carolina, and Texas. In California, ACP has been found in twenty-eight 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, including over forty species of plant that act as hosts and possible carriers. The most serious damage to the environment and property caused by ACP – the death and loss in value of host plants – is due to its vectoring HLB. In addition, the psyllids also

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. Sooty mold blocks sunlight from reaching the leaves.

These pests present a significant and imminent threat to the natural environment, agriculture, and economy of California. For example, HLB would have severe consequences to both the citrus industry and to the urban landscape via the decline and the death of citrus trees. California is the top citrus-producing state in the U.S., with total production valued at over \$2.2 billion. 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.

Additionally, if unabated, the establishment of HLB in California would harm the natural environment as commercial and residential citrus growers would be forced to increase pesticide use. And, the establishment of HLB could lead to enforcement of quarantine restrictions by the USDA and our international trading partners. Such restrictions would jeopardize California's citrus exports, which are valued at over \$800 million per year.

The causative bacteria of HLB was first detected in Los Angeles in 2012. It has subsequently been detected in Orange, Riverside, San Bernardino, and San Diego counties. Prior to November 2017, the level of HLB risk in California was thought to be relatively stable. However, on November 22, 2017, the University of California and the United States Department of Agriculture released a briefing paper that indicates, beginning in June 2017, a sharp increase in HLB and HLB-positive ACP detections, cities containing HLB, and ACP nymphs. With the release of the November 22, 2017 briefing paper, the Department became aware of the exponential intensification of the HLB epidemic, as demonstrated by the indicators contained in the paper.

Infected trees are destroyed as soon as they are discovered. However, due to the length of time it takes for symptoms to appear on infected trees, new infestations continue to be discovered. If the current infestation is not abated immediately, ACP will likely become established in neighboring counties and could pave the way for a statewide HLB infestation.

CDFA has evaluated possible treatment methods in accordance with integrated pest management (IPM) principles. As part of these principles, I have considered the following treatments for control of ACP: 1) physical controls; 2) cultural controls; 3) biological controls; and 4) chemical controls. Upon careful evaluation of each these options, I have determined that it is necessary to address the imminent threat posed by HLB using currently available technology in a manner that is recommended by the HLB Task Force.

Based upon input from the HLB Task Force, the Primary State Entomologist, the Primary State Plant Pathologist, USDA experts on HLB and ACP, and county agricultural commissioner representatives who are knowledgeable on ACP and HLB, I find there are no physical, cultural or biological control methods that are both effective against ACP and allow CDFA to meet its statutory obligations, and therefore it is necessary to conduct chemical treatments to abate this threat. As a result, I am ordering insecticide treatments for ACP using ground-based equipment within a 250-meter radius around each HLB detection site and any subsequent sites.

A Program Environmental Impact Report (PEIR) has been prepared which analyzes the ACP and HLB treatment program in accordance with Public Resources Code (PRC), section 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 and HLB at the program level and provides guidance on

future actions against ACP and HLB. It identifies feasible alternatives and possible mitigation measures to be implemented for individual ACP and HLB treatment activities. The ACP and HLB program have 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

CDFA has consulted with the California Department of Fish and Wildlife's California Natural Diversity Database for threatened or endangered species, 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 for rare and endangered species will be implemented as needed. The CDFA shall not apply pesticides to bodies of water or undeveloped areas of native vegetation. All treatment shall be applied to residential properties, common areas within residential development, non-agricultural commercial properties, and rights-of-way.

Work Plan

The proposed treatment area encompasses those portions of Los Angeles County which fall within a 250-meter radius area around the properties on which the causative agent of HLB has been detected, and any subsequent detection sites within the proposed treatment boundaries. The Notice of Treatment and the associated Proclamation of Emergency Program are valid until August 17, 2022, which is the amount of time necessary to determine that the treatment was successful. Maps of the treatment boundaries are attached. The work plan consists of the following elements:

1. ACP Monitoring. Visual surveys within a 250-meter radius around each HLB detection site will be conducted to monitor post-treatment ACP populations.
2. ACP and HLB Visual Survey. All host plants will be inspected for ACP and for HLB symptoms within a 250-meter radius around each HLB detection site, at least twice a year. ACP and host plant tissue will be collected and forwarded to a USDA accredited laboratory for identification and analysis.
3. HLB Disease Testing. All host tree tissues, and ACP life stages shall be tested for the presence of HLB.
4. Treatment. All properties with host plants within a 250-meter radius around each HLB detection site shall be treated according to the following protocol to control ACP:
 - a. Tempo® SC Ultra, containing the contact pyrethroid insecticide cyfluthrin, shall 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 reapplied up to three times annually if additional ACP 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 shall be invited to a public meeting or contacted directly by CDFA staff. Consultation with the California Department of Pesticide Regulation, the Office of Environmental Health Hazard Assessment, and the county agricultural commissioner's office will be provided at the public meeting or upon request to address residents' questions and concerns.

Residents shall be notified in writing at least 48 hours in advance of any treatment in accordance with the Food and Agricultural Code (FAC), sections 5771-5779 and 5421-5436.

After treatment, completion notices are left with the residents detailing precautions to take and post-harvest intervals applicable to the citrus fruit. Treatment information is posted at http://cdfa.ca.gov/plant/acp/treatment_maps.html.

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. Treatment information is posted at 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.

Information concerning the HLB/ACP program will be conveyed directly to local and State political representatives and authorities via letters, emails, and/or faxes.

Findings

HLB and ACP pose a significant and imminent threat to California's natural environment, agriculture, public and private property, and its economy.

The work plan involving chemical control of these pests is necessary to prevent loss and damage to California's natural environment, citrus industry, native wildlife, private and public property, and food supplies.

My decision to adopt findings and take action is based on FAC sections 24.5, 401.5, 403, 407, 408, 5401-5405, and 5761-5764.

Karen Ross, Secretary

Date