

FINDING OF EMERGENCY

The Secretary of the Department of Food and Agriculture (Department) determined that an emergency exists; suspect citrus tissue samples for Huanglongbing (HLB) disease (HLB associated bacteria *Candidatus Liberibacter asiaticus*) were collected in the Riverside area of Riverside and San Bernardino Counties. These suspect samples were confirmed to be HLB on July 25, 2017 from the citrus tissue samples in the Riverside area of Riverside County. The Department is proposing an emergency amendment of the HLB Disease Interior Quarantine regulation to establish a quarantine in the Riverside area of Riverside and San Bernardino Counties.

Emergency Defined

“Emergency” means a situation that calls for immediate action to avoid serious harm to the public peace, health, safety, or general welfare,” Government Code Section 11342.545. If a state agency makes a finding that the adoption of a regulation is necessary to address an emergency, the regulation may be adopted as an emergency regulation. Government Code Section 11346.1(b)(1).

In this document the Department is providing the necessary specific facts demonstrating the existence of an emergency and the need for immediate action to prevent serious harm to the general welfare of the citizens of California, pursuant to Government Code Section 11346.1(b)(2).

Government Code Section 11346.1(a)(2) requires that, at least five working days prior to submission of the proposed emergency action to the Office of Administrative Law, the adopting agency provide a notice of the proposed emergency action to every person who has filed a request for notice of regulatory action with the agency.

Government Code Section 11346.1(a)(3) provides that if the emergency situation clearly poses such an immediate, serious harm that delaying action to allow public comment would be inconsistent with the public interest, an agency is not required to provide notice pursuant to

Government Code Section 11346.1(a)(2) The Secretary believes that this emergency clearly poses such an immediate, serious harm that delaying action to give the notice pursuant to Government Code Section 11346.1(a)(2) or allow five calendar days to allow public comment pursuant to Government Code Section 11349.6 would be inconsistent with the public interest, within the meaning of Government Code Section 11349.6(b).

Asian citrus psyllid (ACP) adults are the only mobile vector of this disease in California and can acquire the disease in one feeding and transmit the disease into a host in one feeding. Within the proposed quarantine area there may be production nurseries and retail nurseries and many of them could have host material which has been exposed to feeding by ACP. Recently infected nursery stock will not show any disease symptoms for up to two years. It is essential to immediately prevent the movement of this high risk host nursery stock to ensure the disease is not moved artificially over long distances.

Each day that this quarantine amendment is not in place increases the odds that artificial spread of HLB will occur unabated and the ACP/HLB complex will be able to begin its devastating destruction in that area.

Providing five days advance notice of an emergency rulemaking to interested parties delays being able to get this quarantine regulation in place by an additional eight to ten days. This delay increases the chances of the Department's inability to prevent long distance artificial spread of HLB, including to any other area in the state, such as our major citrus production areas.

The information contained within this finding of emergency also meets the requirements of Government Code Sections 11346.1 and 11346.5.

The Secretary is proposing to amend this regulation pursuant to the authority in Food and Agricultural Code (FAC) Section 403 states, "the department shall prevent the spread of injurious insect pests, Section 407, "the director may adopt such regulations as are reasonably necessary to carry out the provisions of this code which he is directed or authorized to administer or enforce," and FAC Section 5322, "the director may establish, maintain, and enforce quarantine,

eradication, and such other regulations as are in his or her opinion necessary to circumscribe and exterminate or prevent the spread of any pest which is described in FAC Section 5321.”

Additionally, FAC Section 401.5 states, “the department shall seek to protect the general welfare and economy of the state and seek to maintain the economic well-being of agriculturally dependent rural communities in this state”

California Environmental Quality Act

A Statewide Plant Pest Prevention and Management Environmental Program Environmental Impact Report (EIR) was prepared by the Department as the lead agency under the California Environmental Quality Act. The EIR addresses the potential impacts and mitigations when implementing the Statewide Plant Pest Prevention and Management Program activities related to HLB.

The PEIR may be accessed at the following website:

<http://www.cdffa.ca.gov/plant/peir/>.

Evidence of an Emergency

The Cerritos, Hacienda Heights, La Habra, Anaheim, and San Gabriel areas of Los Angeles and Orange counties are the existing quarantine areas. These quarantines were established by using a five mile buffer radius around the find site. This new quarantine in the Riverside area has substantial established populations of the Asian Citrus Psyllid (ACP). By itself, ACP causes only minor cosmetic damage to citrus trees. However, when it becomes infected with Huanglongbing (HLB or citrus greening), it becomes a carrier for the disease and can transmit the HLB-associated bacteria from the fourth nymphal instar through the adult stage with a latency period as short as one day or as long as 25 days. HLB was first identified in China in 1919 and is considered to be the most devastating of all citrus diseases. Once infected, there is no cure for HLB infected citrus trees, which decline and die within a few years. Additionally, the fruit produced by infected trees is not suitable for either the fresh market or juice processing due to the significant increase in acidity and bitter taste.

Both ACP and HLB are federal action quarantine pests subject to interstate and international quarantine restrictions by the USDA. It is imperative that the Department prevent the artificial spread of HLB host material and HLB infested ACP wherever possible to ensure the devastating damage caused by HLB is limited to the smallest area possible.

California is the number one economic citrus state in the nation. The California Agricultural Statistics Review for 2015-16 puts the value of citrus (grapefruit and oranges) at \$823,744,000.00 (California Agricultural Statistics Review, 2015-16; pg 60). A 2002 report by the Arizona State University School of Business indicates that there is at least \$825.6 million of direct economic output and another \$1.6 billion when all upstream suppliers and downstream retailers are included. This represents over 25,000 direct and indirect employees. To protect this source of economic activity, California must do everything possible to exclude both HLB-associated pathogens and ACP from the state.

The current study by the University of Florida IFAS Extension calculated and compared the impact of having and not having HLB present. Their economic analysis concluded HLB had a total impact of \$3.64 billion and eliminated 0.08 percent of the total Florida workforce. For 2008 in Florida, the estimated increased production costs for citrus range from \$266 to \$332 million. There are approximately 600,000 acres of citrus in production in Florida. This translates into increased production costs of \$443 to \$553 per acre. This estimate is based upon an eight dollar per tree replacement cost. In California, the estimated cost to replace a tree is from \$10 to \$20. Using a cost of \$15 per tree would push the projected production costs up to \$450 to \$550 per acre. The estimated citrus acreage in 2008 in California is approximately 290,000 acres. The projected increased citrus production costs in California would be at least \$130.5 to \$159.5 million.

The USDA cannot regulate less than an entire state unless the state has a quarantine regulation which is substantially the same as what the existing federal rule requires for interstate movement. The Department needs to have the immediate authority to prevent the movement of infested or potentially infested HLB host material both from and within the proposed quarantine

area. This in turn will enable the USDA to amend their federal regulation or order. If the Department fails to implement a quarantine on an emergency basis, the USDA may consider quarantining all of California for HLB in order to immediately prevent the affected host material from being shipped interstate.

Therefore, it is necessary to amend this regulation to establish a new quarantine in the Riverside area of Riverside and San Bernardino Counties as an emergency action.

Project Description

This proposed emergency action will establish a quarantine for HLB of approximately 94 square miles in the Riverside area of Riverside and San Bernardino Counties. The proposed boundary lines were drawn jointly by the United States Department of Agriculture (USDA), the California Department of Food and Agriculture, and the affected county agricultural commissioners. The criterion for determining quarantine boundaries around an epicenter was based upon the information obtained from the USDA. Any quarantine actions undertaken by the Department will be in cooperation and coordination with the USDA and the affected county agricultural commissioners.

A critical component of the quarantine project strategy is to prevent the movement of “exposed” host nursery stock within and from the area. HLB infected ACP can introduce HLB into the host material through one feeding. With the exception of curry plants, a symptomless carrier, all other host material will die. However, it may take up to two years before the infested plants show signs of HLB infection and the titer level of the HLB is high enough where it can be sampled and confirmed positive through existing laboratory testing methods. The movement of such unprotected stock in Florida is believed to have been another key factor in the rapid spread of HLB throughout the state. Therefore, the movement of any exposed host nursery stock is prohibited under the proposed quarantine restrictions.

The effect of the amendment of this regulation will be to implement the State’s authority to perform quarantine activities against HLB in the Riverside area of Riverside and San Bernardino Counties. Any quarantine actions undertaken by the Department will be in cooperation and

coordination with the USDA and the affected county agricultural commissioners. It is immediately necessary to implement quarantine actions in order to prevent the artificial spread of HLB.

Background

The California citrus industry has taken a great deal of responsibility in preparing for the introduction and establishment of HLB-associated bacteria and psyllid vectors. Funding has been allocated towards research on easy, early (i.e., pre-clinical) detection methods (i.e., one primer set to detect all strains rather than primer sets specific for each known strain; host systemic responses) and the identification of HLB-associated bacterial strains, and vector relationships. In addition, a public relations firm has been hired to determine the most effective and efficient methods to educate the general public and make them feel as though they are part of the solution. Industry leaders (research and marketing boards) are involved in procuring federal funds for national research programs in the areas of host plant resistance, etiological agents and variants of HLB, specific native and exotic natural enemies of the insect vectors, and pesticide efficacy and new chemistries.

California citrus industry leaders recognized how Florida was at a loss of ample supplies of HLB-free citrus stock when the pathogen was detected in 2005. As a result, plans are underway to expand the greenhouse facility at the UC Lindcove Research and Extension Center that houses the industry's pathogen-free budwood source to allow for the protection of additional varieties. Other alternatives are being considered to protect valuable citrus propagation sources, germplasm, and breeding material such as isolated and/or protected locations and tissue culture. For long-term survey and management, the industry may pursue the formation of pest control districts.

Senate Bill 140 (SB 140), chaptered November 2, 2009, required the California Department of Food and Agriculture (Department) to establish a Citrus Nursery Stock Pest Cleanliness Program (CNSPCP) to protect citrus nursery source propagative trees from harmful diseases, pests, and other risks and threats. One of the diseases of primary concern was HLB. The bill also required that anyone propagating citrus by any means must comply with all of the eligibility requirements and testing protocols issued by the secretary. Further the bill authorized the department to adopt and enforce regulations to carry out the program and to issue orders establishing rates or prices

to cover the department's costs for administration, testing, inspection and other services under the program. The bill declared that it was to take effect immediately as an urgency statute. The Department adopted Sections 3701, et. seq., as an emergency action effective May 17, 2010, to establish a mandatory Citrus Nursery Stock Pest Cleanliness Program. The adoption of Section 3701 et. seq. established that participation in the Citrus Nursery Stock Pest Cleanliness Program is mandatory for any person (with the exception of the Citrus Clonal Protection Program) who by any method of propagation, produces any citrus nursery stock; the diseases for which testing is required and the test methods to be used, a list of laboratories approved for performing the tests, frequency of such testing, requirements and time frames for growing registered mother and increase trees in protective structures, a performance standard for such structures, a fee schedule for participants, record-keeping requirements for the Department and participants, elements of a required application form and compliance agreement between nurseries and the Department, provisions for suspending or cancelling the registration status of citrus trees and provisions for mandatory destruction of trees and/or propagative materials for which registration has been cancelled.

During ACP workshops held in Riverside on June 11 and 12, 2009, several critical presentations were made regarding the ACP/HLB vector disease complex including the following:

1. FundeCitrus (a research institute funded by Brazilian farmers and the juice industry) staff described the devastating impact of HLB in Brazil. HLB was present in one grove in 30 in 2004 but spread to one in five by 2008. FundeCitrus and the citrus industry lobbied successfully for a federal law which, since 2005, makes it an offense to leave a HLB-infected orange tree planted once laboratory tests have diagnosed the disease. Subsequent data showed less than one percent of trees were infected after the federal law became effective.

2. AVASA (the national certification program in Spain) staff describing the Spanish citrus certification program which, since 1996, has required 100 percent of citrus propagative source materials to be produced under screen.

3. A Florida citrus nurseryman described the impact of ACP, HLB and citrus canker on the Florida citrus industry and the resulting regulations. Two counties were known to be infected with HLB in 2005. By 2008, HLB had been identified in 32 counties. Florida hopes to manage HLB by a three pronged approach: starting with disease-free nursery trees (all citrus nursery stock and

the propagative sources of the stock must be maintained in insect-resistant structures), scouting for and removing infected trees and controlling the ACP.

In Florida and countries where HLB exists, insecticides have been a first line of defense to eliminate the psyllid vector, thereby reducing the spread of the HLB-associated pathogens. Applying insecticide sprays at critical flushing periods in order to kill psyllid nymphs may be an effective method of HLB. In accordance with integrated pest management principles (IPM), the Department will evaluate all appropriate mechanical, biological, cultural and treatment control options which may be efficacious to prevent the artificial spread of HLB infested ACP. If a treatment option is chosen, as insecticide use registrations vary between crops and urban areas and between fruit trees and ornamentals, any treatment program will need to be tailored to each situation.

The implementation of biological control methods (the use of beneficial organisms to attack pest populations) will be an important component of an integrated pest management program to reduce populations of the ACP. As there are no known psyllids in California citrus, exotic natural enemies from the pest's area of origin may need to be imported into the United States or from Florida under strict quarantine protocols. There may be some generalist predators such as the coccinellid beetles that will come into citrus from other habitats but to what extent these would be effective is not known at this time. Natural enemies obtained from commercial sources or mass reared by government or industry personnel can be periodically released into field situations once the psyllid becomes established.

Populations of ACP in Florida are fed upon by many generalist arthropod predators such as spiders, lacewings, hover flies or syrphids, and minute pirate bugs, and are attacked by a number of parasites. The coccinellids exert the greatest amount of control. Two lady beetles, *Olla v-nigrum*, which is native to California and *Harmonia axyridis*, are the most important predators of ACP nymphal stages in Florida. *H. axyridis* was imported from Japan to control the pecan aphid and is established in parts of California. Two tiny parasitic wasps have been imported and released in Florida. *Tamarixia radiata* was imported from Taiwan and Vietnam, and *Diaphorencyrtus aligarhensis* was imported from Taiwan. *Tamarixia radiata* has already been

imported into California and releases of this parasitoid have occurred.

The Department also relied upon the following information:

Letter dated July 31, 2017, from Ruben Arroyo, Riverside County Agricultural Commissioner to Secretary Karen Ross.

Email dated July 31, 2017, from Roberta Willhite, San Bernardino County Agricultural Commissioner to Secretary Karen Ross.

Pest and Damage Record # RS0P06614898, California Department of Food and Agriculture, Plant Health and Pest Prevention Services.

Economic Impacts of Citrus Greening (HLB) in Florida, 2006/07-2010/11, University of Florida IFAS Extension.

Federal Register, Vol. 76, No. 81, dated April 27 2011, Docket No. APHIS-2010-0048, Citrus Canker, Citrus Greening and Asian Citrus Psyllid; Interstate Movement of Regulated Nursery Stock.

“New Pest Response Guidelines, Citrus Greening Disease,” dated June 2, 2008, United States Department of Agriculture, Animal and Plant Health Inspection Service.

Authority and Reference Citations:

Authority: Sections 407 and 5322, Food and Agricultural Code.

Reference: Sections 407 and 5322, Food and Agricultural Code (FAC).

Informative Digest

Existing law provides that the Secretary is obligated to investigate the existence of any pest that is not generally distributed within this state and determine the probability of its spread and the

feasibility of its control or eradication (FAC Section 5321).

Existing law also provides that the Secretary may establish, maintain and enforce quarantine, eradication and other such regulations as he deems necessary to protect the agricultural industry from the introduction and spread of pests (FAC Sections 401, 403, 407 and 5322).

Anticipated Benefits from This Regulatory Action

Existing law, FAC section 403, provides that the department shall prevent the introduction and spread of injurious insect or animal pests, plant diseases, and noxious weeds.

Existing law, FAC section 407, provides that the Secretary may adopt such regulations as are reasonably necessary to carry out the provisions of this code which she is directed or authorized to administer or enforce.

Existing law, FAC section 5321, provides that the Secretary is obligated to investigate the existence of any pest that is not generally distributed within this State and determine the probability of its spread, and the feasibility of its control or eradication.

Existing law, FAC section 5322, provides that the Secretary may establish, maintain, and enforce quarantine, eradication, and such other regulations as are in her opinion necessary to circumscribe and exterminate or prevent the spread of any pest which is described in FAC section 5321.

The existing law obligates the Secretary to investigate and determine the feasibility of controlling or eradicating pests of limited distribution but establishes discretion with regard to the establishment and maintenance of regulations to achieve this goal. The adoption of this regulation benefits the citrus industries (nursery and fruit) and the environment by having a quarantine program to prevent the artificial spread of HLB over long distances; thus confining its devastating impacts to the smallest area possible. Almost all of the commercial citrus fruit and nursery stock production is located outside this proposed quarantine boundary area.

This amendment provides the necessary regulatory authority to prevent the artificial spread of a serious insect pest which is a mandated statutory goal.

The California consumers benefit as the fruit from host trees infected with HLB is inedible. Confining the HLB infestation to the smallest area possible ensures citrus fruits and other host fruits are available for consumption and at reasonable prices.

FAC Section 401.5 states, “the department shall seek to protect the general welfare and economy of the state and seek to maintain the economic well-being of agriculturally dependent rural communities in this state.” The adoption of this regulation is confining HLB to a primarily urban environment and achieves this statutory goal. HLB is generally distributed in Florida. The University of Florida IFAS Extension calculated and compared the impact of having and not having HLB present in Florida and concluded HLB had a total impact of \$3.64 billion and eliminated 0.08 percent of the total Florida workforce. The overall California economy benefits by the amendment of this regulation which is intended to prevent HLB from becoming generally distributed in California and resulting in a similar affect on our economy as to what happened in Florida.

The United states Department of Agriculture (USDA) maintains a federal domestic quarantine regulating the interstate movement of host material. If the State does not have a parallel interior quarantine which is substantially the same as the federal domestic regulation, the USDA cannot regulate less than the entire State. The amendment of this State regulation will prevent the USDA from having to unnecessarily regulate the entire State.

The Department is the only agency which can implement plant quarantines. As required by Government Code Section 11346.5(a)(3)(D), the Department has conducted an evaluation of this regulation and has determined that it is not inconsistent or incompatible with existing state regulations.

Section 3439. Huanglongbing Disease Interior Quarantine.

This proposed emergency action will establish 94 square miles surrounding the Riverside area of Riverside and San Bernardino Counties as an additional area under quarantine. The effect of the

amendment of this regulation is to provide authority for the State to perform quarantine activities against HLB within this additional area under quarantine. The total area which would be under regulation would be approximately 525 square miles.

Mandate on Local Agencies or School Districts

The Department of Food and Agriculture has determined that Section 3439 does not impose a mandate on local agencies or school districts, except that an agricultural commissioner of a county under quarantine has a duty to enforce it. No reimbursement is required under Section 17561 of the Government Code because the affected county agricultural commissioners requested that this regulation be adopted.

Cost Estimate

The Department has also determined that the regulation will involve no additional costs or savings to any state agency because initial funds for state costs are already appropriated, no nondiscretionary costs or savings to local agencies or school districts, no reimbursable costs to local agencies or costs or savings to school districts under Section 17561 of the Government Code and no costs or savings in federal funding to the State.