



CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

OFFICIAL NOTICE FOR THE CITIES OF ANAHEIM, BUENA PARK, AND FULLERTON

PLEASE READ IMMEDIATELY

PROCLAMATION OF AN ERADICATION PROJECT FOR THE ORIENTAL FRUIT FLY

Between October 11 and 14, 2011, eight oriental fruit flies (OFF) were trapped in the city of Anaheim in Orange County. These OFF detections are within 0.5 miles of each other. Based on the proximity in time and distance between the detection sites, these OFF detections indicate that an infestation exists in the area.

The OFF is a serious exotic insect pest that is not native to California, and attacks over 230 different hosts; many of which are grown in Orange County. Immediate emergency eradication action is needed to protect California from the negative economic and environmental impact the establishment of this pest would cause. Important California crops at risk include pome and stone fruits, citrus, dates, avocados, and various vegetables, particularly tomatoes and peppers. Damage occurs when the female lays eggs in the fruit. These eggs hatch into larvae, or maggots, which tunnel through the flesh of the fruit, making it unfit for consumption. Should OFF become established in California, crop loss estimates are in the range of \$44 million to \$176 million. An established population of OFF would increase the need for pesticide use as well as require the need to enforce quarantine restrictions.

The emergency program is based on an action plan developed in consultation with the Pest Prevention Committee of the California Agricultural Commissioner's Association, United States Department of Agriculture and scientists on an advisory panel. Pursuant to sections 5401-5405 and 5761-5763 of the Food and Agricultural Code (FAC), the Secretary is mandated: to thoroughly investigate the existence of a pest; to determine the probability of the spread of a pest; to adopt regulations (Title 3 of the California Code of Regulations, Section 3591.2) as are reasonably necessary to carry out the provisions of this code; to abate a pest from the established eradication area; and, to prevent further economic damage.

In accordance with integrated pest management principles, the California Department of Food and Agriculture (CDFA) has evaluated possible eradication methods and determined that there are no cultural or biological methods available to eradicate the OFF. CDFA will employ mechanical control via host fruit removal when larvae or multiple OFF are detected (as described below).

To comply with FAC mandates, the treatment plan for OFF eradication in Orange County is as follows:

- Mechanical control . Due to multiple OFF adults have been detected, fruit from the infested site and properties within 200 meters of the detection site will be removed and disposed of under regulatory compliance.

- Because multiple OFF have been trapped, foliar bait ground treatments are required to mitigate the spread of the OFF. Foliar bait ground treatments are comprised of protein bait spray that consists of an organic formulation of spinosad. Visit the CDFA website to learn more about the treatment process at <http://www.cdfa.ca.gov/phpps/videos/spinosad/>.
- The male attractant treatment (MAT) makes use of small amounts of an attractant (methyl eugenol) and pesticide (naled) to lure the male flies in a population to bait stations. The male OFF are eradicated before they can mate with the female OFF. This disrupts the breeding cycle and the population is eliminated. Spot applications will be applied to utility poles, street trees, and other unpainted surfaces using pressurized tree marking guns. The bait stations are placed six to eight feet above the ground and out of the reach of the public. Public exposure to naled and related residues as a result of its use in fruit fly eradication is negligible.

Public Notification:

Any resident whose property will be treated following the determination of a breeding population (eggs, larvae, mated female or multiple adult OFF) on or near their property will be notified in writing at least 48 hours in advance of any treatment in accordance with FAC Sections 5779 and 5401-5404. Following the treatment, completion notices are left with the homeowners detailing precautions to take and post-harvest intervals applicable to any fruit on the property. For pesticide applications in public areas, a press release is issued to the general public. Treatments are repeated every seven to fourteen days for one life cycle. Please contact CDFA's toll-free hotline at 800-491-1899 and staff will be able to assist with any questions related to the project. This telephone number is also listed on all treatment notices.

Enclosed is the Proclamation of an Emergency Program, the OFF Work Plan, host list, a map of the treatment area, alternative treatment methods analysis, and the pest profile.

PROCLAMATION OF AN ERADICATION PROJECT REGARDING THE ORIENTAL FRUIT FLY

Between October 11 and October 14, 2011, eight oriental fruit flies (OFF) were trapped in the city of Anaheim, Orange County. These OFF detections are within 0.5 miles of each other. Based on the proximity in time and distance between the detection sites, these OFF detections indicate that an infestation exists in the area.

The OFF, *Bactrocera (Dacus) dorsalis* Hendel, is an exotic insect which has a long history of being a serious pest of tropical and subtropical fruits in Southwest Asia and most of the Pacific Islands. Following introduction into the Hawaiian Islands in the 1940's, this fly multiplied rapidly, and is currently known to infest more than 125 different host fruits in the state of Hawaii. Worldwide, over 230 different kinds of fruits and vegetables are attacked. The OFF is one of the most serious pests of agriculture in Hawaii, India, Burma, Sri Lanka, Thailand, Indochina, the Philippines, Taiwan, Ryukyu Islands, and Micronesia. Important California crops at risk include pome and stone fruits, citrus, dates, avocados, and certain vegetables, particularly tomatoes and peppers. Damage occurs when the female lays eggs in the fruit. These eggs hatch into larvae, or maggots, which tunnel through the flesh of the fruit, making it unfit for consumption. The first California eradication project occurred in San Diego in 1974, and since that time, numerous major infestations have been delimited and successfully eradicated.

Under my statutory authority, as Secretary of the California Department of Food and Agriculture (CDFA), I have decided, based upon the likely environmental and economic damage that would be inflicted by an established infestation of the OFF, that it is incumbent on me to attempt to eradicate the OFF and its life stages from California. Should OFF become established in California, crop loss estimates are in the range of \$44 million to \$176 million. Additionally, the need for pesticide use would increase as well as the need to enforce quarantine restrictions. By comparison, where the OFF is established in Hawaii, farmers resort to near-weekly spraying of insecticides or abandoning crop production altogether. Industry experts estimate that exotic fruit flies are costing Hawaii more than \$300 million every year in lost markets for locally grown produce. This loss does not include lost export markets. If OFF became established in California, the State would face detrimental quarantine restrictions directed against host commodities by both the United States Department of Agriculture (USDA) and our international trade partners.

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 Food and Agricultural Code (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 3591.2) as are reasonably necessary to carry out the provisions of this code; abate the pest from the established eradication area; and, prevent further economic damage. The enclosed project work plan describes CDFA's actions that are necessary to mitigate the spread of this pest.

This decision to proceed with an eradication program is based upon a realistic evaluation that it may be possible to eradicate the OFF using currently available technology in a manner that is based on an action plan developed in consultation with the Pest Prevention Committee of the California Agricultural Commissioner's Association, USDA, and scientists

on an advisory panel. Treatment needs and the environmental conditions are outlined in the attached work plan. In making this decision, CDFA has evaluated possible eradication methods. In accordance with integrated pest management principles, the following is a list of the options that I have considered for the eradication of this OFF infestation: 1) mechanical controls; 2) cultural controls; 3) mass trapping; 4) biological controls; 5) foliar application of a pesticide by ground; and 6) male attractant treatment using bait stations.

Based upon input from outside experts familiar with the OFF and my professional staff, I have concluded that there are no cultural or biological controls that are effective to eradicate the OFF that allow CDFA to meet its statutory obligations. CDFA will utilize mechanical control due to multiple OFF detected within one-square mile, indicating an infestation exists in the area. In this situation, host fruit will be removed and disposed of using regulatory compliance protocols. To eradicate the adult OFF, I am ordering that male attractant treatments, consisting of methyl eugenol, naled, and a thickener be applied utility poles and street trees to eliminate this infestation. Due to multiple OFF detections, spinosad bait spray treatments will be applied to host trees using ground based equipment. A description of the options is contained in the attached work plan. Due to the size of the infested area and the number of OFF detected, historical data indicates that eradication is possible.

CDFA has prepared and certified a Final Environmental Impact Report (FEIR) entitled "The Exotic Fruit Fly Eradication Program Utilizing Male Annihilation and Allied Methods," which is implemented as per the operations described above. This FEIR addresses the eradication of exotic fruit fly pests at the program level and provides guidance for the conduct of future emergency actions against these pests. It identifies feasible alternatives and possible mitigation measures to be implemented in individual exotic fruit fly pest eradication emergencies. I have incorporated the mitigation measures and integrated pest management techniques as described in the FEIR. In accordance with Section 21105 of the Public Resources Code, this FEIR has been filed with the appropriate local planning agency of all affected cities and counties. I have detected no local condition which would justify or necessitate preparation of a site specific plan.

Sensitive Areas

The treatment area has been reviewed by consulting the Department of Fish and Game's California Natural Diversity Database for threatened or endangered species. Mitigation measures will be implemented as needed. CDFA also consults with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service when rare and endangered species are located within the treatment area. 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, and other non-commercial properties.

Eradication Plan

The eradication area includes those portions of Orange County which fall within an approximate nine-square mile area around each property in which an OFF has been

trapped or in which another life stage of the insect is detected. A map of the detection sites with eradication boundaries and the proposed eradication work plan are attached. In summary form, the work plan will contain the following elements:

1. **Delimitation.** Two types of traps will be placed throughout the project area to delimit the infestation and to monitor post-treatment OFF populations. Jackson traps and McPhail traps will each be placed at a density of 25 per square mile in the core areas, and Jackson traps will be placed at a density of five per square mile in the remaining delimitation area. Additional traps may be added to further delimit the infestation and to monitor the efficacy of treatments. These traps will be serviced on a regular schedule for a period equal to three OFF generations beyond the date of the last OFF detected.
2. **Treatment.** Any OFF detections within the original and/or expanded eradication area(s) will be treated according to the following protocol:
 - The male attractant technique (MAT) will be used to eradicate the adult OFF. The MAT makes use of small amounts of attractant (methyl eugenol) and pesticide (naled) to lure the male flies in a population to bait stations. The OFF dies when they feed at the stations. In each square mile within the eradication boundary, a minimum of 600 evenly spaced bait stations consisting of the naled/lure mixture is applied to utility poles, street trees, and other unpainted surfaces using pressurized tree marking guns. The bait stations are placed six to eight feet above the ground.

Based on the OFF treatment protocol (nine-square-miles around each detection site), a total of 10-square miles will be treated. Treatments will be repeated at two-week intervals for up to two life cycles beyond the last OFF detected (as determined by a life cycle model driven by accumulated day degrees).

- Due to evidence of a breeding population having been detected:
 - The foliage of host trees and shrubs within 200 meters of each detection site will be treated with an organic formulation of spinosad bait spray using hand spray equipment. The foliar bait applications will increase the density of bait stations within a specified area where high numbers of OFF have been trapped. The placement of the spinosad bait application will attract male and female flies emerging from pupae located below host plants.

This treatment will occur weekly for one life cycle beyond the last OFF detected.

- Host fruit will be removed from all properties within a 200-meter radius around the detection sites. The fruit is taken to a landfill for burial using regulatory compliance protocols.

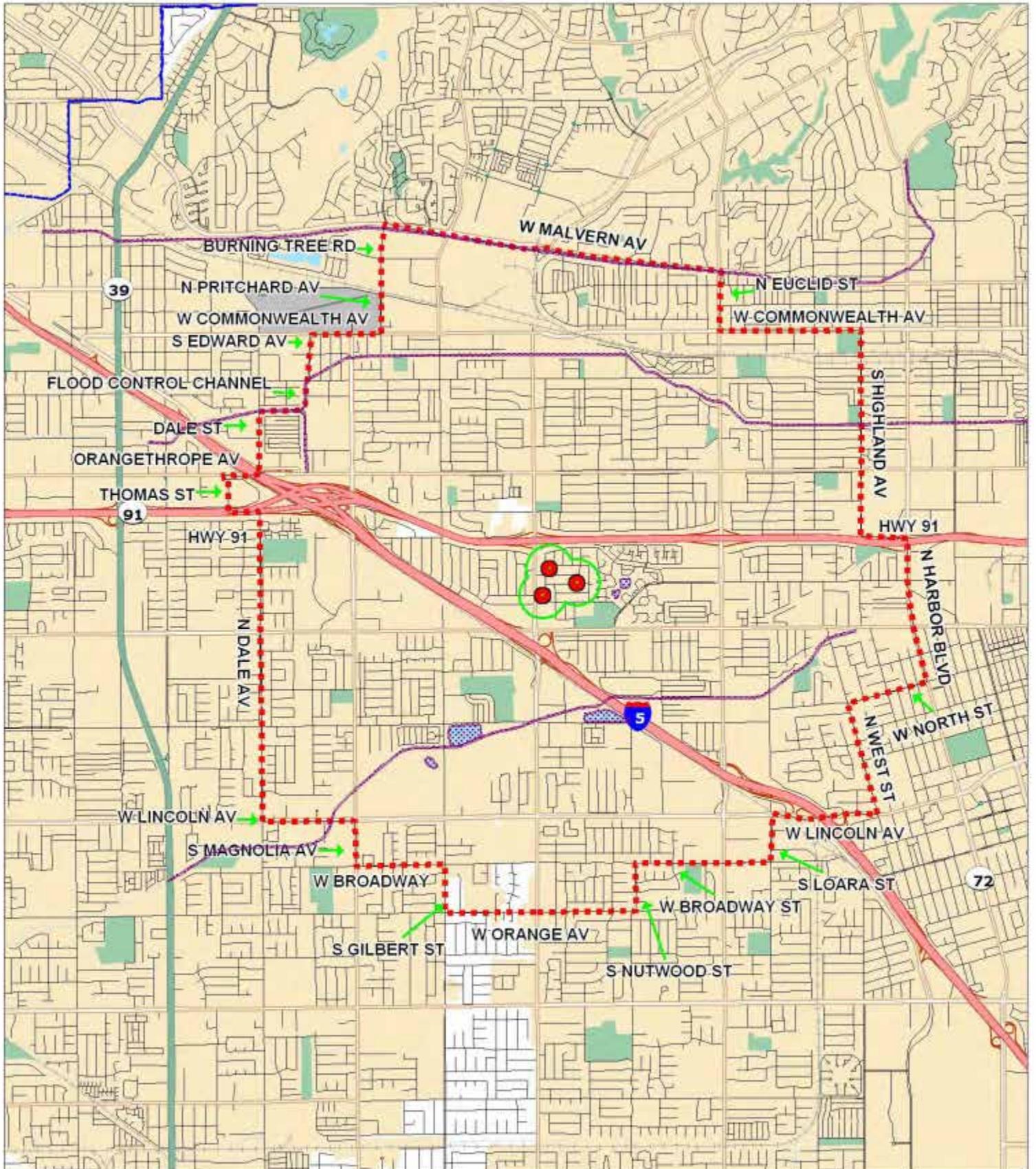
Public Notification

Any resident whose property will be treated following the determination of a breeding population (egg, larvae or mated female) on or near their property is notified at least 48 hours in advance of any treatment in accordance with FAC Section 5779. A breeding population will necessitate an immediate eradication response due to the potential for natural dispersal and the infested fruit to be artificially moved out of the area. After treatment, completion notices are left with the residents detailing precautions to take and post-harvest intervals applicable to any host fruit treated.

Public information concerning the OFF project will consist of press releases to the general public and direct notification of project developments to concerned local and state political representatives and authorities. Press releases are prepared by the CDFA's 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.

If you have specific questions related to this program, please contact John Hooper, Program Supervisor at (916) 654-1211.

ORIENTAL FRUIT FLY
ANAHEIM, ORANGE COUNTY
2011



● DETECTION SITE
..... MAXIMUM PROGRAM BOUNDARY



○ PROPOSED 200M SPINOSAD TREATMENT AREA



— ENVIRONMENTALLY SENSITIVE AREA
— NO TREATMENT