



CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

OFFICIAL NOTICE FOR THE CITY OF LA MESA COMMUNITY OF SPRING VALLEY PLEASE READ IMMEDIATELY

AMENDMENT TO THE NOTICE OF TREATMENT FOR THE MEDITERRANEAN FRUIT FLY

On July 22 and July 31, 2015, three Mediterranean fruit flies (Medflies), *Ceratitis capitata* (Wiedemann), were trapped in the city of La Mesa, San Diego County. On August 4, 2015, an additional Medfly was trapped in the community of Spring Valley. Based on the survey data, pest biology, information from the California Department of Food and Agriculture (CDFA) Mediterranean Fruit Fly Science Advisory Panel (MedSAP), recommendations provided by the CDFA Primary State Entomologist, and the CDFA "Action Plan for Mediterranean Fruit Fly *Ceratitis capitata* (Wiedemann)," the CDFA concludes that an infestation of Medfly exists in this area.

A Program Environmental Impact Report (PEIR) has been certified which analyzes the Medfly 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 are conducted as described in the PEIR.

In accordance with integrated pest management principles, the CDFA has evaluated possible treatment methods and determined that there are no cultural methods available to eradicate Medfly. The CDFA will employ biological control via sterile insects as the primary tool, complemented by limited chemical control, and will use physical control via host fruit removal when there is evidence that a breeding population exists on a property.

The treatment plan for the Medfly infestation will be implemented as follows:

- The sterile insect technique (SIT) makes use of sterile Medflies to prevent the production of viable offspring. The wild female Medflies mate with the sterile males and lay infertile eggs, thereby disrupting the breeding cycle and causing the population to be eliminated. Sterile flies are released by aircraft within a 3.5-mile radius around each detection site. Releases are repeated every three to four days for two life cycles of the fly (typically four to six months, dependent on temperature).
- Foliar-bait treatments are used within 200 meters of each detection site in order to mitigate the spread of Medfly by eliminating those adult life stages not directly affected by SIT (i.e., mated females and sexually immature flies). Foliar-bait ground treatments are a protein-bait spray that contains an organic formulation of the pesticide spinosad (GF-120 NF Naturalyte® Fruit Fly Bait), and are repeated every seven to 14 days for one life cycle of the fly (typically two to three months, dependent on temperature). Please visit the CDFA website to learn more about the treatment process at <http://www.cdfa.ca.gov/plant/videos/spinosad/>.
- If evidence that a breeding population exists on a property (i.e., immature stages, mated female, or multiple adults), all host fruit from each detection site and all properties within a minimum of 100 meters of each detection site will be removed and disposed of in a

landfill in accordance with regulatory protocols. Fruit removal will occur once at the beginning of the project, but may be repeated if additional flies are detected.

Public Notification:

Any resident whose property will be treated via foliar-bait sprays or host fruit removal will be notified in writing at least 48 hours in advance of any treatment, in accordance with the California Food and Agricultural Code Sections 5779. Following the treatment, completion notices are left with homeowners detailing precautions to take and post-harvest intervals applicable to any fruit on the property. For SIT applications, notification is given to the general public via mass media outlets such as newspapers or press releases, and information is posted at http://www.cdfa.ca.gov/plant/PDEP/treatment/medfly_treatment.html. Information concerning the Medfly project will be conveyed directly to concerned 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.

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.

Enclosures

AMENDMENT TO THE FINDINGS REGARDING A TREATMENT PLAN FOR THE MEDITERRANEAN FRUIT FLY

On July 22 and July 31, 2015, three Mediterranean fruit flies (Medflies), *Ceratitidis capitata* (Wiedemann), were trapped in the city of La Mesa, San Diego County. On August 4, 2015, an additional Medfly was trapped in the community of Spring Valley. Based on the survey data, pest biology, information from the California Department of Food and Agriculture (CDFA) the CDFA Primary State Entomologist, and the CDFA "Action Plan for Mediterranean Fruit Fly *Ceratitidis capitata* (Wiedemann)," I have determined that an infestation of Medfly exists in the area.

The Medfly is an exotic insect originating in Africa, and has been accidentally introduced into southern Europe, western Australia, and Central and South America. Its distribution in the United States is restricted to the Hawaiian Islands, where it was discovered in 1910. Worldwide, the Medfly has been recorded infesting over 250 different types of fruits and vegetables. A great number of crops in California would be threatened by the introduction of this pest including apple, apricot, avocado, cherry, date, grape, grapefruit, nectarine, orange, peach, pepper, and tomato. Damage occurs when the female lays eggs in the fruit. These eggs hatch into larvae, which tunnel through the flesh of the fruit, making it unfit for consumption. This pest presents a major threat to a wide variety of California produce, with the combined 2012 gross value of these commodities being over \$15 billion. The permanent establishment and spread of this pest would result in increased production and postharvest costs to safeguard commercial fruit from infestation, increased pesticide applications on both production agriculture and residential properties to mitigate damage, and lost economic activity and jobs from trade restrictions imposed by the United States Department of Agriculture (USDA) and foreign trade partners.

This decision to proceed with treatment is based upon a realistic evaluation that it will be possible to eradicate Medfly from this area and prevent its spread 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 Commissioners and Sealers Association, the USDA, and scientists on the MedSAP. Due to the size of the infested area and the number of Medflies detected, historical data indicates that eradication is possible. The first California Medfly detections occurred in Los Angeles County in 1975, and since that time, numerous re-introductions have been delimited and successfully eradicated. 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 Medfly infestation: 1) physical controls; 2) cultural controls; 3) biological controls; and 4) chemical controls.

Based upon input from my professional staff and outside experts familiar with Medfly, I have concluded that there are no cultural methods that are effective to treat the Medfly that allow the CDFA to meet its statutory obligations. To eradicate Medfly, I am ordering that sterile insect releases and ground applied foliar-bait sprays be used. Releases of sterile flies will occur via aircraft, while foliar bait spray treatments consist of an organic formulation of spinosad applied to host trees using ground-based equipment. Additionally, in the event of evidence of a breeding population on a property, host fruit removal will occur. Descriptions of these options are below. The options selected are a biological-control measure that involves the use of sterile insects targeting reproduction, a chemical-control measure that involves the use of insecticides targeting the adult stage, and a physical-control measure targeting the eggs and larvae. These

options were 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 Medfly 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 Medfly at the program level and provides guidance on future actions against the Medfly. It identifies feasible alternatives and possible mitigation measures to be implemented for individual Medfly treatment activities. The Medfly 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 treatment program area encompasses those portions of San Diego County which fall within 3.5 miles around each property on which a Medfly 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.** Traps will be placed throughout the program area to delimit the infestation and to monitor post-treatment Medfly populations. Cardboard Jackson sticky traps and the cardboard Champ[™] sticky traps are baited with the attractant trimedlure, and plastic Multilure[®] traps baited with three-component lure and diluted anti-freeze are used. Champ[™] traps are placed over a nine-square-mile area around each detection site (core and first buffer) at a density of 100 in the core square mile and 50 in the surrounding eight-square-mile buffer. Jackson traps are placed in each mile of the remaining delimitation area, in a 25-20-10 array. Twenty-five Multilure[®] traps are placed in the core square mile. Once sterile releases have begun, trap densities in the affected square miles are reduced to 20 Multilure[®] traps per square mile. Following the cessation of sterile release, Champ[™] traps are added back at pre-release levels, and Multilure[®] trap density is adjusted to pre-release levels. 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 three Medfly generations

beyond the date of the last fly detected. In addition, host fruit will be sampled for the presence of eggs and larvae in a 200-meter radius around each detection site.

2. Treatment. Any Medfly detections within the original and/or expanded eradication area(s) will be treated according to the following protocol:
 - The sterile insect technique (SIT) makes use of sterile male Medflies to prevent the production of viable offspring. The female Medflies mate with the sterile males and lay infertile eggs, thereby disrupting the breeding cycle and causing the population to be eradicated. Sterile flies are released by aircraft in a 3.5-mile radius around each detection site. Releases are repeated every three to four days for two life cycles of the fly (typically four to six months, dependent on temperature). The minimum release rate is 250,000 flies per square mile per week.
 - Foliar-bait treatments are used within 200 meters of each detection site in order to mitigate the spread of Medfly by eliminating those adult life stages not directly affected by SIT (i.e., mated females and sexually immature flies). 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 (GF-120 NF Naturalyte® Fruit Fly Bait) using hand spray or hydraulic spray equipment. Treatments are repeated every seven to 14 days for one life cycle of the fly (typically two to three months, dependent on temperature).
 - If evidence that a breeding population exists on a property (i.e., immature stages, mated female, or multiple adults), all host fruit from each detection site and all properties within a minimum of 100 meters of each detection site will be removed and disposed of in a landfill in accordance with regulatory protocols. Fruit removal will occur once at the beginning of the project, but may be repeated if additional flies are detected.

Public Information

Any resident whose property will be treated via foliar bait sprays or host fruit removal will be notified in writing at least 48 hours in advance of any treatment, in accordance with the California Food and Agricultural Code (FAC) Sections 5779. Following the treatment, completion notices are left with the residents detailing precautions to take and post-harvest intervals applicable to any fruit on the property. For SIT applications, notification is given to the general public via mass media outlets such as newspapers or press releases. Information concerning the Medfly program will be conveyed directly to local and State political representatives and authorities via letters, emails, and/or faxes. Treatment and other information is posted at http://www.cdfa.ca.gov/plant/PDEP/treatment/medfly_treatment.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 Medfly in this area, that it is incumbent upon me 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 3591.5) 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 program work plan above describes the CDFA's actions that are necessary to mitigate the effects of this pest.



Karen Ross, Secretary

8/10/15
Date

**MEDITERRANEAN FRUIT FLY ERADICATION PROJECT (AMENDMENT)
LA MESA/SPRING VALLEY, SAN DIEGO COUNTY
2015**

