

## PROCLAMATION OF AN ERADICATION PROJECT REGARDING THE LIGHT BROWN APPLE MOTH

Upon inspection of the LBAM traps and visual surveys conducted between March 5, 2013, and June 18, 2013, 11 separate detections of light brown apple moth (LBAM), a serious exotic pest were detected in the city of Oceanside, San Diego County. Eight of these detections are within 1.5 miles of each other. Based upon the proximity in time and distance between the detections sites, these LBAM detections indicate that an infestation exists in the area.

The light brown apple moth is a pest to ornamental plants and agricultural crops. It is native to Australia, and has become established in New Zealand, New Caledonia, Hawaii, and the British Isles. If the LBAM becomes established in California, this pest will devastate residential landscapes and agriculture. The LBAM attacks over 250 hosts. It attacks nearly all types of fruit crops, ornamentals, vegetables and nursery stock. Hosts occurring in California that are of significant concern include: apple, apricot, avocado, broccoli, camellia, chrysanthemum, citrus, cottonwood, cypress, dahlia, ferns, geranium, grape, honeysuckle, kiwi, oak, peach, rose, spruce, strawberry and willow. LBAM causes economic damage from feeding by the larvae. The pest destroys, stunts and deforms young seedlings; spoils the appearance of ornamental plants; and injures deciduous fruit tree crops. During severe outbreaks, damage to fruit may be as high as 85 percent of the crop.

The impact on production costs for LBAM hosts in California could top \$95 million. It was estimated for Australia that LBAM causes AU\$21.1 million annually in lost production and control costs, or about 1.3% of gross fruit value, for apples, pears, oranges and grapes. Applying this percentage to the 2011 gross value of these same crops in California of \$4.6 billion, the estimated annual production costs would be \$59.8 million. This estimate does not include economic costs to the nursery industry nor to other significant host crops in California such as apricots, avocados, kiwifruit, peaches and strawberries. If the same level of costs were incurred by these as for the previous four crops, the additional costs would be \$36.4 million, based on their 2011 gross value of \$2.8 billion. Therefore, the total lost production and control costs in California could be \$96.2 million for all of the crops mentioned above. Based upon the known climatic zones of infested origins, and the distribution of similar climatic zones in California, it is likely that the pest will successfully adapt to the climate of this state if the infestation is not eradicated.

Establishment of the LBAM could cause indirect environmental damage via increased pesticide use statewide by commercial and residential growers and direct damage via adverse feeding impacts on native plants. Populations of threatened and endangered plant species could be severely threatened or extirpated should this moth adapt to feeding on them.

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 LBAM, that it is incumbent upon me to attempt to eradicate the LBAM and its life stages from infested areas of California.

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 3591.20) as are reasonably necessary to carry out the provisions of this code; abate a 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 LBAM and prevent the establishment and the spread of the LBAM using currently available technology in a manner that is based on an action plan developed by USDA, CDFA and scientists on the LBAM Technical Working Group. In making this decision, CDFA has evaluated possible eradication methods. In accordance with integrated pest management principles, the following is a list of options that I have considered for the eradication of this LBAM infestation: 1) mechanical controls; 2) cultural controls; 3) biological controls; 4) pheromone mating disruption; and 5) foliar application of pesticides.

Based upon input from my professional staff and recommendations from outside experts familiar with the LBAM, I have concluded that there are no mechanical, biological, or cultural control methods that are effective to eradicate the LBAM that allow CDFA to meet its statutory obligations. To eradicate the adult LBAM I am ordering the deployment of pheromone-infused dispensers be applied by ground to LBAM hosts within a 200-meter radius around all detection sites. In issuing this decision, I have considered pesticidal and non-pesticidal options. The option selected is a chemical control measure that involves the use of a synthetic insect pheromone (sexual attractant) that confuses male moths, impairing their ability to find mates. This option was selected based upon biological effectiveness, minimal public intrusiveness, cost and, and minimal impacts to the environment.

An Environmental Impact Report (EIR) has been prepared for the LBAM project in accordance with Public Resources Code (PRC), Sections 21000 et.seq. The LBAM Program EIR was certified by the Secretary of CDFA on March 22, 2010. The EIR addresses the eradication of LBAM at the program level and provides guidance for the conduct of future actions against the LBAM. It identifies feasible alternatives and possible mitigation measures to be implemented in individual LBAM eradication activities. I have incorporated the mitigation measures and integrated pest management techniques as described in the EIR. In accordance with PRC Section 21105, this EIR 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 Wildlife's California Natural Diversity Database for threatened and endangered species. Mitigation measures will be implemented as needed. CDFA also consults with the U.S. Fish and Wildlife Service and National Marine Fisheries Service when rare and endangered species are located within the treatment area. CDFA will not apply pesticides to bodies of water. CDFA will also not apply pesticides to schools, day care centers, nursing homes, and hospitals.

### **Eradication Plan**

The proposed eradication area encompasses an area within the City of Oceanside, San Diego County, which falls within 200 meters of each individual detection site. If additional LBAM are detected outside of the eradication area, the area will expand as necessary. A map of the detection sites is attached. In summary form, the work plan consists of the following elements:

1. Trapping – Jackson traps baited with the LBAM pheromone lure will be placed in the treatment area at the density of 25 traps per square mile where LBAM has been detected. Additional traps may be added to further delimit the infestation and to determine the efficacy of treatments. All monitoring traps will be serviced on a regular schedule for a period of time equal to three generations beyond the date of the last LBAM detection.
2. Treatment – Ground applications with pheromone-infused dispensers placed on trees, shrubs on designated properties within a 200-meter radius of each detection site. The pheromone dispensers contain an odorless, synthetic insect pheromone (sexual attractant) that confuses male moths, impairing their ability to find mates. Once the breeding cycle of the moth is broken, the LBAM population is reduced and ultimately eradicated from the area. Residents in the affected area will be notified in writing prior the deployment of the pheromone dispensers.
3. Post-Treatment Monitoring – the LBAM traps will be inspected for one life cycle following the last deployment of the pheromone dispensers.
4. Quarantine – The official detection of any life stage of the LBAM will trigger a quarantine or expansion of an existing quarantine boundary. The quarantine boundaries will be developed in association with local regulatory authorities.

All regulated entities, such as nurseries, landscapers, packing houses and green waste handlers will be identified, informed of the quarantine restrictions and placed under regulatory compliance. Quarantine inspections will be conducted as necessary in all quarantine areas to ensure ongoing compliance with quarantine restrictions.

### **Public Notification**

Any resident whose property will be treated following the determination of a population of LBAM on or near their property will be notified in writing at least 48 hours in advance of any treatment in accordance with FAC Section 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.

Public information concerning the LBAM project may 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 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 CDFA Toll-Free Hotline at 1(800)491-1899.

# 2013 Light Brown Apple Moth San Diego County Oceanside Area

