

PRESS RELEASE FOR IMMEDIATE DISTRIBUTION

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LIGHT BROWN APPLE MOTH aka LBAM!

In July and November of 2006 a moth was found in a homeowner's blacklight insect trap in Berkeley. Early in February of 2007 it was identified as *Epiphyas postvittana*, more commonly known as the Light Brown Apple Moth (LBAM). This moth is originally from Australia, and has become established in New Zealand, New Caledonia, Hawaii and the British Isles. This was the first known detection of this insect in North America, and as such, began a huge effort by the United States Department of Agriculture (USDA), the California Department of Food and Agriculture (CDFA), and local Agriculture Departments, including our own Alameda County Department of Agriculture to learn the extent of the infestation. It has been detected in 12 counties throughout the State. Detection traps have been deployed throughout the state to determine the boundaries of this pest. Nationally, survey trapping will be conducted to determine if this pest exists in other parts of the country.

The USDA has solicited the help of a group of scientists to evaluate the severity of the situation and make recommendations on eradication and other approaches. The objective is to protect the environment including agricultural crops and urban landscape, while ensuring the health and well-being of our citizens.

The moth larvae do severe damage by feeding on leaves and fruits of a large number of host plants-including, but not limited to, apple, pear, citrus, peach, avocado, oak, willow, walnut, pine, eucalyptus, roses, jasmine, strawberry, table and wine grapes, berries and other ornamental shrubs, bushes and trees. Hitchhiking is the most likely way this pest has been dispersed -people moving infested plants, fruits, and vegetables from an infested site to a non-infested one.

Quarantines have been established around known finds of this pest. In Alameda County, the quarantine areas include Albany, Berkeley, most of Oakland, and areas in Dublin, Fremont, Union City, and Pleasanton. Additional inspection and/or certification for plant products leaving these quarantine areas is now required. Nurseries in the affected areas are inspected and sign a compliance agreement which spells out how to keep this insect pest out of their nursery stock and, if found, how to eradicate it.

Officials continue to educate and work with retail, wholesale, and production nurseries, maintenance gardeners, green waste facilities, community and school gardens, various garden clubs, public agencies, and certified farmers' markets on how best to stop the spread of this pest.

USDA and CDFA eradication strategies are based around the use of a synthetic insect pheromone specifically formulated for LBAM. Female moths emit a pheromone in order to attract a male moth, which are "hard-wired" to respond, for mating. By flooding an area with this synthetic pheromone the male moths become confused and cannot find a female moth. Eventually the population collapses and eradication is achieved. No conventional pesticides are used, it is pest specific, and non-toxic (it doesn't even kill the target moth). This cutting edge 21st century pest management strategy is consistent with Integrated Pest Management (IPM) philosophy.

There are three different approaches based on the number of moths trapped. At low levels a twist-tie approach is used. A piece of plastic, much like the produce ties found in grocery stores, are saturated with the pheromone, attached to a wire hanger and placed at a rate of 250/acre or approx. 40 per residential property which are within 200 meters of the find. At

medium levels a bait station consisting of pheromone and a small amount of pyrethrium is applied to street poles or trees 8 feet above ground. The moth is attracted to the station and dies when it comes in contact. In conjunction with the bait stations, the area may be saturated with a small parasitic sting-less wasp which will lay eggs in moth eggs and consume it from within. At large levels, aerial applications of the pheromone is used in order to cover large areas.

Alameda County residents are asked to help stop the spread of LBAM by not taking fruits and vegetables, or plant material out of the quarantine area.

For more information, please go to www.cdfa.ca.gov/lbam.



Figure 1 larvae final stage



Figure 2 egg mass



Figure 3 pupa



Figure 4 moth male on left