

## Actions Taken To Eradicate Light Brown Apple Moth From California

Prepared by the Animal and Plant Health Inspection Service at the request of the Secretary of Agriculture

April 8, 2008

Insect pheromones are recognized in the scientific community to be naturally occurring, species-specific compounds that are produced and released by female insects to attract males for mating purposes. Insect pheromones exhibit no toxicity to their target-or nontarget-species. Based on its evaluation of such pheromones, the U.S. Environmental Protection Agency (EPA) has determined that certain pheromone products pose no risk to human health or to the environment. APHIS will only use EPA-approved pheromone products in the LBAM eradication program and will make its selection based upon two key criteria: (1) the safety of the pheromone as it relates to the environment and public health and (2) the efficacy of the pheromone in disrupting LBAM mating and controlling the LBAM infestation in California.

Over the past year, APHIS has published several environmental assessments (EA) to analyze the potential environmental impacts of proposed LBAM eradication activities in various areas of California. The most recent programmatic EA was published in February 2008, and the 30-day public comment period for this EA closed on March 17, 2008. APHIS is now reviewing the comments.

APHIS is committed to ensuring that planned aerial pheromone applications are safe-both for the public and the environment. While EPA has determined that insect pheromone poses no risk to human health and the environment, APHIS has voluntarily chosen to have a further assessment conducted of any potential toxicity that may be associated with the ingredients of the LBAM pheromone formulations currently under consideration for use. EPA will review the results of the additional testing and will assess any potential toxicity of the inert ingredients based upon oral, dermal, and inhalation toxicity; potential skin and eye irritation; and potential skin sensitization. Once toxicity testing on the LBAM pheromone formulations is complete, APHIS will publish a supplemental EA regarding aerial spraying for LBAM eradication in California and will solicit public comments on that document for 30 days. In addition, APHIS will review all input received during the comment period and give it careful consideration in the decisionmaking process.

APHIS believes that public outreach is key to program acceptance and success. Prior to the application of LBAM pheromone in residential neighborhoods in fall 2007, APHIS and the

California Department of Food and Agriculture (CDFA) held open house meetings for local residents in 15 counties to answer their questions and respond to their concerns. In February and March 2008, LBAM program staff participated in informational hearings held by the California State Assembly Environmental Safety and Toxic Materials Committee. In addition, APHIS has provided outreach to agriculture industry stakeholders and the public-through briefings, conference calls, daily reports, brochures, factsheets, treatment notifications, and environmental documentation-from the outset of the LBAM eradication program. Most recently, APHIS, CDFA, industry representatives, and other important stakeholders met on March 18, 2008, to coordinate outreach efforts to address public concerns and to emphasize the pest's impact on native ecosystems. As the program moves forward in 2008, dozens of additional meetings will provide a forum for stakeholders to discuss LBAM eradication efforts. APHIS and CDFA remain committed to this intensive outreach program for stakeholders to ensure the success of the LBAM eradication program.

The U.S. Department of Agriculture (USDA) agrees that we should collaborate with other Federal and State agencies as we work to address public concern about the human health impacts of aerial pheromone treatments. In recent months, APHIS officials have been in contact with the U.S. Surgeon General and the Department of Health and Human Services' Centers for Disease Control and Prevention about this issue. While officials of those agencies recognized our interest in working with them, they ultimately deferred to EPA as the lead agency on matters involving pheromone materials and other products registered as pesticides. APHIS officials are continuing to work closely with their counterparts at EPA to ensure that all LBAM eradication activities are carried out in compliance with our obligations under the National Environmental Policy Act and other applicable State and Federal environmental statutes.

In addition, APHIS is working cooperatively with the California Department of Public Health concerning this issue. CDFA has also established an advisory group of State and county public health officials to review such complaints and provide recommendations on how to respond. APHIS will continue to take all possible steps to assure the public that the pheromone treatments used in the LBAM program are safe for public health and the environment. USDA is carefully balancing public concern with the urgency of the LBAM situation for California's agriculture industry and plant resources, including those of homeowners and residents. LBAM is potentially one of the most destructive invasive pests the United States has ever experienced. The next generation of adult moths is expected to emerge this summer, and it is critical that we disrupt mating among emerging adult moths. Without action, a significant increase in California's LBAM population will occur and severely jeopardize our ability to eradicate the pest.

If left uncontrolled, based on LBAM's current distribution, this pest could cause an estimated \$160 to \$640 million annually in crop losses and pest control costs if it spreads to agricultural

production areas from the affected California counties. If LBAM were to spread beyond the currently affected counties, the estimated losses to agriculture production within California could be up to \$2.4 billion annually. Exports of significant California crops would also be impacted. Furthermore, if LBAM is not eradicated, the likelihood that producers of host crops will seek to manage the pest using chemical pesticides is significantly high. APHIS is working diligently with the State of California to prevent such a situation from occurring. In so doing, APHIS proposes to use the aerial application of LBAM pheromone to cause mating disruption as a primary means of eradicating this pest. In addition, APHIS and CDFA propose to incorporate other tools-such as trichogramma parasitic wasps and ground applications of two naturally occurring insecticides, spinosad and *Bacillus thuringiensis kurstaki*-in the eradication effort.