

What Others are Saying

Comments in Support of the California LBAM Project

**Dr. Ronald Tjeerdema, Chair, Department of Environmental Toxicology
University of California, Davis**

**(Article by Erin Digitale, "Report: Moth spray not a likely cause of Monterey Peninsula illnesses,"
The Salinas Californian, dated November 20, 2007)**

"Looking at the ingredients, I don't see anything of concern. The Department of Food and Agriculture should be commended for using pheromones and not traditional pesticides."

Mary-Ann Warmerdam, Director, Department of Pesticide Regulation

Joan Denton, Director, Office of Environmental Health Hazard Assessment

(Letter to Secretary Linda Adams, Cal-EPA; Secretary Kim Belshe, California Health and Human Services Agency; and Secretary A.G. Kawamura, CDFA; dated November 16, 2007)

"In summary, the toxicity data on the pheromone active ingredients, as well as on microencapsulated pheromone product formulations, suggest that exposure to a high dose of airborne Checkmate microencapsulate particles could cause eye, skin, or respiratory irritation. The application rates were extremely low, and it is likely that exposure occurred at levels below those that would be expected to result in health effects. Measured deposition rates fell below the proposed rate of 20 grams active ingredient per acre.

Public concern has centered on the previously undisclosed inert ingredients, which have now been disclosed. Water is the bulk of the inert ingredients, as the microencapsulated polyurea particles consist primarily of the pheromone active ingredients. The polyurea shell exists only as a component of the particles, and makes up only a small percentage of the particle weight. While the toxicological information on the Checkmate product indicates that exposure to high levels of the applied material would be consistent with many of the reported symptoms, the application rate was extremely low, and it is likely that exposure occurred at levels below those that would be expected to result in health effects."

**Dr. Gina Solomon, Physician and Senior Scientist
Natural Resources Defense Council**

(NRDC Position Statement on Spraying for LBAM in California, dated November 14, 2007)

"On September 8, 2007, NRDC responded to a request from Assemblymember John Laird stating support for the use of the pheromone Checkmate. The letter stated, in part: 'we applaud CDFA's decision to use an approach to the LBAM that relies on the principles of [integrated pest management] and that uses a pheromone-based approach instead of toxic insecticides. We hope that the prompt use of such a strategy will help to avert future use of insecticides to control this pest.'

NRDC still believes that there are unlikely to be toxicity concerns with the pheromone spraying. Unlike pesticides, pheromones are not toxic to living things, and would not be expected to have adverse effects on human health or the environment. Pheromones are used in organic agriculture and are a major component of integrated pest management (IPM) approaches. NRDC is also concerned that the establishment of LBAM in California could result in a

significant increase of insecticide use in the future as farmers, landscapers and others take matters into their own hands to control this pest."

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Santa Cruz Sentinel Staff Report

(Excerpts from "As We See It: It's time to allow spraying," dated October 24, 2007)

"Independent experts have weighed in and said that the active ingredients are benign, and that the spraying would carry with it little risk for the public.

What's worth remembering is that the apple moths themselves pose a huge risk to the local agricultural community, and to the jobs and well-being of a big number of local residents.

We hope that some reasonable members of the public will make their wishes known to local officials, and support them in doing the best thing for the largest number of people—ensuring that the spraying program continues, and that it will fight back against the worsening apple moth problem."

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Dr. Hugh Stallworth, M.D., M.P.H., Division Chief and Health Officer

Monterey County Health Department

(Article by Tom Ragan, "City Council votes to try to stop moth spraying," Santa Cruz Sentinel, October 10, 2007)

The Monterey County Department of Health is uncertain there's a link between the spraying and the illnesses, said Dr. Hugh Stallworth, the county's public health officer. "Two things confound the possibility that symptoms are caused by spraying," he said. "One is that September is a month when allergies are either continuing or starting to kick up. And this is the time of year when kids go back to school, and we tend to see upper respiratory infections that kids are sharing or bringing home."

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Paul Michel, Superintendent

Monterey Bay National Marine Sanctuary

(Letter to CDFG, dated October 5, 2007)

"While the timeline and dynamic geographic scope of the project led to some initial procedural issues, we appreciate your agency's subsequent efforts to communicate and provide requested information. From the outset, we have appreciated the importance of stopping the spread of invasive species and CDFG's use of a pheromone based product over a traditional pesticide.

Since the initial spraying in September, we have arranged for 48-hour acute toxicity tests using mussel embryos to be conducted at the University of California at Davis' Granite Canyon Marine Pollution Studies Laboratory. These tests indicate that the product is non-toxic to marine life."

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**Michael Termini, Mayor
City of Capitola**

(Email to CDFA, dated October 4, 2007)

"Please extend my sincere thanks to the Secretary for not only coming down to meet with us yesterday but also showing great strength and poise in the face of fire. I will continue to be a proponent of the plan and hope we can meet in the future in an environment where questions can be calmly asked and answered."

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**Crawford Tuttle, Chief Deputy Director
Department of Forestry and Fire Protection**

(Excerpts from a letter to Assembly man Laird, dated October 2, 2007)

"If the apple moth were to become established, it would undoubtedly encounter and feed on many new hosts, including some native plants that are threatened or endangered. The risk to California's natural environment is significant. Experience in New Zealand indicates that Monterey pine is susceptible to the light brown apple moth. Monterey pine is an important native component of California's Central Coast forest ecosystem and is already threatened by a number of exotic pest and environmental stressors.

Review of scientific materials by CAL FIRE staff indicates that the exposure to the environment is expected to be minimal.

Pheromone treatments are most effective at controlling small populations; such as is currently the situation for the light brown apple moth in California. Their low toxicity, effectiveness at low doses, and high target specificity make pheromones an extremely safe treatment option. We know of no other eradication treatment options that would be safer and equally effective. Based on the information reviewed by CAL FIRE, I believe that the CDFA, in cooperation with the USDA, by its use of pheromone for mating disruption, has designed the most environmentally benign program possible for the eradication of this potentially very harmful insect.

As the light brown apple moth numbers can increase quickly, a rapid response is needed to curtail populations as soon as possible. Because of the potential environmental and economic impacts of this pest, CAL FIRE supports CDFA's eradication program as a prudent and justified response."

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**Carol Monahan-Cummings, Chief Counsel
Office of Environmental Health Hazard Assessment
California Environmental Protection Agency**

(Email to Ms. Davi, Monterey Asst. Attorney, dated September 19, 2007)

"At this point, the available information indicates to us that there is minimal health risk from the proposed application of Checkmate, the light brown apple moth pheromone."

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**Dr. Hugh Stallworth, M.D., M.P.H., Division Chief and Health Officer
Monterey County Health Department**

(Article by Daniel Lopez, "Anti-moth spraying may not be over: Weather could prevent completion of application," Monterey County Herald, September 12, 2007)

"This material does not appear to be toxic to people, pets or plants. I would be surprised if we see any symptoms either in the short run or the long run."

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**Ruth Coleman, Director
California Department of Parks and Recreation
(Letter to Assemblyman Laird, dated September 12, 2007)**

"LBAM is a generalist defoliator with a long host list including such important native conifers as coast redwood, Douglas-fir, grand fir, pine, spruce and cypress species, western red and Port Orford cedars, and native hardwoods including oaks, willows, cottonwoods, Pacific madrone, and California black walnut. It also will attack a multitude of native shrubs including rhododendrons, coyote bush, currants, roses and sages. In the absence of its native predators and parasites, LBAM could easily explode through California forests causing yet another wave of dead trees and shrubs and the associated costs. It has become exceedingly difficult for Department staff to manage native ecosystems that are repeatedly exposed to such unprecedented disruptions.

The Department of Parks and Recreation strongly supports the efforts of the California Department of Food and Agriculture and the US Department of Agriculture to eradicate LBAM before it becomes permanently established. Weighed against the tremendous long-term cost and toxic pesticide exposure that Californians will have to endure if forced to live with a permanently established population of LBAM, the risk of human injury from exposure to the target-specific insect pheromones Checkmate ORL-F and Checkmate LBAM-F or localized treatments of the insect-specific, biological control bacteria Bt (*Bacillus thuringiensis*) does not appear significant."

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**Steve Shimek, Executive Director
The Otter Project and Monterey Coastkeeper
U.S. Fish and Wildlife Service Sea Otter Recovery Team
Monterey Bay National Marine Sanctuary Advisory Council
(E-mail to CDFA, dated September 12, 2007)**

"I am supportive of the pheromone spraying in Monterey County."

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**Marilyn Dolan, Executive Director
Alliance for Food and Farming
(Letter to CDFA, received September 11, 2007)**

"Since our information gathering shows that this application will be administered in a safe and environmentally friendly manner and because of the potential damage from light brown apple moth to crops, home gardens and native plant species, the Alliance for Food and Farming strongly supports the decision to release this pheromone product in Monterey County."

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**Dr. Carl Winter, Toxicologist and Director
Foodsafe Program, UC Davis**

(Excerpt from Marilyn Dolan letter to CDFA, received September 11, 2007)

"This really is a benign pest control agent. It is much safer than commonly used home cleaning and home pest control products. In fact, as humans, our bodies are unable to recognize and/or even react to pheromones produced by insects."

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**Dr. Frank Zalom, Extension Specialist
Integrated Pest Management, UC Davis**

(Excerpt from Marilyn Dolan letter to CDFA, received September 11, 2007)

"A pheromone is not a pesticide in the sense that it is not intended to kill the pest. Rather, it is a very specific scent that an insect produces to communicate with a potential mate. When applied for pest control, a pheromone works by confusing only the target insect, which prevents it from mating so the species cannot reproduce. Pheromones are naturally occurring in the environment and are produced by most insects, so we are exposed to them every day. Most entomologists consider pheromone mating disruption as a positive approach to controlling pests that do harm to the community or the environment."

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U.S. Environmental Protection Agency

(Excerpt from Marilyn Dolan letter to CDFA, received September 11, 2007)

"Based upon low toxicity in animal testing and expected low exposures to humans, no risk to human health is expected from the use of these pheromones."

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**Peggy Miars, Executive Director
California Certified Organic Farmers**

(Excerpt from Marilyn Dolan letter to CDFA, received September 11, 2007)

"The state is being extremely careful to choose non-toxic materials and to minimize spraying in key areas. We feel that the state is respecting the needs of organic farmers as well as the concerns of citizens. We're talking about the livelihood of thousands of organic farmers in the state who are terribly concerned about the impact of this moth."

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**Peggy Miars, Executive Director
California Certified Organic Farmers
(Letter to CDFA, dated September 7, 2007)**

"We very much appreciate the fact that CDFA chose the least toxic and most environmentally friendly option available."

"Thank you for hosting discussions with residents on this topic and for considering the impact of pesticides upon organic farmers. We believe that CDFA has been responsive and considerate of the community's concerns, protective of the area's special environmental circumstances, and respectful of the needs of organic farmers."

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**Bill Hammond, President
Monterey County Farm Bureau
(Letter to CDFA, dated September 7, 2007)**

"We applaud you for your willingness to meet with local officials and residents to answer their concerns."

"We understand that California is too often the entry point for invasive pests like LBAM. California is the first line of defense for our nation's environment and food supply against this pest. We believe it is vital for you to fulfill your duty to eliminate this new pest before it spreads to other states and other countries."

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**Robert Falconer, Executive Vice President
California Association of Nurseries and Garden Centers
(Letter to CDFA, dated September 7, 2007)**

"We believe that the application of a mating disruption pheromone presents the least risk, most sustainable method of lessening the impact of LBAM."

"Another reason we believe this is the right course of action is that, in the long term, the application of the pheromone now will result in less pesticide use in the future. If the LBAM population is allowed to increase and spread there will be increased pesticide applications for the purpose of general control by nurseries, farmers, landscape maintenance firms and homeowners."

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**The Monterey County Herald
(Excerpts from "The Herald's View: Moth spray opposition overblown," dated September 6, 2007)**

"...based on what is actually known, no matter where one falls on the faith-in-government scale, there is little or no reason to believe the material being sprayed will injure the public now or later. It's a biological control believed to be safer than almost any traditional pesticides.

If you are worried now, you could have bigger things to worry about later."

**James Bogart, President & General Counsel
Grower-Shipper Association of Central California
(Letter to CDFA, dated September 6, 2007)**

"We would like to acknowledge the concerns of residents in Monterey County who are not familiar with this environmentally friendly version of pest control and encourage CDFA to continue educational outreach to the community."

"The potential damage of LBAM to Monterey County agriculture and the local economy could be devastating. But, the Grower-Shipper Association also understands the concerns of residents. This is why we support the simple 'fix' of applying a non-toxic pheromone instead of a traditional pesticide to combat this pest. It's the right decision and we strongly support your decision to release this pheromone product in Monterey County."

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**Dr. Chip Taylor, Entomology Professor and Monarch Butterfly Specialist
Kansas University**

(Secretary Kawamura letter to Mayor Cort of Pacific Grove, dated September 6, 2007)

"It would appear that the spraying is not an immediate threat to the monarchs at Pacific Grove."

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**Dr. Jay Schreider, Primary Toxicologist, Medical Toxicology Branch
David Kim, Environmental Scientist, Environmental Monitoring Branch
California Department of Pesticide Regulation**

(DPR Internal Memorandum, "ENVIRONMENTAL MONITORING RECOMMENDATION FOR SYNTHETIC PHEROMONE TREATMENTS TO ERADICATE THE LIGHT BROWN APPLE MOTH, dated August 27, 2007)

"Considering the low application rate and low toxicity of this class of compounds, DPR believes the proposed applications can be performed with minimal risk to the environment and public health, and no environmental monitoring is needed for any of the application methods described on the labels."

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KSBW Channel 8

("Editorial: Light Brown Apple Moth Hubbub," dated August 24, 2007)

"The bad news: lost in all the hubbub and people ready to head for the hills is the fact that long-time environmentalists will calmly tell you that this proposed use of pheromone is exactly what they and concerned scientists worked long and hard for to replace pesticides."

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The Monterey County Herald

(Excerpt from "No-risk solution not possible," dated August 22, 2007)

"...there seems to be a much greater chance that if the spraying doesn't proceed, the voracious little moths will start causing severe damage to thousands of acres of crops in our area and beyond. There is a much greater chance that if that happens, state and federal agricultural officials will bring in chemicals much higher on the toxicity scale.

There are those in the community who are appropriately concerned but who believe illogically that it's wise to always insist on no-risk solutions.

Like most everyone else, we wish there was another way. But while there are times to draw the line, to go to court, to fight, this is a time when fighting makes little real sense because a victory now would only increase the chances of defeat later."

**David M. Pereksta, Assistant Field Supervisor
United States Department of the Interior
Fish and Wildlife Service**

(Letter to CDFA, dated August 15, 2007)

"We concur with your determination that the proposed application of the LBAM pheromone is not likely to adversely affect the species listed above because:

1. The pheromone is specific to LBAM and would not cause a response from the Smith's blue butterfly, nor disrupt its breeding.

2. The pheromone has very low toxicity at the levels it would be applied and would not adversely affect any of the listed animal species that come into contact with it.
3. The CDFA proposes to avoid spraying the pheromone over open water.
4. The pheromone is sensitive to ultraviolet radiation and oxidation, and would break down rapidly in terrestrial and aquatic environments."

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