

FOR INFORMATION
DA-2008-17
April 28, 2008

SUBJECT: Federal Domestic Quarantine Order for Light Brown Apple Moth, *Epiphyas postvittana*, Interstate Movement Restrictions

TO: STATE AND TERRITORY AGRICULTURAL REGULATORY OFFICIALS

The Animal and Plant Health Inspection Service (APHIS) is amending the Federal Domestic Quarantine Order, issued on September 17, 2007, for the Light Brown Apple Moth (LBAM), *Epiphyas postvittana*, by adding Santa Barbara and Sonoma Counties, California, to the LBAM quarantine.

LBAM is considered to be a pest that is transient: actionable and under eradication in the United States. LBAM was first confirmed in California on March 16, 2007, in Alameda County. This represented the first time this pest was confirmed in the continental United States. Since that time, APHIS has confirmed detections of LBAM in a total of 14 California counties, which include Alameda, Contra Costa, Los Angeles, Marin, Monterey, Napa, San Francisco, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, and Santa Barbara.

In order to prevent the spread of LBAM to other areas in the United States, APHIS established on May 2, 2007, a Federal Domestic Quarantine Order to restrict interstate movement of certain articles from the affected counties of California and the entire State of Hawaii. The statewide quarantine of Hawaii is necessary because of the absence of data on the distribution of LBAM within the State.

This revised Federal Order reflects the current status of the LBAM quarantine area based on the latest information of known and active infestations in affected California counties and describes the conditions required for interstate movement of specified regulated articles from California and Hawaii.

For further information, please contact Deborah McPartlan, Staff Officer, Plant Protection and Quarantine (PPQ), Emergency Management staff at Area Code (301) 734-5356 or Helene Wright, California State Plant Health Director, APHIS, PPQ, at Area Code (916) 930-5500.

/s/ Paul R. Eggert /for

Rebecca A. Bech
Deputy Administrator
Plant Protection and Quarantine

Attachment:
Federal Order

FEDERAL DOMESTIC QUARANTINE ORDER
***Epiphyas postvittana* (Light Brown Apple Moth)**
DA-2008-17

The purpose of this Federal Order is to prevent the spread of Light Brown Apple Moth (LBAM), *Epiphyas postvittana*, through regulatory authority provided by Section 412(a) of the Plant Protection Act of June 20, 2000, as amended, 7 U.S.C. 7712(a), which authorizes the Secretary of Agriculture to prohibit or restrict the movement in interstate commerce of any plant, plant part, or article if the Secretary determines that the prohibition or restriction is necessary to prevent the dissemination of a plant pest within the United States.

The Administrator of the Animal and Plant Health Inspection Service (APHIS) considers it necessary, in order to prevent the dissemination of the LBAM, to establish restrictions on the interstate movement of certain regulated articles from the States of California and Hawaii as described in this Federal Order.

The Administrator issued a Federal Order on May 2, 2007, establishing restrictions on the interstate movement of certain regulated articles from the States of California and Hawaii because of LBAM infestations. The Federal Order of May 2, 2007, designated certain counties in California as well as all counties in Hawaii as quarantined areas. The May 2, 2007, the Federal Order also enumerated regulated articles that could not be moved interstate from those quarantined areas. The Administrator revised on September 17 the Federal Order to add the counties of Los Angeles, Napa, and Solano to the California quarantine area as LBAM detections had occurred in those counties. In addition, the revised Federal Order identified a list of regulated articles (Appendix 1) determined to be exempted from the conditions required in the earlier May 2, 2007, LBAM Federal Order for interstate movement of regulated articles. The exemption is applicable only to commercially-produced commodities based on the pest mitigations provided through industry standards of production, harvesting, and packaging practices for each of the exempted commodities. The Federal Order of November 20, 2007, removed the counties of Napa and Los Angeles from the quarantine area of California for meeting the conditions for removal from the quarantine area as set in the LBAM regulatory protocol (Appendix 2). This Federal Order adds the counties of Santa Barbara and Sonoma to the California quarantine area due to LBAM detections that have occurred in the counties.

A. Quarantined Areas:

The Administrator will list as a regulated area each state, or each portion of a state, in which LBAM has been confirmed by an inspector to be present, in which the Administrator has reason to believe that LBAM is present, or that the Administrator considers necessary to quarantine because of its inseparability for quarantine enforcement purposes from localities in which LBAM has been found.

Less than an entire state will be designated as a quarantine area only if the Administrator determines that:

- 1) The state has adopted and is enforcing restrictions on the intrastate movement of the regulated articles that are substantially the same as those imposed by the Administrator on the interstate movement of regulated articles; and
- 2) The designation of less than the entire state as a quarantine area will be sufficient to prevent the interstate spread of LBAM.

The Administrator or an inspector may temporarily designate any non-quarantine area as a quarantine area. The Administrator will give a copy of this Order along with a written notice for the temporary designation to the owner or person in possession of the non-quarantine area. Thereafter, the interstate movement of any regulated article from an area temporarily designated as a quarantine area will be subject to this Order. As soon as practicable, this area will be added to the list of quarantine areas or the designation will be terminated by the Administrator or an inspector. The owner or person in possession of an area for which designation is terminated will be given notice of the termination as soon as practicable.

The Administrator has determined that California has adopted and is enforcing restrictions on the intrastate movement of the regulated articles that are substantially the same as those imposed by the Administrator on the interstate movement of regulated articles; and that the designation of less than the entire State of California as a quarantine area will be sufficient to prevent the interstate spread of LBAM.

The following areas are designated as quarantined areas:

- a. **State of California** – the counties of Alameda, Contra Costa, Marin, Monterey, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, Santa Barbara, and Sonoma.
- b. **State of Hawaii** – all counties.

B. Determination of Infestation:

Any county in which any of the LBAM life stages are found, including eggs, larvae, pupae, or adults will be considered a quarantined area.

D. Regulated Articles:

The following are regulated articles, and may not be moved interstate from a quarantine area except in accordance with this Order:

- a) Nursery stock

- b) Cut flowers, garlands, wreaths or greenery of any plants
- c) Cut trees and shrubs, such as Christmas trees
- d) Greenwaste
- e) Fruits and vegetables (except as indicated on the attached list of exempted commodities)
- f) Green Hay
- g) Bulk fresh herbs and spices (except as indicated on the attached list of exempted commodities)
- h) Any other products, articles, or means of conveyance of any character whatsoever, when it is determined by an inspector that they present a hazard of spread of LBAM.

D. Conditions for Interstate Movement of Regulated Articles:

- a) State of California –
 - i. In order to be eligible for interstate movement, nursery stock, cut flowers, garlands, wreaths or greenery of any plants, trees and bushes, greenwaste, and green hay located 1.5 miles or less from a LBAM detection site in any of the quarantined counties must meet the following conditions:
 - 1. Trapping for LBAM must occur on each premises or farm that ships regulated articles interstate. Premises or farms that are larger than five acres must maintain traps at a density of one trap every five acres or less. Premises or farms that are equal to or less than five acres must be trapped with a minimum of one trap. Inspection of traps by an inspector must occur biweekly;
 - 2. Nurseries and cut flower farms must implement an Integrated Pest Management (IPM) program that consists of regular inspection and approved treatments designed to target LBAM; and
 - 3. Each shipment of articles intended for interstate movement must be inspected by an inspector and a certificate issued for interstate movement only if the articles are found free of any life stages of LBAM.
 - ii. In order to be eligible for interstate movement under certificate, nursery stock, cut flowers, garlands, wreaths or greenery of any plants, trees and bushes, greenwaste, and green hay, located more than 1.5 miles from a LBAM detection in any of the quarantined counties must meet the following conditions:
 - 1. Trapping for LBAM must occur on each premises or farm that ships regulated articles interstate. Premises or farms that are larger than five acres must maintain traps at a density of one trap every five acres or less. Premises or

farms that are equal to or less than five acres must be trapped with a minimum of one trap. Inspection of traps by an inspector must occur biweekly to ensure freedom from LBAM.

2. Each establishment or facility must be subjected to one visual inspection by an inspector to verify freedom from any LBAM life stages, including eggs, larvae, pupae; and
 3. Each establishment that is inspected and found free of LBAM must be included in a master list of certified LBAM-free facilities maintained by CDFA to ensure compliance with the above two conditions.
- iii. Fruits and vegetables and bulk fresh herbs and spices (except as indicated in the attached list of exempted commodities) growing in areas 1.5 miles or less from a LBAM detection site in any of the quarantined counties must meet the following conditions:
1. Trapping for LBAM must occur at an approved trapping density and must be inspected by an inspector biweekly; and
 2. Each premise or farm must be inspected at least once by an inspector 30 days prior to the interstate movement of regulated articles and found free of LBAM.
- iv. Fruits and vegetables and fresh herbs and spices (except as indicated on the attached list of exempted commodities) growing in areas located more than 1.5 miles from a LBAM detection in any of the quarantined counties must meet the following conditions:
1. Trapping for LBAM must occur at an approved detection level and traps must be inspected by an inspector biweekly.
- b) State of Hawaii – Certificates may be issued by an inspector for the interstate movement of all regulated articles from all counties, provided they meet the conditions specified below:
- i. Regulated articles must be inspected by an inspector and found free from any life stages of LBAM.

E. Definitions:

Certificate: A document, stamp, or imprint by which an inspector affirms that a specified regulated article meets applicable requirements of this subpart and may be moved interstate to any destination.

Green Hay: Any grass or legumes cut and stored used for animal feed that can harbor and sustain any life stages of LBAM.

Greenwaste: Dead or dying plants and plant parts.

Inspector: Any employee of APHIS, the U.S. Department of Agriculture, or any employee of a State, a County, or any other person specifically authorized by the Administrator to perform the duties required under this Order.

2 Attachments

Appendix 1

Light Brown Apple Moth (LBAM) Host List Exempted from Federal Quarantine Order August 2007

The host commodities listed below are exempt from the conditions required in the LBAM Federal Domestic Quarantine Order for interstate movement of regulated articles. The exemption is applicable only to commercially-produced commodities based on the pest mitigations provided through industry standards of production, harvesting, and packaging practices for each of the exempted commodities.

Host (Scientific Name)	Host (Common Name)	Justification for Exemption
Brassica spp.	Broccoli Brussel sprouts Cauliflower Cabbage Kale Bok choy Kohlrabi	Integrated Pest Management (IPM) practices implemented by producers, including the use of routine chemical applications that are designed to suppress Lepidoptera pests, also target LBAM. In addition, harvesting and packaging practices provide the safeguard necessary to eliminate the risk of harboring LBAM. As each of the listed Brassica spp. commodities is hand picked, the outer leaves are removed, and inspected for quality, as well as ensuring freedom from pests and diseases before packing and storage. Blemished commodities do not leave the production area and are either disked into the ground or consumed locally.
Brassica spp.	Mustard Collards	In addition to the above practices, mustard leaves and collards are carefully washed and inspected again prior to packing and storage.

Petroselinum crispum	Parsley	IPM practices implemented by producers, including the use of routine chemical applications that are designed to suppress Lepidoptera pests, also target LBAM. Harvest practices focus heavily on visual inspection of leaves in the field before packing and any blemished product does not leave the production site. Leaves are washed and inspected again before packing.
Apium spp.	Celery	Same as parsley
Lactuca sativa	Head Lettuce	IPM practices implemented by producers, including the use of routine chemical applications that are designed to suppress Lepidoptera pests, also target LBAM. In addition, harvesting and packaging practices provide the safeguard necessary to eliminate the risk of harboring LBAM. Each head of lettuce is hand picked, the outer leaves are removed, and inspected for quality, as well as ensuring freedom from pests and diseases before packing and storage. Blemished lettuce heads do not leave the production site and are either disked into the ground or consumed locally.
Lactuca sativa	Leaf Lettuce	IPM practices implemented by producers, including the use of routine chemical applications that are designed to suppress Lepidoptera pests, also target LBAM. In addition, leaf lettuce is mechanically harvested, thoroughly washed, and then inspected before shipping from the regulated area.
Spinacia oleracea	Spinach	Same as leaf lettuce
Asparagus officinalis	Asparagus	Only the asparagus spears are harvested. After harvest they are washed, inspected and bundled before packing and shipping. Any blemished spears would be culled in the field.
Cucurbita spp.	Squash Pumpkin	Only the squash and pumpkin are harvested (no leaves) and the product is inspected thoroughly before shipping from the field.

Capsicum spp.	Peppers	Only the peppers are harvested (no leaves) and the product is inspected thoroughly before shipping from the field.
Solanum lycopersicum	Tomato	Only the tomatoes are harvested (no leaves) and the product is inspected thoroughly before shipping from the field.
Daucus spp.	Carrot (w/o tops)	This root crop that is generally harvested mechanically with leaves removed in the field. Carrots are processed in packing plants where they are washed, brushed, inspected and packaged before shipping.
Cynara scolymus	Globe artichoke	Only artichoke thistle flower heads are harvested and are inspected twice before packing and shipping from the field to the cooler. They are inspected again at the cooler before final packing and shipping to market.
Raphanus spp.	Radish (w/o tops)	This root crop that is generally harvested mechanically with leaves removed in the field. Radishes are processed through packing plants where they are washed, brushed, inspected and packaged before shipping.
Solanum spp.	Potato	This root crop that is generally harvested mechanically with no leaves attached. Potatoes are processed in packing plants where they are washed, brushed, inspected and packaged before shipping.
Beta spp.	Beet	This root crop that is generally harvested mechanically with leaves removed in the field. Beets are processed in packing plants where they are washed, brushed, inspected and packaged before shipping.
Olea spp.	Olive	The product is hand picked and placed in bins that are immediately taken to packing plants where the olives are placed in a brine solution for curing.
Juglans spp.	Walnuts	All commercial walnuts are mechanically harvested free of husks and leaves and are taken in bins to packing plants where they are inspected thoroughly before packing.

APPENDIX 2

APHIS Plant Protection and Quarantine

Light Brown Apple Moth (LBAM) Regulatory Protocol October 2007

The following regulatory protocol was adopted based on recommendations from the LBAM Technical Working Group (TWG) to initiate or remove conditions required for interstate movement of regulated articles in response to new detections or the elimination of incipient LBAM populations.

Regulatory conditions will be implemented if:

1. A total of two or more LBAM adults are trapped within 3 miles of each other and during the timeframe of one lifecycle as determined by the degree-day phenology model; or
2. A mated female is trapped; or
3. One or more immature LBAMs are confirmed through DNA analysis. An exception to this condition would occur in the event that it could be determined that the presence of the immature LBAM was the result of a regulatory incident. For example, a larva is transported (hitchhiker) into an area on nursery stock.

Regulatory conditions will be removed and trapping will revert to normal detection levels after the last detection if:

1. A trapping protocol of 100 traps per square mile within a 0.5 mile radius and 25 traps per square mile in an additional 1 mile radius is applied for three generations; and
2. No additional moths are trapped; and
3. One of the following:
 - a. No pheromone treatments (mating disruption) were applied during the same period; or
 - b. If pheromone products (e.g., ISOMATE twist ties) were applied in the 200 meter radius for the first two generations, and were completely removed for one additional generation.

The following are actions to be taken to determine the need for regulatory action:

Single finds that are more than 3 miles from any other find can be delimited using the following protocols.

1. A trapping protocol of 100 traps per square mile within a 0.5 mile radius and 25 traps per square mile in an additional 1 mile radius is applied for three generations; or
2. A trapping protocol of 25 traps per square mile within a 1.5 mile radius is applied for four generations; and
3. If no additional moths are found after the prescribed number of generations, then trapping would revert to normal detection levels.