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**Office of intelligence (OI)**

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**BIOSEC THREAT ADVISORY**  
**No.AD-11-0015**  
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## **Invasive Pest**

### **Light brown apple moth (LBAM)**

*(Epiphyas postvittana)*

**Occurring in the following areas:** Northern Europe, southern Australia, New Zealand, Hawaii and mainland USA

**Native range, Australia**

#### **Distribution and Habitat**

*Epiphyas postvittana* (LBAM) is of particular concern because it can damage a wide range of crops and other plants. Young larvae of the light brown apple moth (LBAM) are pale yellow and small (about 1 mm long) and settle on the underside of leaves where they spin a protective web in which they feed. After their first molt they abandon the web to construct a nest by webbing together leaves and or fruit. LBAM always feed under shelter. They continue to feed from this nest until mature at which stage they are up to 25 mm long, pale to medium green in color with a darker green central stripe and a brown head.

The moths which are buff-colored and about 10 mm long are seldom seen.

#### **Ecological Threat**

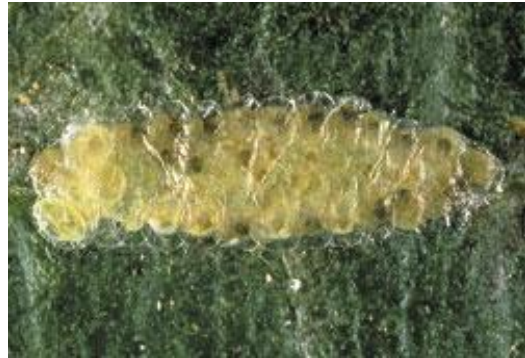
**The light brown apple moth (LBAM), *Epiphyas postvittana* (Walker), is not known to occur in Guam.** LBAM is a highly polyphagous pest that has a host range well over 50 plant families 1,000 plant species. *Epiphyas postvittana* is known to attack more than 250 fruits and vegetables. The introduction of this pest may have an adverse impact on crops and existing endangered fauna. Caterpillars are also known to burrow into fruit to feed. Even if the fruit or leaves are not inedible, LBAM ruins the appearance with visible blemishes and renders the produce generally unmarketable. In addition, LBAM may destroy or stunt the growth of flowers, young plants and trees or damage the ability of plants and trees to produce fruit or flowers, or be harvested.

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**Guam relies heavily on the importation of produce from California. Unfortunately, LBAM has become established in California with seventeen counties now under quarantine.** The quarantine area consists of counties surrounding San Francisco Bay and extending southward along the coast to and including Los Angeles County. It has been determined that the establishment of this pest in the United States would have a severe effect on U.S. agriculture and natural ecosystem. **The introduction of this exotic pest to Guam may have adverse effect on our agriculture industry and the destruction of our fragile ecosystem.** Check amongst the blossom clusters for webbing and presence of the larvae. Leaves should be inspected for the webbed nests constructed by the larvae. Check the Calyx, the bottom of the fruit for the presence of eggs, web material, larva or pupa.



Pupa and caterpillar of (LBAM) Photo: D Ironside



Cluster of eggs Photo: A Green



(LBAM) Male on Left and Female on right



(LBAM) feeding on calyx of apple

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Chronicle / Lance Iversen



Curling of leaves



Stunted growth on black berries.

Larvae of light brown apple moth may be present for most of the year, either in the trees, agriculture crops or on weed hosts.



Leaf heavily damaged by *Epiphyas postvittana*



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(LBAM) caterpillar on tomato fruit.



*Epiphyas postvittana* burrowing into tomato fruit.

Source: [www.apsnet.org](http://www.apsnet.org)  
[www.naplesgov.com](http://www.naplesgov.com)  
Pacific Island Ecosystems at Risk (PIER)  
[www.ct.nrcs.usda.gov](http://www.ct.nrcs.usda.gov)  
[CAIP-WEBSITE@ufl.edu](mailto:CAIP-WEBSITE@ufl.edu)  
[//edis.ifas.ufl.edu](http://edis.ifas.ufl.edu).

### **Note:**

*All officers are reminded to exercise additional scrutiny when screening passengers and cargo arriving from or transiting through the above mentioned areas for any possible restricted or prohibited propagatable plant material or plant products. For more information, please contact the CQA Biosecurity Taskforce at 642-8058/60.*

**Stay Alert. Stay Safe**