



CAES

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OLD WORLD BOLLWORM (*Helicoverpa armigera*)

The old world bollworm (OWB) is native to Europe, Asia, and Africa. It is a pest of over 60 plant species. Major hosts include barley, beans, brassicas, corn, cotton, eggplant, pepper, potato, soybean, sunflower, tobacco, tomato, and wheat. OWB has not been found in the United States, but international trade poses a large risk for its introduction. It has been intercepted at ports of entry over 800 times from 60 countries since 2010. It is estimated to cause over \$2 billion in crop damage annually in regions where it is present.

The adult moths have a wingspan of 1 ¼ to 1 ½ inch, and range in color from yellowish brown to red. The larvae are also highly variable in color, ranging from brownish, reddish, or pale green. *H. armigera* is indistinguishable from *H. zea*, a native species, and must be identified



Source: Central Science Laboratory
Harpenden Archive

through dissection or molecular methods by a trained entomologist.

Larvae primarily feed on flowers and fruits but may also feed on foliage. They bore into these reproductive structures to feed. Frass may be seen near the entrance holes. Feeding damage may cause secondary infections, destroy seedlings, or defoliation.

Bucket traps baited with a pheromone are used to detect the presence of the old world bollworm. Early detection is key to controlling the potential damage and spread of this pest.



Figure 1. *Helicoverpa armigera* adult female (top), and adult male (bottom) (Todd Gilligan, USDA-APHIS-PPQ-S&T).