



Mexican Bean Beetle

Epilachna varivestis Mulsant; Family: Coccinellidae



Adult with summer coloration on a bean leaf.

Photos by Whitney Cranshaw, Colorado State University, from Bugwood.org



Larva and feeding damage on a bean leaf.



Pupa on a bean leaf that was damaged by larval feeding.

Injury

The Mexican bean beetle, formerly called the bean ladybird, is one of the most destructive insect pests of beans in New York State. The beetle feeds on the leaves of almost all types of beans, including snap, lima, pinto, navy, kidney, and soybeans. With snap beans, bush varieties seem to be attacked more readily than pole varieties.

Most of the damage from the Mexican bean beetle occurs during July and August. Both the adult and the larval stages feed on the foliage, chewing out holes in the leaves. They usually feed on the undersides of the leaves, and sometimes will attack young pods and stems. As a result of feeding, only the veins are left, giving the leaves a lacy appearance. Yield may be greatly reduced and the entire planting may be destroyed in severe infestations.

Description

The Mexican bean beetle is a convex beetle, about 1/3 inch long, and pale yellow to copper in color, with 16 black spots on its back. The beetles are pale yellow when they first emerge from the pupal stage, but as they age, they develop the typical copper color.

The eggs are yellow, and found in irregular clusters of 40 or more. The larvae are also yellow, and have branched spines on their body, giving them a fuzzy appearance.

Life History

The adult beetles overwinter in sheltered locations. They leave the overwintering sites when the weather warms up in mid-to-late spring. The females deposit their yellow eggs in clusters on the undersides of the bean leaves. In 5-14 days the young larvae hatch and begin to feed, passing through four molts before reaching the mature size of about 1/3 inch in 3 to 5 weeks. The mature larvae attach themselves to the undersides of the bean leaves

and transform into the pupal stage. The pupal stage is the resting stage and does not feed. In 3 to 7 days the adult beetle emerges. In the fall when cold weather approaches, the adults migrate to sheltered areas in which they will spend the winter.

Management

Hand picking and crushing of the beetles and the eggs will provide limited control. Planting the heaviest crop of beans for canning and freezing early in the season may also be helpful in eliminating some of the beetle damage, because the beetle populations are heaviest during the mid-to-late summer period.

If necessary, control can be obtained if one treats with an insecticide when the first Mexican bean beetles and/or their damage is seen. Check the Days to Harvest on the label and make sure to wait a sufficient number of days after application, before picking beans for use

*Prepared 1978 by Carolyn Klass & Prof. Arthur A. Muka, Dept. of Entomology, Cornell University
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