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Mexican Bean Beetle

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The Mexican bean beetle, *Epilachna varivestis* Mulsant, is the most injurious insect pest of beans. The adults are 1/4 to 1/3 long, slightly oval and yellowish with 16 black spots on their wing covers (elytra). The adults look like large ladybird beetles and are classified in the ladybird beetle family, Coccinellidae. While the Mexican bean beetle and the closely related squash beetle feed on plants, other ladybird beetle species prey on insects and mites.

Life History

The adult Mexican bean beetle overwinters under leaves or other debris in grassy, weedy areas and around fence rows or trees. The adults move into the bean fields and gardens soon after the bean plants emerge. The adults feed for a week or two before laying their yellow egg masses on the underside of the leaves. The eggs hatch in five to 14 days. The bright yellow larvae are oval-shaped with six rows of branched spines. The larvae feed for two to five weeks. Larvae and adults feed on all types of beans and are an occasional pest of soybeans. They generally feed on the underside of leaves, removing all of the leaf tissue except the clear layer on the upper side of the leaf, called the epidermis. This damage, called "windowpaning," gives the leaves a lacelike or skeletonized appearance. The remaining leaf tissue turns brown in a couple of days, giving the field a burnt cast. New pods and stems are often attacked, and severely damaged plants may die prematurely.



Mexican bean beetle. A-B, adults. C, Eggs. D & E, Larvae. F, Pupa.

Control

Early-maturing bean varieties and fall plantings allow crops to escape most of the serious Mexican bean beetle damage occurring in July and August. Destroying old plants and removing pods promptly will aid in slowing the buildup of Mexican bean beetle populations. Treatment is needed if populations of

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more than one adult per two plants or more than one egg mass per foot of row are found.

Insecticides recommended for residential gardens can be found at the following link: https://tiny.utk.edu/ag/gardeninsect.

Insecticides recommended for commercial vegetable production can be found at the following link: http://www.thegrower.com/south-east-vegetable-guide.

References

- Carter, C.C., & K.A. Sorensen. 1983. Beans and Peas, pp. 31-45. K.A. Sorensen and J.R. Baker [eds.], Insect and Related Pests of Vegetables, Some Important, Common, and Potential Pests in the Southeastern United States. The North Carolina Agricultural Extension Service, North Carolina State University, Raleigh, NC.
- Flood, B., R. Foster, & B. Hutchinson. 1995. Beans, pp. 41-54. R. Foster and B. Flood [eds.], Vegetable Insect Management with Emphasis on the Midwest, Meister Publishing Co., Willoughby, Ohio.

Disclaimer

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

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