



# Non-chemical pest control options for managing insect pests on beans

Written by: Dr. Judy Hough-Goldstein March 2025



The Mexican bean beetle, Epilachna varivestis

July and August in the vegetable garden typically bring bountiful harvests of colorful vegetables. These are also the months when insect pests can really make their presence known, with plant and fruit damage becoming increasingly noticeable.



Be sure to crush any eggs and larvae after removing adults. (Photo courtesy of UMD Cooperative Extension)

#### Mexican bean beetles

Mexican bean beetles are plant-feeders in the same family as ladybird beetles (ladybugs)—most of which are beneficial predators.

## Type of damage

Both adults and larvae feed on foliage, skeletonizing the leaves.

## Life cycle

Adults overwinter and emerge with warm weather. Adults feed on tender young bean plants for approximately 12 days, then lay eggs (in batches of 40 to 70) on the undersides of leaves; distinctive spiny yellow larvae feed for 2 to 5 weeks, then pupate on leaves. There is only one generation per year, but egg-laying continues all summer.

#### Life cycle with suggested control methods:

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- is only one generation per year, but egg-laying continues all summer.
- Like most beetles, adults "play dead" (withdraw appendages and drop to the ground) when disturbed. Place open containers with soapy water under beetles, and catch/drown them as they drop. Try to kill the adults as they appear on plants before they lay eggs.
- Crush any eggs and larvae.
- Row covers can be used over bean plants to exclude adults and can be kept in place all season (beans do not require insect pollinators)
- For heavily infested plants, practice "destructive harvest" pull plants up by the roots, harvest any viable beans, then put the remaining plants (with beetle eggs, larvae, and adults) in black plastic bags. Seal and leave in the sun for several days to kill the pests.

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