



## Mexican Bean Beetle *Epilachna varivestis*



**Figure 1.** MBB showing lighter color when young.  
(Note 16 spots.) (Tom Murray,  
[www.pbase.com/tmurray74](http://www.pbase.com/tmurray74))



**Figure 2.** An older MBB with typical copper color.  
(Clemson University, USDA Cooperative Extension  
Slide Series)

**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 (**Fig. 1**) 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 (**Fig. 2**). 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 (**Fig. 3**).

**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 (**Fig. 4**) 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.

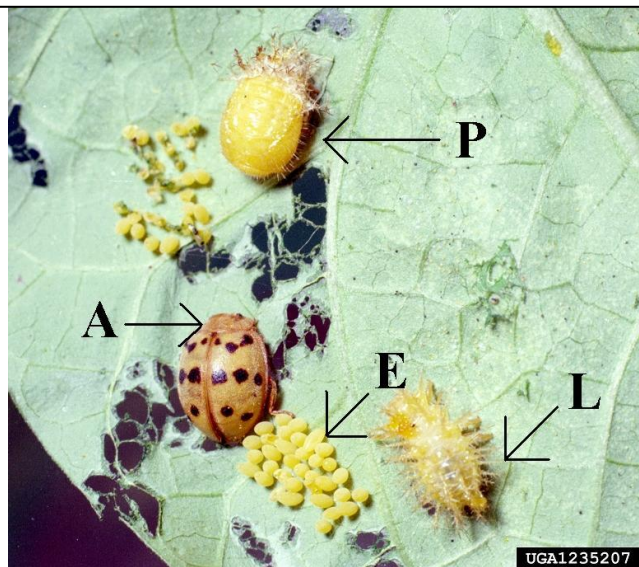
**Management:** Hand picking and crushing of the beetles and the eggs will provide limited control. Planting the heaviest crop of beans for canning and freezing early in the season may also be helpful in eliminating some of the beetle damage, because the beetle populations are heaviest during the mid-to-late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

Good management can be obtained if one treats when the first Mexican bean beetles and/or their damage is

seen. Insecticides registered in 2009 for New York State for use in home gardens include: carbaryl, insecticidal soap (potassium salts of fatty acids), kaolin clay (for suppression only), malathion, neem oil (a repellent), permethrin, or pyrethrins with canola oil. 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.



**Figure 3.** A MBB adult and larva. (Note the branched spines on the larva) (Clemson University, USDA Cooperative Extension Slide Series)



**Figure 4.** Life cycle of the MBB. A) adult, P) pupa, E) eggs, L) larva. (Clemson University, USDA Cooperative Extension Slide Series)

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The Pesticide Management Education Program (PMEP), in cooperation with the New York State Department of Environmental Conservation (NYSDEC), maintains a web site with a searchable database for pesticide products currently registered in New York State. Homeowners who have Internet access can locate currently registered products at <http://pims.psur.cornell.edu/>. Several different queries are available that will produce a summary for the product(s) that the system locates. If the system fails to locate the product in question, then that product is not currently registered in New York State. The database also provides a summary of important information related to every product currently registered. Two data fields “Status” and “Expiration Date” are provided in each summary. Products with a status of “Registered - Discontinued” are currently registered but will probably be discontinued for use, sale, and distribution in New York State after the date noted in the “Expiration Date” field.

**This publication contains pesticide recommendations. Changes in pesticide regulations occur constantly and human errors are still possible. Some materials mentioned may no longer be available, and some uses may no longer be legal. All pesticides distributed, sold or applied in New York State must be registered with the New York State Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension Specialist or your regional DEC office. Read the Label Before Applying Any Pesticide.**

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