



Colorado Potato Beetle

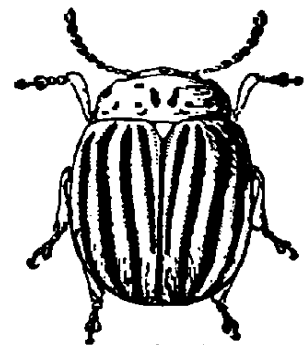
Introduction

The Colorado Potato Beetle (CPB) became a pest when settlers brought potatoes into the Rocky Mountain area, the native habit of this beetle. The beetle preferred the potato to its host weed and has spread to become a serious pest throughout the US and Eastern Canada. The CPB feeds on the leaves and terminal growth of the nightshade-family plants, such as potato, tomato, and eggplant. The potato, however, is its preferred plant. The above-ground destruction of potato plants can cause severe reduction in tuber size and overall yield.

Description

CPB larvae grow to about ½-inch long with a semi-spherical “humpback” shape. They are a shiny reddish-bronze color, having two rows of black spots on either side of the body.

The adult is a distinctive yellow and black striped beetle, with ten black stripes running along the length of the wing covers. The beetles are convex, about 3/8” long and 1/4” wide. The eggs, orange-yellow in color, can be found in clusters, usually on the underside of leaves.



adult

Life Cycle

The CPB overwinters as an adult in the soil. It emerges early in the spring, mates, and the female lays as many as 500 eggs in clusters of approximately 24 over a 4-5 week period. Larvae hatch in 4-9 days and begin to feed immediately, passing through 4 molting stages and maturing in 2-3 weeks. They then enter the soil, form a spherical cell and pupate. The new adults then emerge in 5-10 days and the life cycle is repeated through a second generation.

Control

Prevention and non-chemical control

Rotate potatoes to a new spot in the garden each year to foil the adult CPB who have overwintered in the soil of last season’s potato patch. In cases of severe infestation, consider not growing potatoes for a year to interrupt their life cycle.

In the early stages of plant development, floating row covers will protect potatoes against overwintering adult beetles. As soon as leaves emerge, begin checking foliage frequently for the presence of egg-laying adults, yellow-orange egg clusters on the undersides of leaves or the humpbacked, brick-colored larvae. Crush egg masses, handpick insects and drop into a pail of warm, soapy water. For small home plantings, handpicking alone may provide adequate control of this pest.

A biological pesticide based on a strain of *Bacillus thuringiensis* (Novodor) is still registered in NH. It is most effective on young larvae.

Chemical Control

There are hundreds of pesticides registered in NH to control CPB, but many that are registered for backyard gardens have limited effectiveness. Non-chemical options mentioned above should be the first line of defense. Organic gardeners may wish to try higher concentration neem or pyrethrum products, or Entrust. Conventional gardeners may try these, or synthetic pesticides containing a pyrethroid insecticide, abamectin, carbaryl or others. Young larvae are usually the easiest stage to kill with pesticides. Spray or dust weekly as needed, according to label directions. CPB develops resistance to pesticides so rapidly that it is a good idea to switch pesticides regularly rather than depend on a single product for the whole season.

Stop! Read the label on every pesticide container each time before using the material. Pesticides must be applied only as directed on the label to be in compliance with the law. All pesticides listed in this publication are contingent upon continued registration. Contact the Division of Pesticide Control at (603) 271-3550 to check registration status. Dispose of empty containers safely, according to NH regulations.

*Reviewed and amended by Dr. Alan Eaton, UNH Cooperative Extension Entomology Specialist.
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