Extension

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Colorado Potato Beetle

Pest Fact Sheet 16

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UNH Cooperative Extension Programs	
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Introduction

The Colorado potato beetle (*Leptinotarsa decemlineata*) became a pest when settlers brought potatoes into the Rocky Mountain area, the native habitat of this beetle. The beetle preferred potatoes to its host weed, and now is a serious pest throughout the U.S. and Eastern Canada.

The Colorado potato beetle feeds on the leaves and terminal growths of such plants as potatoes, tomatoes, and eggplant. Potatoes are the preferred host. The defoliation can cause severe reductions in yield and tuber size.

Adult Colorado potato beetles. Credit: David Cappaert, Bugwood.org.

Description

Colorado potato beetle larvae are up to ½" long, hump-backed, and shiny reddish bronze, with two rows of black spots on each side.

The adults are distinctive yellow and black striped beetles. Ten black stripes run along the length of their wing covers. They are convex, about ⅜" long and ¼" wide. Their spindle-shaped orange-yellow eggs can be found in groups, usually on the underside of leaves.

The Colorado potato beetle is a serious pest throughout the U.S. and Eastern Canada.

Life Cycle

The Colorado potato beetle overwinters as an adult in the soil. It emerges early in the spring and mates. The female lays eggs on the underside of host leaves in batches of about 24 over a 4-5 week period. In total, about 500 eggs are laid per female. The eggs hatch within 4-9 days and the larvae begin to feed immediately. They grow through four stages in 2-3 weeks. Then they enter the soil, form a spherical cell, and pupate. The new adults emerge in 5-10 days and the life cycle is repeated through a second generation.

Colorado potato beetle larva. Credit: David Cappaert, Bugwood.org.

Did You Know?

This insect can become resistant to pesticides quickly, so it is important to incorporate non-chemical measures into your management program.

Colorado potato beetle eggs. Credit: David Cappaert, Bugwood.org.

Management

IPM Strategies:

- Cultural Practices— This insect can become resistant to pesticides quickly, so it is important to incorporate non-chemical measures into your management program. Examples are planting into a standing stubble, rotating crops, and barriers such as spunbonded row covers, trench traps, and trap crops. If problems are severe, consider growing no potatoes or eggplant at all for one year, to break the pest cycle.
- Monitoring — Monitor for damaging populations. *For more information see the New England Vegetable Management Guide.
- Biological Control — There are a number of natural enemies that attack Colorado potato beetle eggs or larvae, so it will be important to know if they are present before applying pesticides.
- Chemical Control — Colorado potato beetle has developed resistance to many insecticides. Therefore, growers should rotate insecticides between various modes of action, to reduce the likelihood that resistance will develop.

Consult the New England Vegetable Management Guide or your county Agricultural Field Specialist for specific recommendations.

Larval damage. Credits: Whitney Cranshaw, Colorado State University, Bugwood.org.

Summary

Table 1 summarizes key information on the Colorado potato beetle.

Table 1: Summary

Summary Table	
Damaging Stage	**Larvae and Adults**
Parts of Plant Attacked	**Leaves and tTerminal Growth**
Overwintering Stage	**Adults**
Number of Generations Per Year	**Two**
Time of Year of Greatest Damage	**June-August**
Number of Pesticide Applications Per Year	**1-3 Depending Upon the Extent of Infestation**

Notes: Refer to the text for more information about the Colorado potato beetle.

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 New Hampshire regulations.*

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