Flea Beetles

Introduction

The name *flea beetle* describes many species of small beetles that chew tiny shot-holes in plant foliage and jump around like fleas when disturbed. Although some species feed on a wide range of plants, most FB species attack a single species or family of related plants.

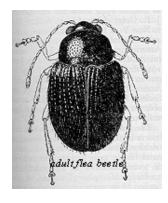
New Hampshire garden crops most likely to suffer early-season FB attack include cabbage-family crops, potatoes, tomatoes, eggplant, beets, corn, grapes and spinach.

FB damage is worst in spring. Heavy infestations can kill an entire planting of newly-germinated seed-lings or severely weaken young transplants. FB damage also renders plants vulnerable to attack by pathogens; in some cases, the beetles actually transmit disease such as early blight of potatoes. Larvae of most FB species feed on the roots of the same plants being attacked from above by adults. Other FB larvae mine leaves or feed on underground stems.

Description

Adult FB are small, elongate-oval beetles, typically between 1/16" (potato FB) and 1/5" (grape FB) long, with narrow prothorax and head. Most species are black, brown or another dark color; some with striped wing covers. FB antennae are one-half to two-thirds as long as their bodies. Powerful muscles in their hind legs give FB the power to jump and move quickly when disturbed.

Larvae are typically dingy white or gray, cylindrical and worm-like, 1/8" to 1/3" long when fully-grown, with tiny legs and brown heads.



Life Cycle

Most species overwinter as adults, hibernating under dead leaves, grass or weeds in and around the garden. They emerge in May, feeding on weeds and tree foliage until their preferred garden plants become available. Depending on species, female beetles lay tiny eggs in the soil, on plant leaves, in leaf petioles or on plant stems. The eggs hatch in about 10 days and the larvae feed on roots, tubers or leaves for 3 or 4 weeks. The larvae pupate in the soil for a week to 10 days. Depending on the species there are one or two generations each year.

Control

Prevention and non-chemical control

Since adult FB feed on weeds in the early spring and late fall and FB larvae may be present in large numbers on weed roots, controlling weeds in and around the garden will go a long way towards controlling this pest.

Providing the gardener has paid rigorous attention to crop rotation and fall garden cleanup (depriving adult FB of overwintering habitat in the garden), floating row covers will offer excellent protection for direct-seeded crops and new transplants.

Chemical control

Many common garden insecticides are listed for use against flea beetles, including carbaryl, esfenvalerate, permethrin, pythrethrins and others. Before spraying or dusting any crop against this pest, make sure that both "flea beetles" and the crop you intend to protect are listed on the label. Follow all label directions explicitly.

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.

Fact sheet by reviewed and amended by Dr. Alan Eaton, UNH Cooperative Extension Entomology Specialist.

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