

# Flea Beetles in Home Vegetable Gardens

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## Description

Flea beetles are small dark beetles that have a flea-like appearance with enlarged hind legs. They feed on a variety of plants including many vegetable plants. They are very active and hop away when disturbed. Their color can be black, dark blue, brown, or some are striped. Size is about 1/16-inch long

## Damage

Flea beetles chew many tiny holes in leaves (Fig. 1). Young plants, especially transplants, are severely damaged. Most noticeable damage is small brown spots and holes in leaves (Fig. 2).



Figure 1. Potato flea beetle and damage. Whitney Cranshaw, Colorado State University, Bugwood.org

## Distribution

Flea beetles are found throughout Virginia. They feed on a wide variety of plants including: Tomato, pepper, cabbage, eggplant, beet, spinach, turnip, mustard, corn, and radish. Also on weed plants.

## Lifecycle

Adults overwinter in soil; in early spring, they begin feeding on crop foliage. Females deposit eggs near the soil line where larvae emerge in about a week

and feed on roots. Larvae feed for two to three weeks until reaching maturity and then pupate, emerging from the soil as adults in about two weeks. Larvae of most species are root feeders but some feed on leaves

## Cultural Control

Till under weed and crop debris in the fall after harvest. Use a garden fabric, also known as a row cover or floating row cover to exclude the flea beetles. Use the garden fabric in combination with fall tilling and crop rotation. Use hoops to keep the cover above the plants. Keep the garden fabric over the plants from planting until the beginning of flowering.

## Organic/Biological Control

Dust with diatomaceous earth or pyrethrin for serious infestations.



Figure 2. Eggplant flea beetle and damage. David Cappaert, Bugwood.org

## Chemical control

Treat with a registered insecticide when insects appear in damaging numbers. Repeat as needed. Do not spray an insecticide on a plant when it is flowering or to the tassel region of the corn plant

during the pollen shedding period as this can harm honey bees and other pollinators.

## Common Species of flea beetles in Virginia

### Potato Flea Beetle

Adult potato flea beetles (Fig. 1) feed on both potato and tomato leaves and makes small shot hole like damages. The larval stage feeds on the tuber of potato and makes small holes or tunnels. This larval damage is usually less than 3/8 inch in depth.

### Eggplant Flea Beetle

The eggplant flea beetle (Fig. 2) makes numerous small shot holes in leaves and can severely stunt growth. Rotate crops when planting and consider using a row cover.

### Corn Flea Beetle

The corn flea beetle (Fig. 3) is usually a minor pest in home vegetable gardens. Its feeding pattern appears as tan lines on the corn leaves.



Figure 3. Corn Flea Beetle University of Illinois at Urbana-Champaign, Bugwood.org

### Crucifer Flea Beetle and Striped Flea Beetle

Crucifer flea beetle and the palestriped flea beetle (Fig. 4) damages leaves by chewing small holes on the leaves that do not go all the way through. Repeated feeding reduces yield and makes the leaves brittle. It feeds on cabbage as well as Brussels sprouts, Chinese cabbage, collards, kale, kohlrabi, mustard, radish, rutabaga, broccoli, cauliflower, horseradish, and turnip.



Figure 4. Palestriped flea beetle and damage. Whitney Cranshaw, Colorado State University, Bugwood.org

### Spinach flea beetle

The spinach flea beetle (Fig. 5) chews small holes in the leaves causing stunted growth and reduced yields.



Figure 5. Spinach flea beetle and damage. Whitney Cranshaw, Colorado State University, Bugwood.org

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