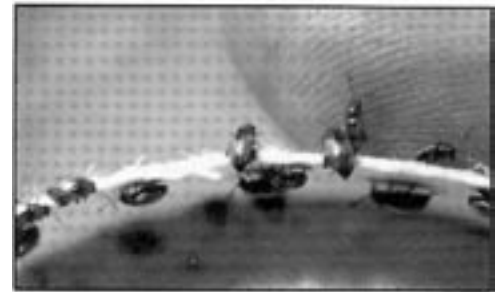


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# Flea Beetles

|                       |                                 |
|-----------------------|---------------------------------|
| <b>Order:</b>         | Coleoptera (beetles)            |
| <b>Family:</b>        | Chrysomelidae (leaf beetles)    |
| <b>Metamorphosis:</b> | Complete (egg-larva-pupa-adult) |
| <b>Mouthparts:</b>    | Chewing in larvae and adults    |



Adults of the **FLEA BEETLE**, *Aphthona nigricutis*, see color print, Fig. 19, on publication B-1013.

The flea beetle's name comes from its ability to jump several inches when disturbed. Flea beetles of the genus *Epitrix* are found in the western United States, and certain species are pests of potatoes, tomatoes, cabbage, sugar beets, beans, and related plants. Other species are inconsequential to plant health such as species found on the range. One species, *Aphthona nigricutis*, was intentionally introduced into the region and feeds selectively on leafy spurge.

## Body Form

**Eggs:** Eggs are extremely small, found in the soil, and typically not observed.

**Larvae:** Larvae are soft-bodied, whitish grubs with yellowish or brownish heads. They measure up to ¼ inch in length.

**Pupae:** Pupae are found in the soil and are typically not observed.

**Adults:** Adults are shiny black, brown, or green and measure about 1/16 inch in length. The antennae are close together at the base. Adults have enlarged hind legs that are used for jumping.

## Life History

Flea beetles overwinter as adults in weeds or plant debris. In the spring, eggs are deposited in the soil near the base of a host plant. The larvae hatch, move to the root zone, and feed on the roots. They pupate in the soil, and adults emerge the same season. There are one to two generations per year. They may overwinter as larvae or adults.

## Plant Injury

Most damage is caused by the larvae, which feed on roots, underground stems, and tubers. In potatoes, feeding produces ¼ to ½-inch-deep tunnels in the flesh of the tubers. Tubers may be more difficult to market when this damage occurs. Larvae may also cause bumps and scar trails on the surface of tubers. In leafy spurge, root feeding depletes carbohydrate reserves, resulting in plant stress and decline.

Adults may chew small holes in the foliage of its host plants. Adult feeding is typically inconsequential to established plants, but newly emerged plants are susceptible to stem and leaf feeding.

## **Management**

Flea beetle occurrence on potatoes is sporadic, and special controls are usually not needed. When necessary, systemic insecticides and foliar sprays can be used. As seedling pests of sugar beets beans, and related plants, their damage is sporadic in occurrence but can be severe when it occurs. The detection of flea beetle activity is critical in order to time insecticide use prior to severe defoliation. The introduced flea beetle *Aphthona nigris-cutis*, which selectively feeds on leafy spurge, is being redistributed throughout infested areas of the state.

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