Order: Coleoptera Family: Chrysomelidae Genus/Species: Tuber flea beetle, *Epitrix tuberis*; Tobacco flea beetle, *Epitrix hirtipennis*; Western potato flea beetle, *Epitrix subcrinita*; and Crucifer flea beetle, *Phyllotreta cruciferae*.

**Description:** Flea Beetles are small, 1/15-1/6 inch, brown, black or bluish, metallic, some with small markings. Their name comes from their large rear legs which allow them to jump like a flea when disturbed. Their antennae are close together at the base and their front coxae are usually conical. The larvae are slender, dirty white with a brown head and about  $\frac{1}{4}$  inch long when mature.

**Habitat:** Many flea beetles restrict their feeding to certain types of plants. Commonly attacked: tomato, eggplant, potato, peppers, beets, turnips, radish, rutabagas, parsnip, collards, kale, Swiss chard, broccoli, Brussels sprouts, cauliflower, and beets.

**Life Cycle:** These flea beetles develop below ground. In spring adults lay very small eggs in soil cracks around the base of plants. The minute, wormlike larvae primarily feed on small roots, usually from June to mid-July, then they pupate in the soil. The adults emerge from July through early September and feed on the foliage for a short time before over-wintering in debris. Depending on the species there are one or two generations each year.

**Economic Importance & Management**: Adults chew small pits or holes in the leaves. On mature plants it is not considered to be particularly damaging, but seedlings may be killed or stunted. Usually the larva feeding on the roots cause little damage, except for those attacked by Western potato flea beetle, *Epitrix subcrinita*. This larva feeds on roots and tubers causing the surface to appear roughened. The shallow feeding causes small pits on the surface of the tuber. Sanitation and tilling will help decrease adult numbers. In the spring, young plants should be protected from attack. Row covers can offer protection during seedling establishment. Adults can be picked or vacuumed off foliage, repeating frequently. Refer to the *PNW Insect Management Handbook* for more information.

## References: Garden Insects, Whitney Cranshaw

PNW Insect Management Handbook, OSU Insects & Mites of Economic Importance in the NW, Ralph E. Berry Pests of the Garden and Small Farm, Mary Louise Flint Photos, Ken Gray Collection, OSU



Tuber Flea Beetle



Tobacco Flea Beetle



Western Potato Flea Beetle



Cabbage Flea Beetle