POTATO FLEA BEETLES Coleoptera: Chrysomelidae Western Potato Flea Beetle *Epitrix subcrinita*, **Tuber Flea Beetle** *Epitrix tuberis*

DESCRIPTION

Adults are about 2 mm long, slightly oblong in form, dark metallic-brown, black or bronze. The hind legs are yellow-brown and enlarged, enabling the beetles to jump when disturbed. Mature **larvae** are about 5 mm long and dirty-white with a brown head.

ECONOMIC IMPORTANCE

Western potato flea beetle adults eat small irregular holes in leaves causing death of seedling plants or stunting of older plants much the same as the tuber flea beetle. Feeding injury also may be associated with a fungus disease, which spreads out from the holes and affects a considerable portion of the leaf. Damaged leaves dry and eventually die. Larvae feed on roots and tubers causing the surface to appear roughened. Larval feeding is shallow and causes "tracking" or small pits on the surface of the tuber.

DISTRIBUTION AND LIFE HISTORY

This pest occurs throughout western North America and British Columbia and is most serious on potato, tomato, pepper, and eggplant. Adults overwinter in trash around the margins of fields. Adults become active in late March and early April and feed on weed hosts. Eggs are deposited in late May and larvae are present in the soil during June and early July when pupation occurs. Beetles begin emerging in late July and disperse within the same field or to new fields of late planted potatoes. Eggs are deposited in the soil and larvae are present during August and early September. Adults from this generation emerge in mid-October and feed for a short time before overwintering. There is one to two generations each year.

MANAGEMENT AND CONTROL

Control of western potato flea beetle may not be necessary unless the population of adults exceeds 10 per 50 sweeps or unless the foliage shows severe feeding injury. For tuber flea beetle, treatment may be necessary when the adult population averages two or three per 7.6 m of row (25 ft). In June or July, five or six adults per 25 sweeps will cause economic loss. Treatment of the foliage with registered insecticides provides control of adult beetles. Application around the border of the field may be adequate to prevent



Flea beetle adult

Adult feeding injury



Larval feeding injury



damage. Preplant insecticides incorporated into the soil are effective against larvae. Return to Insect List