Flea Beetles

Two common flea beetles associated with hemp in Colorado: palestriped flea beetle (top); western black flea beetle (bottom).

Flea beetles are tiny beetles that have enlarged hind legs that allow them to jump. Two species of flea beetles have been recorded from hemp in Colorado, the **western black flea beetle** (*Phyllotreta pusilla*) and the **palestriped flea beetle** (*Systena blanda*). Damage produced by both species is done by the adult beetle, which chew on leaves. Leaf injuries initially produced are small pits produced by chewing, but as leaves develop the injured areas usually form holes ("shotholes") in the interior of the leaf.

The western black flea beetle is the smaller of the two, about 1/10-inch long, with a shiny dark body. Adults may be expected to be seen in hemp early in the season (June, early July) then again in late August and September. This insect has a very wide host range but develops in highest numbers in mustard family plants and it is a key pest of crops such as canola, cabbage, and broccoli. Many common weeds, such as flixweed and tansy mustard, are important in providing food plants that sustain the first generation of western black flea beetle.

The palestriped flea beetle is a bit larger, about 1/6-inch long, and marked with yellowish stripes along the back. It also has a very large number of crops on which the adults will feed, including lettuce, beans, potato, and sunflower.

The larvae of both of these flea beetles develop feeding on roots of plants. However, the injury this stage (larva) produces is generally considered to be negligible to plant growth. Adult feeding also is usually insignificant to well established plants, although high numbers of flea beetles present on seedlings can retard growth and even kill plants.

Another species of flea beetle, **hop flea beetle** (*Psylloides punctulata*), occurs in more northern areas and is reported to be a potentially serious pest of hemp during early growth stages. Larva

may also damage the crop by feeding on roots. To date, this insect has not been observed in hemp grown in Colorado.

The potential of these insects to significantly damage hemp would when large numbers of these beetles coincide with seedling stages. On such young plants the injuries produced by many flea beetles could cause significant affect to plant growth (including damage to the growing point) and conceivably could even kill some plants. These injuries on established plants with a larger leaf area would be expected to cause negligible/insignificant crop injury.

Coleoptera: Chrysomelidae

Small "shothole" wounds in leaves are typical leaf injuries produced by flea beetles.