

Legume Insect Pests

Seedcorn Maggot, Wireworm, Flea Beetle, Onion and Flower Thrips, Mexican Bean Beetle, Western Bean Cutworm



FIGURE 1



FIGURE 2



FIGURE 3

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PHOTOGRAPHS: Courtesy of F.B. Peairs, J.L. Capinera (University of Florida) & Oregon State University [10/09]

COMMON HOSTS: Common bean and other legumes

SYMPTOMS (ON COMMON BEAN):

FIGURE 1 • The seedcorn maggot is yellowish white, legless and about ¼ inch (6 mm) long that can be active in early spring as it feeds on the germinating bean and seed. Wireworms are slender, yellowish, hard-bodied larvae that may grow to 1 inch (25 mm) or more in length; they feed on roots and hypocotyls. Both pests can cause plant stunting and death.

FIGURE 2 • The pale-striped flea beetle is about ⅙ inch (4 mm) long with two pale white stripes; larvae feed on roots and adult feeding results in small shot holes on seedling leaves. Onion and Western Flower Thrips are small (less than ⅛ inch or 1 mm in length), active, yellow to brown insects that feed by sucking plant juices from plants; they can also cause flower and pod abortion.

FIGURE 3 • Adult Mexican bean beetles are bronze with 16 black spots on their wing covers, and are ¼ inch (6 mm) or slightly larger. They lay bright yellow eggs in masses of 40–60 eggs, which hatch to produce fuzzy, bright yellow larvae that feed on the underside of leaves. The western bean cutworm adult lays 5–200 dome-shaped, white eggs which turn to purple on the lower surface of bean leaves; larvae feed on pods and seeds, and are about 1 inch (25 mm) in length when fully grown.

FACTORS FAVORING:

- Cool and wet conditions from planting to emergence, reduced tillage (seedcorn maggot)
- Beans following sod or grass crops (wireworm)
- Planting adjacent to alfalfa or last year's bean crop (pale-striped flea beetle)
- Proximity to maturing winter wheat and spring barley (thrips)
- Planting near locations heavily infested in previous year (Mexican bean beetle)
- Proximity to flowering corn (western bean cutworm).

ADDITIONAL DIAGNOSTICS AVAILABLE AT:

<http://legume.ipmpipe.org>

<http://wiki.bugwood.org/PIPE:Legume>

<http://www.npdn.org/DesktopDefault.aspx>