

49. Cutworms

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Hosts

Cutworms (family Noctuidae) attack a wide variety of both conifer and hardwood seedlings, but damage is generally more severe among conifers. Several species, such as the dingy cutworm (*Feltia ducens*), attack seedlings in forest tree nurseries.

Distribution

These pests are found throughout the United States, but the most damaging populations apparently occur in the Lake States and South.

Damage

Large cutworm populations can destroy thousands of seedlings in only a few weeks. But since such populations develop only during favorable environmental conditions, cutworms are generally periodic importance

Diagnosis

Feeding on newly emerging seedlings in the spring causes the most damage.

On conifer seedlings look for cut or chewed primary needles (fig. 49-1). Old chewing damage may become sunken or depressed, resembling fungus-caused lesions. Occasionally, seedlings are clipped at the groundline, and tops are left lying on the soil surface. This type of damage may be confused with damping-off. Sometimes the cut off stems become covered with soil, suggesting that the seed has not germinated.

Cutworm larvae are stout, hairless, and dull gray in color, ranging from 2 to 5 cm at maturity (fig. 49-2). Moths are extremely hairy,



Figure 49-1—Cutworm damage on young conifer seedlings. Note clipped needles.



Figure 49-2—Dingy cutworm larva (left) and pupa.

with markings on their forewings but with rather nondescript hindwings (fig. 49-3).

Biology

Depending on the geographic location and species of cutworm, there may be more than one generation per year. Some species overwinter as larvae; others as eggs.



Figure 49-3—Dingy cutworm adult.

All species become active in early spring, during the larval stage. They feed and rapidly evolve through as many as seven instars.

Cutworm outbreaks occur when favorable environmental conditions allow populations to build up quickly to damaging economic levels.

Control

Cultural—Maintain nursery beds and keep surrounding areas neatly cultivated and weeded.

Chemical—Where cutworms cause substantial damage, apply chemical controls, such as diazinon, chlorpyrifos, or trichlorfon, at the earliest sign of damage.

Fumigation of seedbeds with a methyl bromide -chloropicrin formulation is highly effective in controlling existing populations of soil-inhabiting insects, including cutworms.

Selected References

Miller, Richard L. 1979. Bug dope. [Publ.] 8. Columbus, OH: Ohio State University. 4 p.

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