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Corn Cutworms

Cutworms--conditions that favor infestations; damage they cause; and control.

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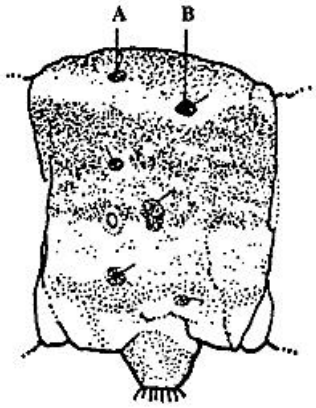
[Previous Category] [Catalog] [Order Info]

Severe cutworm damage is rare in Nebraska and is usually confined to localized eastern drainage areas. Central and western Nebraska corn may be affected by cutworms when following sod, pasture, alfalfa, soybeans, or small grains. Fields with heavy plant residues or early season weed growth are also susceptible to cutworm attack. Dingy and black cutworms are the species most often associated with damage to corn in Nebraska, although dark-sided cutworms are also important in northeast and western counties. Other minor species include sandhills, glassy, spotted, bristly, and occasionally pale western in the western part of the state.

Dingy cutworms overwinter as larvae and are usually the first to damage corn in the spring. They are most often found in fields following legumes or in heavy crop residue situations. Dingy cutworms generally cause less damage than black cutworms because they feed primarily on leaves and only rarely cut stems. In most cases, treatment for dingy cutworms is not justified unless extensive feeding accompanies poor growing conditions. There is only one generation per year of this species.

The following comparisons should help in determining the cutworm species present in your fields.

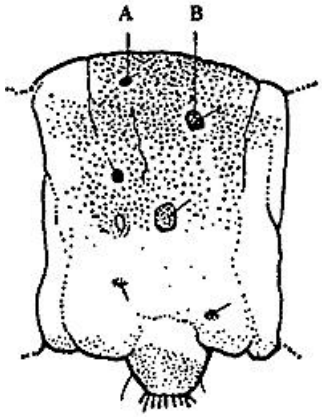
DINGY CUTWORM



Abdominal Segment

- □ Overwinters as small larva.
- □ Associated with legumes.
- □ Pale gray to reddish brown with mottled pigmentation.
- □ Light gray V-shaped markings on back
- □ Tubercles A and B about equal size

BLACK CUTWORM



Abdominal Segment

- □ Doesn't overwinter in Nebraska; migrates.
- □ Found on many crops, particularly in flooded or weedy areas.
- □ Light gray to nearly black with skin granulations.
- □ Indistinct pale stripe on back
- □ Tubercle A much smaller than tubercle B. size

Black cutworms cause most of the serious cutworm problems in eastern Nebraska, but are seldom found west of the 100th meridian which runs through Dawson County. Black cutworms do not overwinter in Nebraska. Moths migrate northward from southern states in early spring and deposit eggs on grasses and weeds before corn in planted. Variations in wind movement patterns (which affect the migration and ultimate distribution of the moths), stage of corn development, and local environmental conditions are factors which strongly influence the severity of black cutworm infestations. When weeds are destroyed by cultivation or herbicides, cutworms migrate to newly emerged corn where damage soon appears. Although there is more than one generation per year, the first is the only one causing significant damage to corn.

Sandhills, pale western, and glassy cutworms are primarily subterranean feeders, cutting small plants below the soil surface. Sandhills cutworms occur primarily in sandy soils of northeast Nebraska. The pale western cutworm, primarily a pest of wheat in western Nebraska, also feeds on corn. The greatest threat is to corn planted into wheat fields that have been heavily infested by this insect.

Conditions That Favor Cutworm Infestations

Cutworms can occur in any corn field. The following conditions appear to be conducive to serious infestations:

1. Corn following soybeans that had an abundance of winter annual or perennial weeds.
2. Fields having heavy vegetative cover during the early spring.
3. Fields that are planted into sod or legume pastures.
4. Fields on bottom land or in low portions of fields.
5. Fields that are bordered by dense vegetation or pastures.
6. Tillage practices that allow plant residues or weeds to remain in spring.

Scouting for Cutworms

Scout fields once or twice a week beginning with plant emergence. Cutworm scouting can be ended once plants are one foot tall since little additional cutting will occur. Observe plants at several locations in each field for evidence of leaf feeding or cutting of plants. Pay special attention to poorly drained areas and places where weeds were present before planting. If cut plants are found, examine the soil around damaged plants for cutworms. Cutworms feed at night and hide in the soil or under debris during the day.

Cutworm Control

The general recommendation for cutworm control involves use of a postemergence rescue treatment once cutworms and signs of damage are observed. **Early detection is essential!** Treat when one plant out of 20 (5%) is cut by cutworms and when the worms are one inch or less in length. Cutworms longer than one inch are likely to pupate (i.e. cease feeding) before causing significant additional damage.

If the soil surface is dry or crusted, rotary hoeing immediately before or after insecticide application may improve control. Pyrethroid insecticides should not be incorporated, however. Preventive treatments applied at or before planting have generally given erratic control, especially where cutworm numbers have been high. Also, most fields do not have a cutworm problem every year, so preventive treatments are often unnecessary. Planting time treatments may be advisable when replanting is necessary because of cutworm damage and while cutworms remain one inch or less in length. When considering replanting, consider the lateness of the season, stage of cutworm development, and the extent of damage in the field. For additional information about the management of soil cutworms and the most recent insecticide recommendations, refer to the current issue of *EC-1509, Field Crop Insect Control Guide for Nebraska Corn and Sorghum,* available from your local Cooperative Extension Service Office.

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