

Special Bulletin—Cutworms

Cutworms—Biology, Scouting, Economic Thresholds, Control

Cutworms can be a serious problem in many field crops. There are many different species involved, but the most common are the redbacked, darksided and dingy cutworms.

HOST CROPS

The redbacked cutworm feeds on practically all field crops, vegetables and home garden plants. It is best known for feeding on cereals, flax, canola and mustard.

BIOLOGY

Cutworm larvae have four sets of abdominal prolegs and curl up when disturbed. Redbacked cutworms have two broad red or reddish-brown top stripes that extend the entire length of the body. The top-stripes are divided by a dark line with white in the center. The head is yellowish-brown.



Cutworm moths may lay several hundred eggs in or on the soil. After the eggs hatch, the larvae feed on the host plants. Larvae normally have 6 instar stages. They moult several times, eventually reaching about five centimeters (2 inches) in length. The larvae tunnel into the soil to form earthen cells where they pupate. The newly emerged moths exit using the old larval tunnels. Some species overwinter as eggs (e.g. the redbacked cutworm) or as larvae or pupae. Still others do not overwinter in the Prairies but rather re-invade annually from the U.S., aided by southerly winds. Most of our pest species have only one generation per year.

SCOUTING TECHNIQUES

Cutworms are nocturnal, feeding at night and hiding during the day making them hard to detect. Once the crop has emerged, continue scouting on a weekly basis from mid-May to mid-June. Feeding by cutworms results in notched, wilted, dead and cut-off plants (weeds or crop seedlings). Plants may be missing from rows and bare patches may appear in fields as a result of cutworm feeding. Often cutworms are close to the base of the cut-off shriveled plants they have recently damaged. Using a small garden trowel and a soil sifter, they can often be found in the soil around these plants. Cutworms may be found down to about 5 cm (2 inches) below the soil surface. The small, worm-like larvae curl up or attempt to hide in the debris. Pupae may also be collected in this way.



ECONOMIC THRESHOLDS

Treatment is warranted when cutworm densities exceed 1 cutworm per square foot (30cm x 30cm) or if there is a 25 to 30% stand reduction.

CONTROL TIPS

Best results occur if insecticide applications are made in the evening. Sometimes it is most economical to just treat infested patches and not the entire field. Sometimes there are differences in susceptibility to insecticides between species of cutworms. Consult the current edition of *Guide to Crop Production* for registered insecticides.



Young cutworm larvae may be starved before spring seeding by allowing volunteer growth to reach 3 to 5 cm (1.2 to 2 inches), cultivating and then seeding 10 to 14 days later. Many predaceous insects, parasites and birds prey upon cutworms and reduce their