

SCOUTING **CUTWORMS**

CUTWORMS ARE A COMMON INSECT PEST IN MANITOBA

Most species of cutworms are generalists, meaning they will feed on many types of crops and wild plants at the seedling stage, if given the opportunity. Cutworms are not often an economical concern, especially in cereal grains due to high plant populations and the ability to tiller to compensate for the loss of neighbouring plants. These larvae can, however, be a major concern in row crops that are planted at much lower populations, like sunflower. Scouting for cutworm larvae should begin as soon as a crop is emerging. Larvae of some species overwinter as eggs and will be small, while other species overwinter as partially grown larvae and will be larger.

	FIELD CORN	FLAX	SUNFLOWERS	BARLEY	WHEAT
	FIELD CORN	FLAX	SUNFLOWERS	BARLEY	WHEAT
	Notched, wilted, dead or cut-off plants (weed or crop seedlings). Plants missing from rows, bare patches appearing in field.				
TYPICAL DAMAGE	Corn seedling with cutworm damage. Cutworm seen below the corn plant. Sunflower seedling with cutworm damage. Cutworm seen above the sunflower plant.				
MONITORING	Look for cutworm and evidence of cutworm feeding when monitoring corn from early May to end of June. Often cutworms will be close to the cut of shriveled plants that they have just damaged. Cutworm will sometimes be most abundant in patches or a specific area of the field. At each stop, examine 100 plants in a row. Calculate percentage of plants cut off or showing leaf feeding.	Look for cutworm and evidence of cutworm feeding when monitoring from early May to the end of June. Often cutworm will be close to the cut or shriveled plants that they have just damaged. Cutworm will sometimes be most abundant in patches or a specific area of a field. In areas of the field where cutworm damage is noticeable, check around damaged plants in a 1/4 m² area (50 cm x 50 cm). Use a trowel or shovel to carefully search through top 5 cm of soil for cutworm larvae. Multiply the number of cutworms found by 4 to get the number per square metre. Repeat in several locations to get an accurate assessment of what cutworm levels are.			
ECONOMIC THRESHOLD	When 2 to 4 per cent of plants are cut below the ground or when 6 to 8 per cent of plants are cut above the soil surface, and cutworms less than 1 inch long are present.	4 to 5 larvae per m².	1 cutworm or more per square foot (30 cm x 30 cm) or if there is a 25 to 30 per cent stand reduction.	Pale western 3 to 4 per m²; Red cutworm — 5 to established, fall-seed seeded crops wit conditions can toler.	backed and army 6 per m². Well- ded crops or spring- h good moisture

Sometimes it is most economical to just treat infested patches, and not whole fields.

^{*}The above data is collated directly from Manitoba Agriculture's Guide to Field Crop Protection 2023.





CUTWORMS TO SCOUT FOR IN MANITOBA FIELD CROPS:



John Gavloski, Manitoba Agriculture

Darksided Cutworm — Larvae are greyish with a white stripe along each side, and a reddish background colour along the middle of the back. The head is orange-brown with darker spots. Darksided cutworm are easily confused with redbacked cutworm. Larvae feed on leaves and older larvae may cut plants at ground level.



Dingy Cutworm — Larvae have a thin light line down the back. On either side of this thin line is a broader series of diagonal markings that look like tire tracks on the back. They also have 4 equal-sized black dots across the back surface of each abdominal segment. Dingy cutworms are primarily leaf feeders, and rarely sever plants.



Redbacked Cutworm — Larvae have two broad dull-red stripes along the length of their back. The head is yellowish-brown. Young larvae make small holes and notches in the foliage. Older larvae eat into the stems, often severing them.

Other cutworms found in field crops in Manitoba:

The **glassy cutworm** (*left*) sporadically can get to levels that can be economical, but normally cause little or no harm to crops in most areas and years. Host plants can include wheat, oats, barley, corn and grasses grown for forage and seed.

The **pale western cutworm** can be found in Manitoba but is not as serious a pest as in Alberta

and Saskatchewan. Older larvae of this species will sever plant stems below the soil surface.

The **black army cutworm** (*right*) can also sporadically be found on field crops in Manitoba but is normally of little economic concern. Larvae feed aboveground in May and June but do not cut stems.



or cutworms, use a

Cutworms hide underneath soil and surface residue during the heat of daytime, and feed at night. Thus, to look for cutworms, use a trowel or shovel to carefully search through the soil. Cooler, cloudy days and/or cool, wet soils encourage cutworm to either retreat to shallow soil levels or to remain on the soil surface, but in the cover of crop residues or other debris.

CONTROL OPTIONS:

- Cutworms have many natural enemies (insects, parasitoids, birds and pathogens) that naturally reduce populations.
 See Field Heroes Field Guide for natural enemies.
- Insecticides are available to control cutworms. See <u>the Guide to Field Crop Protection (Insect Control)</u> for product options. Efficacy tends to increase if applied in the evening.

FOR MORE INFORMATION:

- Manitoba Agriculture Cutworms
- Cutworm Pests of Crops on the Canadian Prairies

REFERENCES:

Manitoba Agriculture Cutworm Factsheet



CONNECT WITH US

mbcropalliance.ca hello@mbcropalliance.ca P: 204.745.6661







