Cutworm Assessment and Identification

Assessment of Cutworms and Damage

- Cutworm management requires regular scouting. Larvae are typically found under litter or underground as deep as 4 inches. Some species may come up at night or on overcast days to feed on above ground plant material. When touched, all cutworms will curl up into a ball.
- Scout fields every 3-4 weeks during the first few weeks of crop development.
- Feeding typically begins on south facing slopes or hilltops where the soil warms up first and the soil texture is light.
- Under cool spring conditions, the feeding period may last longer than under warm spring conditions.
- Threshold levels of cutworms exist at about 3-4 cutworms/m^2 or 25-30% reduction in canola stand.

Wilted plant as a result of below ground feeding.

Leaf tissue missing as a result of cutworm feeding.

Symptoms and Management

- Signs of cutworm feeding include notches to complete removal of foliage, plants that are wilted, tipped over or clipped and bare patches in the field. Start digging in areas where field symptoms are observed to find cutworms.
- If green material is found in the gut of the cutworm, then it has been actively feeding. You may find green material called frass (cutworm excrement) in the soil as well.
- If pupae are found, then the cutworms have stopped feeding and will no longer be a threat for the current year.
- To help reduce cutworm populations :
  - Remove winter annual weeds or cultivate at least 1-2 weeks prior to seeding to help starve early larvae.
  - Control flowering plants in the fall. Adult moths are attracted to flowers in August and September and lay eggs in these areas.
  - Moths prefer soft soil for laying eggs. Avoid working the soil in July and August to help prevent egg laying.

Cutworm Identification

- **Army Cutworm:** Greyish-black with different patterns of gray and brown stripes. Overwinter as larvae, so out early in the season and will feed on canola from emergence through late June. Feed mostly on leaf material. More common through western Saskatchewan and Alberta.

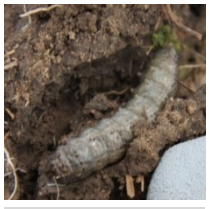
- **Bristly Cutworm:** Dull gray-brown with stripes along the sides and diamond shapes down the back. Stiff hairs protrude from all parts of the body. Hatches from eggs in the spring and feeds near the soil surface. More common in Saskatchewan and Alberta
- **Darksided Cutworm:** Dull colored with shiny heads. A white stripe is present on the side above the legs. Larvae typically feed on the stems at or below the soil surface. Small above ground parts may be consumed.
- **Dingy Cutworm:** Pale gray to brown with dark V-shaped markings on the back of each abdominal segment. Overwinter as larvae, so out early in the season and will feed on canola from emergence through late June. Feed mostly on leaf material (rarely stems). Located throughout western Canada.

- **Glassy Cutworm:** Green-white body that appears glassy or translucent. The head is red-brown. Will feed on canola but tends to prefer cereals. More common in the Peace region of Alberta.

- **Pale Western Cutworm:** Yellow-brown with three pairs of green-gray stripes along the back and sides. Head is amber to black with a black marking on the front that resembles an inverted V. Hatches from eggs in the spring and feeds on stems below the soil surface. Larvae will move down rows feeding underground and cutting off plants. Prefer drier conditions throughout western Saskatchewan and Alberta.
- **Redbacked Cutworm**: Light brown to gray with two red bands bordering a light, medium stripe on the back. Head is yellowish brown. Hatches from eggs in the spring and feeds on plants at the soil surface. Will feed on both foliage and stems. Larger larvae tend to prefer the stem. More common in eastern Saskatchewan and Manitoba.

Orange cutworm pupa

Green cutworm frass



Pale western cutworm

Redbacked cutworm*

Darksided cutworm*

* Photos courtesy of John Gavloski, Manitoba Agriculture, Food and Rural Development