

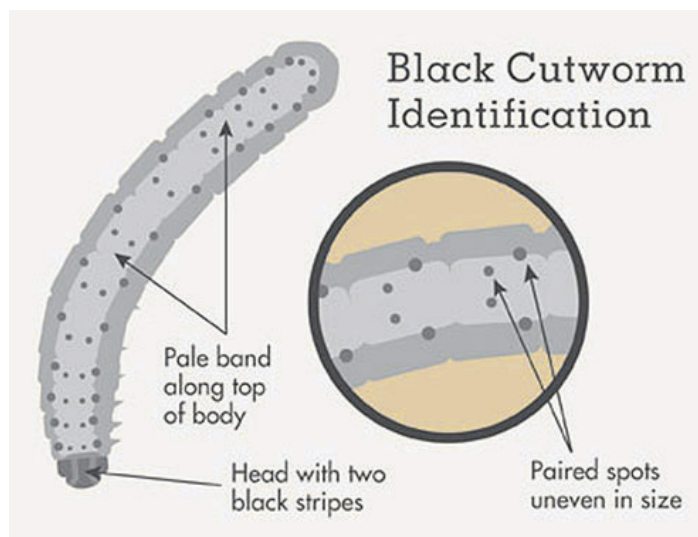
# Black Cutworm



## About Black Cutworm

Black cutworm (*Agrotis ipsilon*) undergoes complete metamorphosis: egg, larvae, pupa, and adult moth. The stage that damages crop plants is the larvae, but it is the adult moths that are attracted to and captured in traps.

Newly hatched larvae are small — only about a quarter-inch long. Maximum larvae length is about two inches. Larvae have rough, grainy skin ranging from light gray to black. The rough skin texture is characteristic of black cutworm and distinguishes it from all other cutworms. Often, a pale, indistinct, narrow stripe along the center of the back is visible. Black cutworm larvae will curl into a “C” shape when disturbed.



Black cutworm larvae can be confused with dingy cutworm larvae. Carefully observe, under magnification, the two pairs of dorsal spots (tubercles) that occur on most body segments. For black cutworm, the pairs of spots are unequal in size. For dingy cutworm, the pairs of spots are equal in size.

Moths are relatively large with wingspans of 1.5-2.0 inches. They are brownish in color. Black cutworm moths are easily identified by a single, black, dagger-like mark on each forewing.

## How to Field-Scout for Black Cutworm (BCW) Larvae

Scouting Saves money and reduces insecticide use. Scouting for black cutworm can be difficult because the larvae often hide during the day in soil or under residue. You should begin scouting in fields in which the probability of black cutworm damage is greatest. Black cutworm larvae are most likely to be found in low-lying fields; fields located near vegetation such as streams, grass strips, woods; weedy fields; fields with heavy residue; late planted corn fields; and/or fields with a history of black cutworm damage.

Examine 25 consecutive corn plants within a row in at least 10 widely distributed areas in a field. Look for signs of leaf feeding and stem cutting. Leaf feeding is usually done by larvae in instar 3 or younger. Instar 4 and older larvae often cut corn stems above ground. If soil is dry, stem cutting may occur below ground. Make sure that you are aware of all three signs of larvae activity. Dig into the soil around damaged plants to be sure that the damage resulted from black cutworm. Larvae of more than one size may be present in the field because of repeated moth flights and matings. So, a mixture of feeding signs might be found. Scouting should be performed from seedling emergence through the V5 (5 leaf collars showing) stage of development.

Thresholds for performing a rescue treatment are based on the percentage of plants damaged. Record the number of damaged plants and the type of damage. Calculate the percentage of affected plants. For example, 12 plants cut above ground among the 250 plants observed (25 plants x 10 areas) means that 4.8% of the stand was damaged by above ground cutting. Thresholds in Missouri are 4% if cutting occurs below soil level and 8% if cutting is above ground or leaf feeding was observed. These thresholds should be decreased to 2 and 6% if corn stands are sparse (less than 22,000 plants/acre).

**For up-to-the-minute information on Black Cutworm:**

visit our black cutworm page: <http://ipm.missouri.edu/pestmonitoring/bcw/index.cfm>