

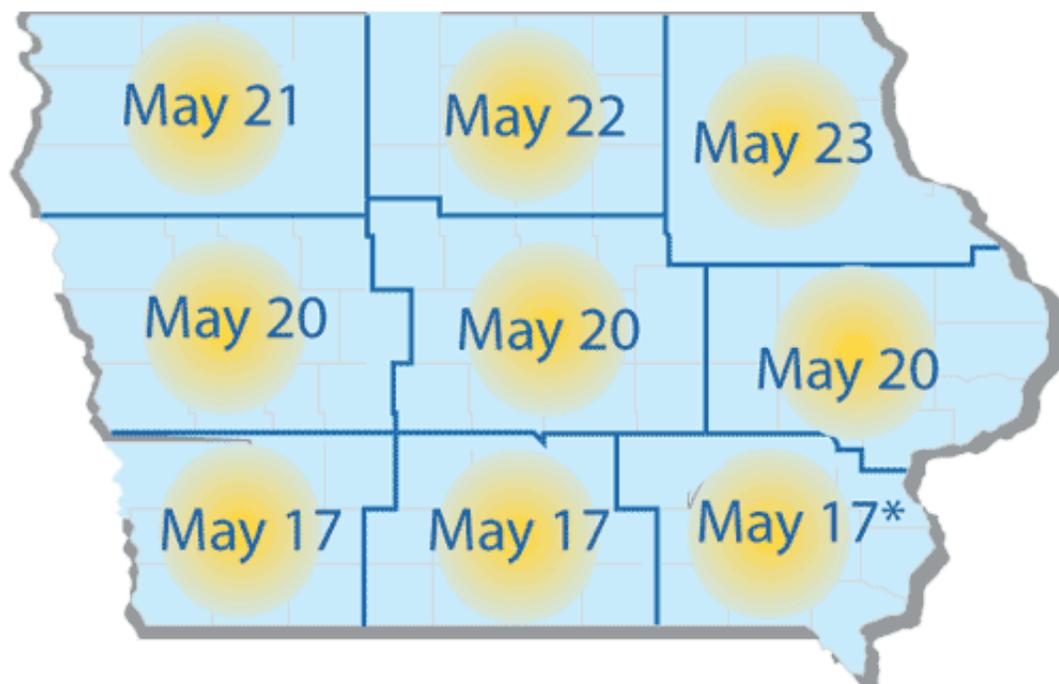
INTEGRATED CROP MANAGEMENT

First cutting dates predicted for black cutworm

The black cutworm is an occasional pest of corn, yet it deserves our attention because of its potential for causing economic damage. Significant flights of black cutworm adults (moths) entered Iowa during April 19-21 and were caught in pheromone traps. From these catches we can predict first cutting of corn. Black cutworms require 300 degree days (base 50°F) for larvae to be large enough to cut corn plants (which is about the length of a dime). So by calculating cutworm hatch and development over time, we can anticipate when to look for damage.

When should scouting begin?

Predictions for the first cutting are shown in the map. By scouting fields several days before the first cutting, you may be able to find "hot spots" based upon leaf feeding and get a head start on management decisions. These dates represent the earliest possible cutting dates, based on normal temperatures. However, it is possible that the cutting period may stretch over two to three weeks because moths lay eggs over an extended period, and the emergence of later planted corn would still be susceptible to cutting.



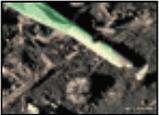
*Davis, Van Buren, Lee and Appanoose counties might expect first cutting to occur May 15-16.

Do predicted cutting dates indicate a cutworm problem?

Of course not. Pheromone traps only catch moths and cannot predict the amount of cutting that will occur, nor where cutting will occur. Each year, one of our concerns is that radio advertisements may predict a cutworm "outbreak" in your county just because moths were trapped there several weeks ago. Neither the traps nor anyone's interpretation (including our own) of the trap catches can predict the amount of cutworm injury. Scouting of seedling corn near the first cutting date is the only reliable method to determine whether a problem exists. Then, insecticides can be applied if needed.

How should a field be scouted?

Walk the field a couple of days before cutting is predicted. Look for cutworm injury on corn leaves. Dingy cutworms also feed on young corn leaves but rarely cut corn. If leaf feeding is detected, try to find the cutworms to determine whether they are black or dingy. Very large cutworms found during the earliest black cutworm cutting dates are often dingy cutworms because dingys overwinter in Iowa as partially grown larvae. If the field has only dingys, then you shouldn't have a cutting problem. If you find leaf feeding and only black cutworms, then mark off 100 plants in a row with stakes or flags, and scout these same plants for cutting over a period of several days at several locations across the field. Then you can monitor the cutworm activity and determine progression of damage (or lack of it).



Black cutworm and cut corn plant.

[Enlarge](#) [1]



Black cutworms the length of a dime can cut seedling corn plants.

[Enlarge](#) [2]

What could be confused with cutworms or their injury?

Several insects will feed on corn leaves, including dingy cutworms and southern corn leaf beetles. Try and find the insect in the soil near the affected corn plant to determine the true culprit. Also, Canada geese will feed on seedling corn clipping the top leaves; this damage may be confused with cutworm injury. Geese, however, often clip several plants in a row, eating only the top leaves and they do not cut the plant at ground level.



Goose injury to corn.

[Enlarge](#) [3]

What economic thresholds should be used?

When cutworms average less than 0.75 inch in length, an insecticide should be considered if 2 or 3 percent of the plants are wilted or cut. If cutworms are longer than 1 inch, treatment should be applied if 5 percent of the plants are cut. If the field has a poor plant population, 20,000 or less, these thresholds should be lowered.

When can field scouting stop?

Stop scouting when the field is sprayed or when plants have five fully developed leaves (stage V5). Cutworms have difficulty in cutting plants in the V5 stage because of the larger stalk diameter, but occasionally they chew into the side of the stalk and kill a larger plant.

Should fields be scouted if a corn rootworm insecticide was applied at planting?

Yes, definitely. At-planting insecticides may not provide adequate control of large cutworm infestations and a rescue treatment still may be needed.

What insecticides are labeled for rescue treatments?

Several insecticides are labeled for black cutworms in corn. Several years ago, research showed that after application, rotary hoeing in dry soils increases the effectiveness of Lorsban, but that the pyrethroids (such as Ambush, Pounce, or Warrior) should not be incorporated.

Insecticides labeled for black cutworms in corn.

Insecticide	Rate
Ambush	6.4-12.8 oz/acre
Asana XL	5.8-9.6 oz/acre
Baythroid 2	0.8-1.6 oz/acre
Capture 2EC	2.1-6.4 oz/acre
Discipline 2EC	2.1-6.4 oz/acre
Lorsban 4E	1-2 pt/acre
Mustang Max	1.28-2.8 oz/acre
Nufos 4E	1-2 pt/acre
PennCap-M	4 pt/acre
Pounce 3.2EC	4-8 oz/acre
Sevin XLR Plus	2 qt/acre
Warrior	1.92-3.2 oz/acre

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Links:

[1] http://www.ent.iastate.edu/imagegal/plantpath/corn/bcutworm/black_cutworm_cut_plant.html

[2] http://www.ent.iastate.edu/imagegal/lepidoptera/bcutworm/bcutworm_4th_instar.html

[3] <http://www.ent.iastate.edu/imagegal/plantpath/corn/geese/3936.18goosedamage.html>

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