New York State
Integrated Pest Management (IPM) Program

We encourage people to adopt a sustainable approach to managing pests, combining methods that minimize economic, health, and environmental risks.

The IPM strategy integrates the use of several pest-suppression technologies, including

- Biological control: beneficial organisms, such as insect predators
- Cultural techniques: practices such as crop rotation, sanitation
- Mechanical and physical methods: screens, traps, cultivation, and temperature modification
- Chemical control. judicious use of pesticides and other chemicals
- Genetic control. traditional selective breeding and new biotechnology practices that produce pest-resistant varieties
- Regulatory control. state and federal regulations that prevent the spread of pest organisms.

The New York State IPM Program funds projects to improve IPM strategies and offers educational programs and resources.

Many organizations and individuals assist in this effort. The New York State Department of Agriculture and Markets, New York State Department of Environmental Conservation, Cornell University, and Cornell Cooperative Extension jointly fund the NYS IPM Program.

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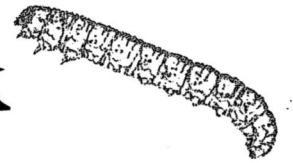
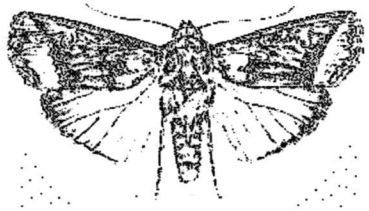
Black Cutworm in Field Corn



Management Guide

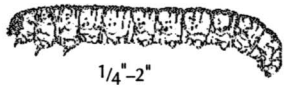
Identification

Adults are gray-brown flying moths (13/4" long) with dark forewings that are pale near the tips.



- Females lay ribbed round ***eggs in clusters*** on weeds in early spring.

Larvae vary in color from light gray to black with an indistinct yellow stripe down their back and a pale brown head. They have a shiny appearance with coarse granules present over their body.



1/4"–2"

Larvae ***curl tightly*** when handled.

There are ***seven larval instars*** (or molts).

- Which instar is it? Using the chart (to right) measure the body, then the head capsule width. (Head capsule width is the best indicator of age.)

Feeding by the larvae is the chief cause of damage.

- ***Symptoms of damage*** are leaf feeding, irregular holes in stem, notched and cut plants (wilting), and death of plants.

Pupae are the dormant life stage of the cutworm that occurs just before the adult stage.

- Presence of numerous pupae or large larvae (6^{th} – 7^{th} instar) indicates that larval feeding pressure in declining. ***Large larvae are more difficult*** *to kill with most pesticides.*

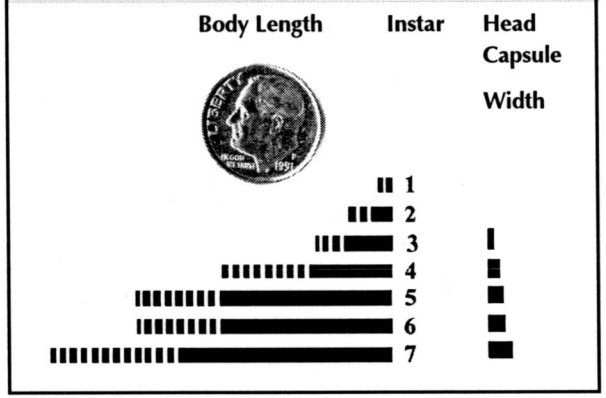
Sampling

Start sampling fields in ***mid-May.*** Repeat scouting every three days. Larvae usually feed at night or during overcast days. They hide in the soil near the base of plants.

Inspect and ***record the damage*** on 20 consecutive plants in five areas of the field.

Collect 10 larvae and determine their size and instar by measuring on the instar guide.

Black Cutworm Instar Guide



Analysis

Treatment with insecticide is suggested if ***5 percent or more*** of the plants have been cut and larvae are still small (1/2 inch or less).

Management Alternatives

Reevaluate for replanting in areas where damage can no longer be managed with insecticide (larvae longer than 1/2").

When the plant reaches the V-6 stage it becomes ***resistant to feeding***.

For pesticide recommendations, consult the *Cornell Guide for Integrated Field Crop Management.* **Always read and follow the pesticide label.**

Caution: Applying soil insecticides at planting will not provide effective control of cutworm.

Implementation

Plow your field, control weeds, and plant early to ***reduce cutworm problems***.

Monitor emerging plants closely, particularly in fields with conditions favoring cutworm outbreaks, such as late planting, weed infestations, wet areas, and fields previously in pasture or sod.

Insecticide sprays should be directed at the base of plants. Only the infested area and a 20–40 foot surrounding area need be treated.

Document all actions taken.

Reevaluation

Review previous pest records and your crop plan for the coming year to identify potential problem fields

Scout from mid-May to early June to determine the need for cutworm management.

For additional help contact your local ***Cornell Cooperative Extension*** educator.