

# CUTWORMS IN HOME GARDENS

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## Introduction

Cutworms are the larvae (caterpillars) of several species of night-flying moths in the family Noctuidae. The larvae are called cutworms because they cut down young plants as they feed on stems at or below the soil surface. There are also species of climbing cutworms that move up plants and feed upon foliage, buds and shoots. The adults are night-flying moths and do not cause damage. As general feeders, most cutworms attack a wide range of plants. Some common vegetable hosts include asparagus, bean, cabbage and other crucifers, carrot, celery, corn, lettuce, pea, pepper, potato, and tomato. In addition, a few species feed on turfgrass.



Figure 1. Bronzed cutworm adult. Ken Gray,  
Image courtesy of Oregon State Univ.



Figure 2. Common cutworms: Black cutworm (above) and  
Dingy cutworm (below). Department of Entomology,  
University of Minnesota

## Identification

The most common species of cutworm occurring in Minnesota gardens are the bronzed cutworm, variegated cutworm, black cutworm, dingy cutworm, glassy cutworm and army cutworm.

Cutworms can be quite distinct from one another, and their coloring can vary from brown or tan to pink, green or gray and black. Some cutworms are a uniform color while others are spotted or striped. Some larvae are dull and others appear glossy or shiny. Cutworms curl up into a tight “C” when disturbed.

Adult moths are moderate sized, brown or black insects showing various splotches, or stripes in shades of gray, brown, black or white. They generally have a body length of about one inch with wingspans up to 1 1/2 inches across. Typically, the front wings are darker than the hind wings and are patterned.

## Life Cycle

Some cutworms migrate into the state from the south each year. However, other species, including, dingy cutworm, bronzed cutworm, and glassy cutworm are native to Minnesota and overwinter as eggs or larvae.

Female moths can lay hundreds of eggs, singly or in small clusters. They typically deposit them on low-growing plants and on plant residue. Migrating moths lay eggs on the soil and the larvae hatch to feed on plants. Young larvae feed on the foliage or small roots of weeds or crops until they reach about 1/2 inch in length. Emerging or newly emerged weeds can be very attractive sites for egg laying and feeding by small larvae. At this stage, they can begin feeding on seedling stems, either cutting through them or burrowing into them. Corn, peppers, tomatoes, beans, and the crucifer family are common hosts, but they will attack many kinds of herbaceous plants.

Cutworm larvae grow as large as two inches long. They may go through as many as three generations per year. Native cutworms overwinter in weedy areas, grassy fields or pastures. It is often in these areas and along field borders where problems arise. If weeds are permitted to grow in the fall after crop harvest and the fall and winter seasons are mild, large numbers of cutworms may survive to attack vegetables in the spring.



Figure 3. Cutworm and damage to corn seedling. Clemson University, USDA Coop Ext Slide Series



Figure 4. Cutworm damage on potato. Sharon Smith

Cutworm abundance and development is greatly affected by weather, especially rainfall. Moths mate and lay eggs from early spring (black cutworm) to late summer/fall (dingy, glassy, and bronzed cutworm), beginning the next generation.

### Damage

Most cutworm damage occurs on vegetable seedlings early in the season when plants are small and have tender tissue. Although cutworms are active throughout the summer, they are rarely a problem after spring. Cutworm populations can vary greatly from year to year and, when numerous, can devastate a garden. Most of the damage caused by cutworms occurs when they chew stems of young plants at or slightly above or below the soil line. Sometimes the severed plants will drop into their burrows. Some cutworms, e.g. black, bronzed, and army cutworms, can be very injurious, attacking and cutting new plants nightly.

Climbing species of cutworm, (e.g., variegated cutworm) can climb the stem of trees, shrubs, vines, and garden plants and eat the leaves, buds and fruit. Other species, such as glassy cutworms, remain in the soil and feed upon roots and underground parts of the plant.

### Management

Regularly check your garden, especially during late afternoon and evening when cutworms are more active, so you can detect their activity when they are first present. Also inspect your plants in the morning when damage is fresh and easier to see. Watch for plants cut off near the ground or plants that are noticeably wilting (when cutworms chew on the stems but do not sever the plant). You may also detect droppings on the ground, which can indicate cutworm feeding. To verify cutworms are present, run your hand over the soil, rolling over soil clumps and other potential hiding places within a one foot square area of the damage.

Control of cutworms is more effective when the larvae are small. For some crops, such as tomatoes, peppers and celery, you may need to monitor for cutworms until harvest.

### Cultural

Remove weeds and plant residue to help reduce egg-laying sites and seedling weeds that nourish small cutworms. Till your garden before planting which helps expose and kill overwintering larvae. Tilling also removes plant residue, which helps to discourage egg laying. Avoid using green manure as this may encourage egg laying, instead use com-

post. Till your garden in the fall; this helps destroy or expose overwintering larvae or pupae.

### Physical

You can control cutworms by placing aluminum foil or cardboard collars around transplants. This creates a barrier that physically prevents cutworm larvae from feeding on plants. When placing these collars around plants, make sure one end is pushed a few inches into the soil, and the other end extends several inches above ground. This should prevent most species of cutworms from getting to your plants.

### Insecticidal

The use of insecticides in home gardens is usually not necessary, but you can protect plants with a residual product if you are experiencing a severe problem. Treat the stems or the foliage (for climbing cutworms). For the best results, apply insecticides in the evening.

### Examples of common insecticides that are effective against cutworms

Common name	Residual*	Notes
Carbaryl	Medium	Contact
Cyfluthrin	Medium-Long	Contact
Permethrin	Medium-Long	Contact

\*Long residual can persist as long as four weeks. Medium residual can persist as long as 10-14 days.

**CAUTION:** Read all insecticide labels very carefully before buying and again before using to ensure proper application. It is especially important that the label specify recommended use on the specific plant you wish to treat, or generally on vegetables or flowers. The label is the final authority on how you may legally use any pesticide.