

Insects

Cutworms in Field Corn

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Introduction

Field corn is susceptible to damage from several species of cutworms that occur in Tennessee. Usually, this damage occurs in early planted corn when the temperatures are cool and the ground is moist. Cutworms are less likely to cause economic damage after corn reaches 2 feet in height.

Occurrence

Fields having one or more of the following characteristics should be watched carefully.

- History of cutworm damage
- Surface litter – especially soybean residue
- Fair to poor drainage or overflow land
- Winter annual weeds prior to tillage
- No-till plantings

Adult moths (Fig.1) may be found depositing eggs on winter weeds in fields in early spring. Newly hatched larvae will move to corn plants as the plants emerge from the soil. Early detection is important to properly time insecticide applications and prevent additional cutworm damage.

Damage

Small larvae or “worms” chew holes in the corn leaves. Larvae that are one-half inch or longer may cut small plants and pull the plant parts into their burrows. Symptoms of injury are cut or wilted plants (Figure 2).



Figure 1. Black Cutworm Adult

Scouting and Treatment Thresholds

Cutworm counts should be made when any cut or wilted plants are found. Examine 20 consecutive plants in four to five randomly selected locations and write down the number of cut plants. Determine the percentage of corn plants cut by dividing the total number of cut plants by the number of plants inspected and multiplying by 100. Look for live cutworms around damaged plants. They will usually be covered or underground during the day. Check under dirt clods near the base of the plants. Finally, record the number of live worms per 100 plants and whether they were near the soil surface or deep in the soil.



The treatment threshold for cutworms is when 5 percent of the plants are damaged and larvae are present (or when two or more larvae per 100 plants are found). If borderline conditions exist, check the field again every 24 to 48 hours until a final decision is made. Stand counts should also be made to determine if treatment is necessary.

Control Measures

Larvae that are present in the field at planting are typically those that do the most damage. Infestations in tilled fields are less likely because tillage destroys weed hosts and kills many of the larvae that are present. In reduced-tillage fields, serious cutworm infestations can often be prevented by maintaining a weed-free planting bed for three or more weeks prior to planting. Cutworm infestations can be controlled with pre-plant or at-planting insecticides or by post-emergence, foliar applications.

Currently recommended insecticides and application rates can be found in PB 1768 Insect Control Recommendations for Field Crops. The 2007 edition is available for purchase from your county Extension office. It is also available for free download on the UTCrops.com Website at http://www.utextension.utk.edu/fieldCrops/cotton/cotton_insects/InsectBook.htm or on the UT Extension Website at <http://www.utextension.utk.edu/publications/>.



Figure 2. Black Cutworm & Damage

Precautionary Statement

To protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store, or dispose of a pesticide. According to laws regulating pesticides, they must be used only as directed by the label.

Disclaimer

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

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