Agricultural Extension Service
The University of Tennessee
W032

Cotton Insects

Cutworms

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Classification and Description

Several species of cutworms (Lepidoptera: Noctuidae) may be found in cotton. Black cutworm (*Agrotis ipsilon*) and granulate or subterranean cutworm (*Feltia subterranea*) are common, but variegated cutworm (*Peridroma saucia*) and other species may be present. Moths of the black cutworm have a wingspan of about 1½ inches. Each forewing has a characteristic dagger-shaped marking. Cutworm larvae are relatively large, slick caterpillars that have a greasy appearance and feel. Larvae of the black cutworm pass through 6-7 instars and reach a maximum size of about 1½ inches. They are gray to black with five pairs of prolegs.

Hosts and Distribution

Most cutworm species have a wide host range and may injure many cultivated plants including cotton and corn. They are widely distributed throughout Tennessee and most of the United States. However, black cutworm rarely overwinters north of Tennessee because cold weather kills overwintering pupae.

Life History (Black Cutworm)

Females lay eggs singly or in groups of up to 30 in pastures, fencerow grasses or other weedy plants growing in fields. Eggs are laid on stems of plants or plant debris near the soil surface. Damp areas of the field are preferred oviposition sites. Cutworms pupate in the soil. Most cutworm species have two or more generations per year in Tennessee. Black cutworms may have as many as four generations per year.

Black cutworm larva feeding on cotton stem

Pest Status and Injury

Cutworms are sporadic pests, typically causing economic injury to a small percentage of cotton fields each year. However, severe infestations can reduce

stands to the extent that replanting is necessary. Only the larval stage is damaging and is almost always found hidden below ground during the day. Larvae "cut" the stems of seedling cotton plants. Occasionally, smaller larvae may feed on leaves without cutting plants.

Management Considerations

Economic damage is usually caused by larvae that are already present in the field at planting. Maintaining a weed-free field for 3-4 weeks prior to planting by cultivation or use of herbicides will greatly reduce the chance of cutworm injury, effectively starving larvae from the field. Besides destroying weed hosts in the field, cultivation will mechanically destroy larvae. If a field is not kept weed free for at least three weeks prior to planting, preventative insecticide applications are often used. Pyrethroid insecticides applied in a narrow band behind the planter (5-7 inches) will typically prevent infestations of cutworm from causing economic damage. Recommended treatments for cutworms are given in the Tennessee Cotton Insect Control Guide (Extension PB 387). Because infestations may occur in isolated spots within fields, spot applications can sometimes be used. Bt cotton will not effectively control large larvae that may be present at the time of planting.

For information about the management of the major field crops grown in Tennessee, visit www.utcrops.com

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. Persons who do not obey the law will be subject to penalties.

Disclaimer Statement

Pesticides recommended in this publication were registered for the prescribed uses when printed. Pesticides registrations are continuously reviewed. Should registration of a recommended pesticide be canceled, it would no longer be recommended by the University of Tennessee. Use of trade or brand names in this publication is for clarity and information; it does not imply approval of the product to the exclusion of others which may be of similar, suitable composition, nor does it guarantee or warrant the standard of the product.

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