

# Insects

## The Common Stalk Borer in Field Corn

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### Introduction

The common stalk borer in Tennessee is reported to attack several crops in addition to field corn. However, the preferred host of the insect is the giant ragweed. This preference is due to the largeness of the stem in which the larvae can mature. Fields of corn planted in a no-till situation are preferred by the moths because of the grassy weeds in the early spring. Later, the larvae will migrate to any corn planted in the fields.

### Description

The adult moth is dark grayish-brown with a number of small white spots on the wing. The hind wings are pale gray-brown. The larva is very small upon hatching, with brownish and white stripes and a purple dark band around the middle of the body. This purple band fades as the larva matures. The larva reaches a length of 1½ inches when fully grown. (See Figure 1.)

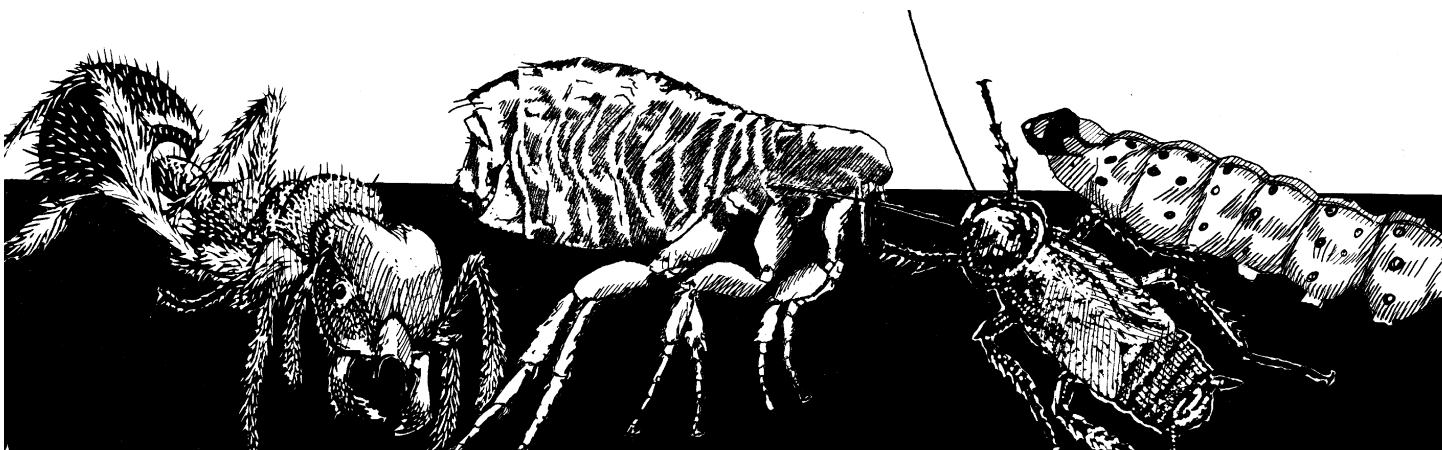
### Life History

Adult female moths deposit their eggs on grasses in the fall, and the eggs overwinter on the grasses. In the spring, the eggs hatch and bore into the stems of the grass. The larva then burrows up and down the stem, feeding on the



*Figure 1. The Common Stalk Borer*

tissue until it becomes too large for that stem. The larva will then migrate to a larger-stemmed plant and bore into it. If this plant is corn, the larva will mature and pupate inside the corn stalk. There does not appear to be more than one generation per year in Tennessee.



## Damage

Damage is done when the larva bores up and down the stalk, eating out the heart of the corn plant. Corn is usually attacked when the plants are less than 2 feet high. The larva may enter the corn plant from the side of the stem or from the top of the plant and move down into the whorl. Damaged plants may be recognized by a dead leaf in the center of the whorl. (See Figure 2.)

## Control Practices

A thorough cleanup of weeds in the field is essential to prevent the larvae from migrating to corn. As soon as the grassy weeds are killed in a field, the larvae move from them to larger-stemmed plants, such as corn. One method of control is to burn weeds with an herbicide and treat with an insecticide as the larvae move to the corn. Careful timing is necessary to achieve control of the borers before they bore into corn plants and become difficult to remove. Since timing is critical, scout corn that is still in the whorl stage to determine if they are present. An early application of a short residual insecticide is very important. If no controls are used, losses can be as high as 50 percent. This pest cannot be controlled by seed treatments.



*Figure 2. Adult Moth*

*Photo Credit:  
University of Illinois, IPM Web site, by Michael Greifenkamp*

## Insecticide Chemical Control

Chemicals	Rate/Acre	Pre-harvest Interval
Baythroid XL	1.6-2.80 oz.	21 days
Brigade 2EC	2.1-6.4 oz.	30 days
Mustang Max 0.8 E	2.72-4.0 oz.	30 days
Warrior II, Karate Z	1.28-1.92 oz.	21 days

### 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. Pesticide 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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