

## Fall armyworms on the move

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We are hearing numerous reports of fall armyworm sightings this year both in Tennessee and in neighboring states. As the name suggests, this pest usually shows up in late summer and fall. Outbreaks can be severe some years. Although armyworms may be better known as agricultural crop pests, they can be a severe but sporadic pest of turfgrass. When in a group, they may eat the grass down to the ground and cause bare areas in lawns. In the case of heavy infestations, large expanses of turfgrass can be destroyed. Fall armyworms have a broad host range, but generally prefer lush, well-fertilized grasses. Areas that are newly-planted will be most susceptible.

### **How to identify fall armyworms?**

Fall armyworms are lepidopteran insects that have four life stages: egg (Figure 1), larva (Figure 2), pupa, and adult (moths). The larvae cause damage to turfgrass by feeding on the leaves (foliar feeders). Larvae generally range from 1 to 1.5 inches long depending on instar (growth stage, Figure 3) and are greenish to brown with alternating dark and light stripes that run the length of their body. The larva has a dark head capsule marked with a pale, but distinct, inverted “Y” (Figure 4). Often, four black dots may be observed on the back side of each segment and the abdomen.

The adult moths are tan with bronze front wings and a single white dot in the middle. Their wings measure about 1.5 inches across when expanded. When enough egg masses are laid close to one another, the resulting larvae overwhelm the surrounding turfgrass, chewing it to the ground. Fall armyworms do not overwinter in Tennessee. Each year, fall armyworm moths, carried by air currents move north from Florida spreading from south to north.



Photo Credit : Tom Rison, Claiborne Co.

Figure 1: Fall armyworm egg mass



Photo credit : Celeste Scott, UT Extension

Figure 2: Fall armyworm larva



Photo credit : Celeste Scott, UT Extension

Figure 3: Fall armyworm larval stages

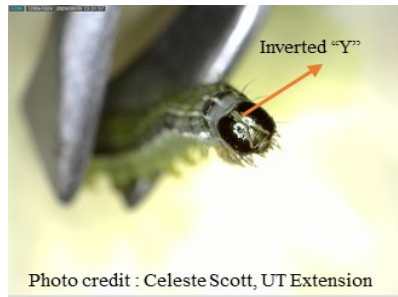


Photo credit : Celeste Scott, UT Extension

Figure 4: Fall armyworm larva with a distinct, inverted “Y” on the head capsule

It is essential to scout lawns for armyworms by carefully inspecting the turfgrass. Unlike many other foliar feeding pests in turfgrass, fall armyworms will feed both during the day and at night but tend to feed most heavily in the early morning. In early stages, transparent leaf tips resembling windowpanes may be visible, as small, immature armyworms that are unable to chew through the leaves will scrape green tissue off the leaf surface. As armyworms mature, they tend to “march” in large groups or feed in a way that creates a distinct line between damaged and undamaged turfgrass. Feeding can persist until the first hard frost. When fall armyworms are suspected but not immediately visible, a soap water solution may help bring them to the surface. Add 1 to 2 tbsp of liquid dishwashing soap in a gallon of water. Pour

this solution over a 2- foot by 2-foot area (4 square feet) and these caterpillars will generally be forced to the surface by the irritating soap solution.

### **How to control fall armyworms?**

While warm-season grasses like bermudagrass can be susceptible to significant injury by fall armyworm, feeding will generally not result in death of established areas, as recovery from the continued growth of rhizomes (below-ground stems) is possible. More often, concerns arise from unsightly and exposed areas that are more vulnerable to winter weeds and other stresses going into winter months. Fall armyworms are generally less attracted to zoysiagrass. If identified quickly, fall armyworms are not difficult to manage and numerous insecticide active ingredients, such as zeta cypermethrin, bifenthrin, deltamethrin, lambda-cyhalothrin, permethrin, carbaryl, cyantraniliprole, spinosad, *Bacillus thuringiensis* etc. will control them. Make sure that fall armyworms are listed as a target pest on any insecticide purchased or used. Liquid applications are preferred to granules due to better coverage and rapid action. Mowing before application can improve penetration of the insecticide through the canopy and into the spaces where fall armyworms are actively feeding. Avoid watering or mowing for 24 hours after spray applications to increase larval exposure to the insecticide. Keep in mind when armyworm pressure is high, an insecticide application soon after installation is recommended to protect newly laid sod. However, many insecticides can pose a risk to beneficial insects and other organisms, particularly if not used in accordance with the label. Always read and follow the label prior to making an application. When in doubt, consult a UT Extension professional.