

Fall Armyworm

Spodoptera frugiperda (Smith)
(Lepidoptera: Noctuidae)

Description:

Immature stages – Fall armyworms are approximately 1-1 ½ inches long, depending on instar, and can vary in color from a green to mottled brown, to almost black. Fall armyworms have wide black stripes running down each lateral (side) of the body. Sometimes you will be able to distinguish four black dots on the dorsal (back) side of each segment of the abdomen and a light-colored, upside-down “YP” marking on the head capsule. Fall armyworms have four pairs of prolegs attached to the abdomen.



Adult stages – Adult moths are more difficult to distinguish from other species. Each moth has a wingspan of approximately 1-1 ½ inches, hind wings are white (same as cutworms) but the fore (front) wings have a noticeable white spot near the center of the wing.

Biology:

Life Cycle – Even in relatively mild years, the moths, or adults, do not survive our winters. Moths move north from Florida each spring and summer, spreading from south to north. This process takes several generations of moths, which is why the worms usually appear in late summer and early fall in northern parts of the state. An armyworm moth can lay eggs in batches of a few dozen to several hundred, allowing populations to grow rapidly throughout the summer. These eggs hatch after a few days and the caterpillars feed and grow for two to three weeks before pupating. A week or so later, the new adult moth emerges to start the cycle again. The cycle takes about four weeks to complete with 14 to 17 days spent as caterpillars feeding on the grass.



Damage to Crop:

Armyworm moths are ubiquitous and do not discriminate between urban areas and rural areas, where most sod farms are located. Although armyworms may be better known as agricultural crop pests, they can be a sporadic but serious pest of turfgrasses. Fall armyworm damage in turfgrass is very distinctive. Since armyworms cross the turf surface as a group, they create a noticeable line between damaged and undamaged turfgrass. Usually damaged areas will originate around a site where egg masses can be easily laid (signposts, buildings) and radiate outward. Although fall armyworms do not have many specific preferences, newly-installed sod is more attractive and more susceptible to damage.

Management:

When armyworm populations are high, applying insecticide immediately following turf installation is recommended. There are a number of effective and relatively inexpensive products. Others are



more expensive but offer better control of larger worms, and a few insecticides offer long-term protection at a premium price. Consult the commercial edition of the Georgia Pest Management Handbook or refer to your local county Extension agent for more specific insecticide recommendations.

Insect growth regulators (IGR) are also available for use on turfgrass. Some are active only on caterpillars, and others have a broader spectrum and affect a range of different insects. The IGRs stop the development of immature insects so that they cannot grow and turn into adults. Many are absorbed into the grass and remain active but do not move into new growth. They are safe for non-arthropod animals including sod harvesters, landscape installers, and customers.

Shimat Joseph, Will Hudson, Clint Waltz, University of Georgia, 2019