

Turfgrass Insects Sheet 1 ¹

D.E. Short and J.L. Castner²

Southern chinch bug, *Blissus insularis* (Plate 1). This is the most important pest of St. Augustinegrass in Florida. Adults are 1/5" long and black with white patches on their wings. The nymphs range from 1/20" to nearly adult size (Plate 2). They are reddish with a white band across their backs but become black as they mature. The nymphs pass through five instars, requiring four to five weeks to reach adulthood. There are three generations per year in north Florida and seven to 10 in south Florida.



Plate 1 .



Plate 2 .

Chinch bugs withdraw the plant sap with piercing-sucking mouthparts, causing yellowish to brown patches in the turfgrass. Injury is more

prevalent in full sun and under dry conditions. When chinch bugs are present in sufficient numbers to cause noticeable damage (20 to 25 per square foot) they can be found by parting the grass at the margin of the off-color areas (Plate 3). Examine at least three or four places in suspected areas. If chinch bugs are the problem, they will be crawling on the soil surface.



Plate 3 .

Fall armyworm, *Spodoptera frugiperda* (Plate 4). It occasionally damages turfgrass. They are more common on golf courses and other Bermuda grass areas than on home lawns. Mature larvae are 1-1/2" long and greenish with dark stripes. Unlike webworms, fall armyworms feed during the day and occur earlier in the year. The life cycle and damage symptoms are similar to webworms.

Tropical sod webworm, *Herpetogramma phaeopteralis* (Plate 5). This is the most common caterpillar attacking turfgrass. They attack all grasses,

1. This document is SP126, one of a series of the Department of Entomology and Nematology, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. This document is available for sale as a high-quality, color publication. For ordering information or to order using VISA or MasterCard, call 1-800-226-1764. Date first printed: November 1992. Reviewed: May 1996. Reprinted: February 1997. Reviewed: June 2005. Please visit the EDIS Website at <http://edis.ifas.ufl.edu>.

2. D.E. Short, retired professor; J.L. Castner, scientific photographer; Department of Entomology and Nematology, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611. The term plates, where used in this document, refers to color photographs that can be displayed on screen from EDIS. These photographs are not included in the printed document.



Plate 4 .

but Bermuda is preferred and Bahia is least desirable. The larvae are greenish with numerous black spots and are 3/4" long when mature. Sod webworms are usually not a problem until June in south Florida, July in central Florida and August in north Florida. Injured grass has notches chewed along the sides of the blades or is eaten back unevenly (Plate 6). They feed only at night and rest in a curled position on the soil surface during the day. The life cycle requires five to six weeks and there are several generations per year.



Plate 5 .



Plate 6 .

Mole crickets. Four species of mole crickets occur in Florida (from left in Plate 7): the northern mole cricket, *Neocurtilla hexadactyla*, the short-winged mole cricket, *S. abbreviatus*, the tawny mole cricket, *S. vicinus*, and the southern mole cricket, *Scapteriscus borellii*. The southern and the tawny are the most prevalent. Mole crickets are considered the most serious pest of turfgrass in Florida. Adults are about 1-1/2" long, light-brown, and have forelegs well adapted for tunneling through the soil. They damage all grasses, but Bahia and Bermuda grasses are their favorite hosts. Their damage is primarily mechanical: they tunnel through the soil near the surface, severing the roots and uprooting the grass (Plate 9).



Plate 7 .



Plate 9 .

There is one generation per year in north and central Florida. Dispersal flights occur in the early spring and eggs are deposited during May. Each female deposits approximately 130 eggs in the soil. Peak egg hatch occurs in June and the nymphs are mature by October (Plate 8).



Plate 8 .

Ground pearls, *Margarodes* and *Eumargarodes* spp. (Plate 10). They are related to mealybugs and are found throughout Florida. Each female lays about 100 eggs, which hatch into crawlers. The crawlers locate grass roots, feed, molt, shed their legs, and secrete a cream-colored, scaly covering which completely encloses their bodies. They become spherical and are gray or brown. They appear very much like small pearls. They insert their long, slender threadlike mouthparts into the grass roots to withdraw plant juices. The nymphs vary in size, ranging from a grain of sand to about 1/16" in diameter when they are mature.



Plate 10 .

The adult female pearls are wingless, about 1/16" in length, pink, and have well-developed front legs. There is one generation per year. They most commonly infest centipede grass in north and northwest Florida. Severely infested grass turns yellow, then brown. It requires large numbers of pearls to damage the grass, and control is usually not justified.