

Sod Webworm Control in Gulf Coast Lawns

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There are several genera of sod webworms in Texas. The native species in the genus *Crambus* are widespread, whereas the tropical sod webworm, *Herpetogramma phaeopteralis* is less cold tolerant, thus is confined to areas along the Gulf Coast. The tropical sod webworm has caused extensive damage to St. Augustine lawns in the Houston area. The adult moths are similar in size with $\frac{3}{4}$ " (20mm) wingspread, but differ in that the *Crambus* sp. fold the wings around the body at rest, the tropicals spread their wings, giving a triangular appearance. The adult *Crambus* vary in color from white to gray, the tropicals are a dull brown.

The slender caterpillars of both groups reach $\frac{3}{4}$ " in length, usually light green from the grass consumed, with numerous raised dark spots in rows along the length of the body. They differ in their feeding habits with the *Crambus* severing the leaves, then consuming these on the ground or in silken tunnels in the thatch; the tropicals feed on the leaves while attached. Both groups feed primarily at night.

Life History

Sod webworms spend the winter months as partially grown larvae, several inches below the soil surface. During spring, the larvae mature and transform into the adult moth stage. After mating, the moths deposit eggs that hatch in about one week. The young, developing larvae may feed for one to two weeks before transformation to the pupal and adult stages. Two or three generations may be completed within a year.



Tropical sod webworm, *Herpetogramma phaeopteralis* Guenée (Lepidoptera: Pyralidae), adult. Photo by G. McIlveen, Jr.

Damage

Sod webworm larvae feed primarily at night and prefer areas in lawns that are hot and dry during daylight hours. As a result, steep slopes, banks and other areas difficult to water properly are subject to larval damage. Heavily shaded areas are seldom attacked by the larvae.

During the summer months, sod webworm larvae live on the soil surface in silken tunnels constructed in the thatch of the grass. Lawn damage occurs as the larvae chew off grass blades and retreat into their protective silken tunnels to consume the foliage. Injury first appears as small brown patches of closely clipped grass. Lawns are particularly susceptible to larval damage during the months of July and August when the temperatures are hot and lawns are not growing vigorously. Large lawn areas may be damaged rapidly if controls are not applied.

Control Measures

The need for sod webworm control can be determined by close examination of the grass and thatch. If three to four sod webworm larvae are found within a 6-inch-square section of dying sod, then chemical treatment is recommended. Larvae are most active on cloudy days or at night.

Insecticides can be applied in either spray or granular form. Spray solutions can be applied with a garden hose sprayer or compressed air sprayer. Apply at least 15 to 25 gallons of insecticide-water solution to 1,000 square feet of grass. Watering the lawn before application will aid penetration into the turf. If the damage is from the tropical sod webworm, a liquid spray applied to the leaves is suggested.

Granular insecticides are easier to use and generally provide more thorough coverage. This type of insecticide can be applied with a fertilizer spreader. Following application, the lawn should be watered for about an hour to wash the granules into the matted turf. Use insecticides containing *acephate* (Orthene®), *bendiocarb* (Dycarb® or Turcam®), *carbaryl* (Sevin®), or the microbial insecticides *Bacillus thuringiensis* ssp. *Kurstake* (B.t.k.) and ssp. *Aizawai* (B.t.a).

The microbial insecticides are specific for caterpillars thus do not harm non-target arthropods or animals. Consult the directions given on the container label to determine the approved rate of insecticide application.