



Sod Webworms

O & T Guide [T-#09]

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Cooperative Extension Service • College of Agriculture and Home Economics • October 2006

The caterpillar stages of these particular snout moths bore into the stems, crowns or roots of grasses. Most larvae feed near the bases of the plants where they construct silk webs.

Metamorphosis: Complete

Mouth Parts: chewing (larvae)

Pest Stage: Larvae

Typical Life Cycle: Eggs are laid in small clutches in the soil around shallow roots of host grasses; rarely seen. → As the Larvae mature, they construct tunnels or burrows through the thatch, sometimes extending into the soil. First generation larvae hatch in late spring, feed without interruption and pupate by mid-summer. Second generation larvae are produced in late summer. These soon hatch, feeding on turf in late fall but pausing to overwinter. They resume feeding as temperatures permit or by early spring. → Pupae are interspersed in the soil/thatch layer. → When disturbed in their usual grassy habitats, Adults commonly make short, jerky, flights from place to place. Adults are short-lived and die soon after mating and laying eggs. Two generations usually occur annually. Several species occur in New Mexico.

Description of Life Stages:

Egg---minute, round, and white.

Larva--- Larvae vary in color from greenish to tan, brown, or gray, depending on the species. Larvae are cylindrical with three pairs of short, segmented thoracic legs and five pairs of stubby, abdominal prolegs. When mature, they are $\frac{3}{4}$ inch long, and most have characteristic dark, circular spots scattered over their body length.

Pupa---lozenge shaped, about $\frac{3}{8}$ inch long, and dark brown to black.



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Adult sod webworm, *Crambus* sp. Photo: David Cappaert, www.forestryimages.org

Adults---The moths are usually whitish or tan and about $\frac{5}{8}$ inch long. At rest, they hold their narrow forewings close to the body. Although adults in the family are called "snout moths," the snout is actually a pair of long, curled palps associated with the mouth parts. These are easily visible when the moth is viewed from the side.

Habitat and Hosts: Sod webworms feed almost exclusively on members of the grass family, especially permanent sod.

Their primary host plants are Kentucky bluegrass, fine fescue, perennial ryegrass and bentgrass. Apparently, most warm season turf species are uncommon hosts for sod webworms. In addition to lawns and other turfgrasses, many webworms feed on small grains, corn, timothy, pasture grasses and meadow grasses. Some undoubtedly feed on New Mexico range grasses.

Damage: Damage first appears as small, brown areas in the grass. The turf often has a ragged appearance. Feeding and consequent damage occurs only at night, when the larvae feed on grass blades. If feeding is extensive during dry weather, the plants may be killed.

IPM Notes: Biological controls include the nematode *Steinernema carpocapsae*, which attacks sod webworms. A slow-

working, but effective fungus that also attacks webworms is *Beauvaria bassiana*; while available as a commercial formulation, this product has not been extensively tested in arid New Mexico conditions. *Bacillus thuringiensis* (Bt) can also be effective in some situations, particularly while the caterpillars are small. Pyrethrum or rotenone, both botanical poisons, paralyze webworms on contact. Insecticidal soaps may help to control sod webworms. Several insecticides are currently registered in New Mexico for this pest.

Cultural controls include reducing the habitat for sod webworms by reducing thatch to $\frac{3}{4}$ inch or less, and by planting perennial resistant ryegrasses and fescues when they are commercially available. Maintaining adequate nutrient and moisture levels also helps.