

Insects

Sod Webworms on Turfgrass

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Sod webworms are a large destructive group of turfgrass pests that usually are found infesting the sunny areas of lawns or golf courses. Adult moths of most species are ½ inch long with a prominent forward projection on the head (labial palpi) from which they get the name snout moths. The forewings are dull ash gray with a conspicuous whitish or silver-colored streak or with less noticeable streaks from the base to the margin. Hind wings are whitish grey or light brown. The moths fly erratically over the lawn, laying eggs between 7:30 and 10:30 in the evening. During the day, they rest in the grass or on plant foliage with their wings folded back over the body, giving the moths a slender, tapering silhouette.



*sod webworm moth
David J. Shetlar, OSU*

The tiny oblong eggs are white to pale yellow and hatch in seven to 10 days. Larvae range from pinkish white to yellowish to light brown. When fully grown, they are

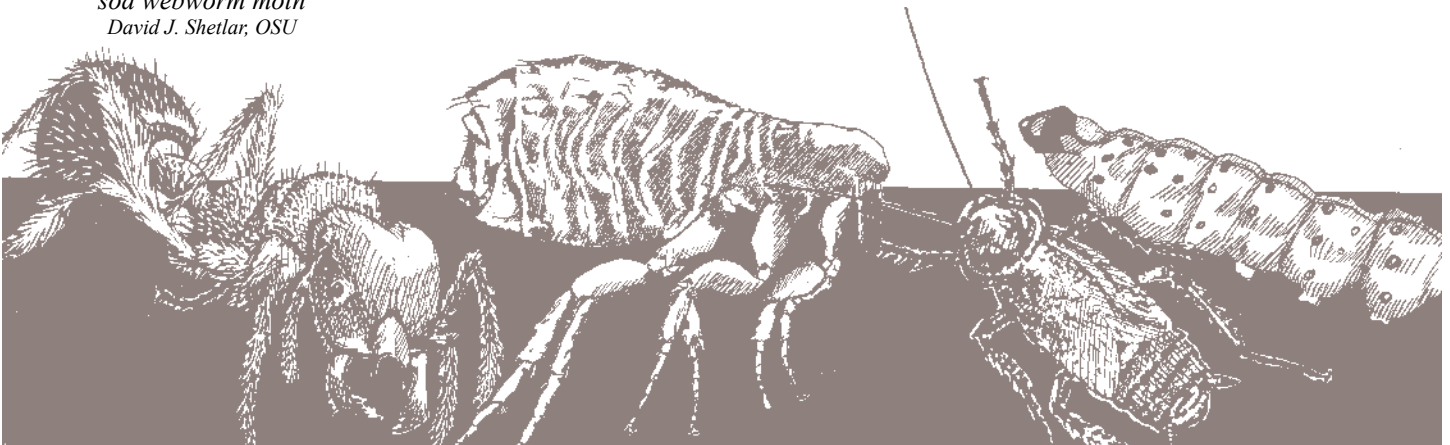
about 1 inch long with coarse hairs. Most species have paired dark spots on their tops and sides.

Sod webworms overwinter as larvae in silk-lined tubes below the soil surface. In the early spring, they feed on the upper roots, stems and leaves of grass. On steep slopes and in sunny areas, larvae build protective silken webs where they feed and develop. In April and May, they pupate in underground cocoons, with the first adults emerging in early May.

Larvae cut off grass blades near the thatch line and pull them underground for consumption. Small brown patches of closely cut grass appear, and if populations are large, patches run together to form large, irregular brown patches. Most of the severe damage occurs in July and August when grasses are growing slowly. Two to three generations may be expected each year, with six weeks per generation. Adult moths fly up in



*sod webworm caterpillar
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front of a lawnmower, fly a zigzag course for a short distance and land in the grass.

Sod webworm larval populations may be detected by applying 2 teaspoons of liquid dishwashing detergent in 1 gallon of water over 4 square feet of grass concentrated within a wooden or metal frame. After a few minutes, the webworms begin to surface and a careful 10-minute inspection between grass blades will reveal them if present. Control measures

should be taken if four to six or more larval sod webworms are found in 4 square feet of sod.

This economic threshold is based on good growing conditions for turf. If the turf is under stress from insufficient water, poor fertility, extremes in temperature or bird-feeding damage, treatment may be required at lower sod webworm densities to maintain turf quality. Several insecticides may be used to control sod webworms.

Insecticide & Formulation	Amount of Insecticide per 1000 Square Feet	Precautions and Remarks
azadirachtin (Turplex BioInsecticide) 3% EC	0.25 - 0.5 fl oz	Use 1-5 gallons of water per 1000 square feet. Irrigate well before applying.
<i>Bacillus thuringiensis</i> (Dipel 2X) 6.4% WP	0.37 - 0.73 oz	
chlorpyrifos (Dursban Pro) 2lb./gal. EC (Dursban 50W) 50% WSP	1.5 fl oz 2 lb/acre	Watering or mowing should be delayed for 2 to 24 hours after treatment. Not for residential use.
cyfluthrin (Bayer Advanced Power Force Multi-Insect Killer) 0.75% conc. (Tempo 20WP) 20% WP (Tempo 20WP GC) 20% WSP	3 fl oz/gal 50 grams-1 packet per 7,500 to 10,000 sq ft 55 grams -1 packet per 11,000 sq ft	Delay watering or mowing for 24 hours for optimum control. Tempo 20 WP not for use on sod farms and golf courses. Tempo 20 WP GC for use on residential and commercial sites including golf courses.
ethoprop (Mocap 10GC) 10% G	1.15 lb	For golf courses. Not for domestic use. Avoid application to wet foliage. Do not apply to newly seeded stands. Water immediately after application. Phytotoxicity is likely to occur on bentgrass and ryegrass.
bifenthrin (Talstar F, Talstar One, Talstar Lawn & Tree Flowable) 7.9 F (Talstar GC) 7.9 F (Talstar EZ Golf Granular, Talstar GC Granular) 0.2% G	0.18-0.25 fl oz 0.25 fl oz 1.15 lb	Delay watering or mowing for 24 hours after application.
halofenozide (MACH 2 Granular) 1.5% G (MACH 2 Liquid) 2lb./gal. L (Grub Ex) 1.5% G	1.55 lb 1.5 fl oz see label for spreader settings	Mach 2 Granular is labeled for use on all turfgrass sites while Mach 2 Liquid is registered for use on commercial sites including: golf courses, sod farms, commercial lawns and cemeteries. It is not registered for use on residential lawns and athletic fields. A single repeat application can be made if needed.
lambda-cyhalothrin (Scimitar WP) 10% WP (Scimitar CS) 9.7% CS (Scimitar GC) 9.7% CS	3-6 grams 3.4-7 ml 3.4-7 ml	Scimitar GC can be used on golf courses.

Insecticide & Formulation	Amount of Insecticide per 1000 Square Feet	Precautions and Remarks
methomyl (Lannate) 90% SP	2/5- 4/5 oz (for use on sod farms only)	For use on sod farms only. After application, sprinkle irrigate for 15 minutes.
permethrin (Astro) 3.2lb./gal. EC	0.4 - 0.8 fl oz	For use on lawns (residential lawns and sod farms).
spinosyn A and spinosyn D (Conserve SC) 1lb./gal.SC	0.25 fl oz	Conserve SC is labeled for use on all turf grasses.
<i>Steinernema carpocapsae</i> (parasitic nematodes)	see label	Application should be made when small larvae or damage is first detected. Apply at sundown for best results.
trichlorfon (Dylox 80) 80% SP (Dylox 6.2G) 6.2%G (Bayer Advanced 24-Hour Grub Killer Plus) 6.2% G	2.5-3.75 oz 2 lb 15 lb/7,500 sq ft	Not for use on turf being grown for sale.
carbaryl (Sevin Brand SL) 4 lb/gal SL	4.4 - 6 fl oz	
deltamethrin (DeltaGard G) 0.1G	2-3 lb	Irrigate with an adequate quantity of water to thoroughly moisten grass and thatch and dissolve the insecticide granules.

Precautionary Statement

To protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store or dispose of a pesticide. According to laws regulating pesticides, they must be used only as directed by the label. Persons who do not obey the law will be subject to penalties.

Disclaimer Statement

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

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