urfgrass disorder: Sod webworms

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The term "sod webworm" refers to a group of closely related insect species whose larvae attack bluegrass and other turfgrasses. Each species has a different life cycle, and sod webworms consume many types of grasses and even broadleaved plants. Many sod webworms are in the genus *Crambus*, and adults of this group are called lawn moths.

Symptoms and effects

Sod webworms cause thin spots in turfgrass. Moderate infestations often produce a trailing brown pattern, and severe infestations may cause overall patchiness in turf.

The larval or "caterpillar" stage causes the damage. Larvae live inside silken tunnels that they build at the base of grass plants—hence the name sod webworm. Larvae clip grass blades and drag them into the tunnels,

causing an immediate thinness in the feeding area. The more numerous the larvae, the thinner the turf will become.

Although symptoms may occur any time from May to September, they occur most frequently in June and August. Small brown areas, about 3–5 inches in diameter, signal the initial damage. Trail patterns soon coalesce into larger, narrow, brown patches as larvae increase in size or numbers.

Life cycle

Sod webworm moths are beige, but they look silvery in flight. The wingspan is $\frac{3}{4}$ –1 inch. At rest, the insect folds its wings against its body. The moths have a feathery, snout-like projection on the front of their heads.

Because there are several species, you may see adults any time between May and September. However, the most common flight periods are May to June, and late August to early September. The moths are most evident at dusk, when they fly low across the lawn, scattering their eggs in flight.

Larvae hatch from the eggs in 7–10 days. They start feeding immediately at the bases of grass plants



Sod webworm larva.



Adult sod webworm moth.



Typical damage to turfgrass caused by sod webworm.

and soon begin making their silken tunnels. Larvae feed and grow for 6–10 weeks, depending on temperature and other conditions. Fully grown larvae are about 1 inch long. The various species are tan to light brown, often with small, darker spots. Most sod webworms overwinter as larvae in their silken webs.

Cause

It can be difficult to verify that sod webworms are causing your turf damage because the larvae live in the thatch layer of turfgrass. Check for them by carefully separating turf and thatch in damaged areas and examining for silken tunnels and larvae.

You also can use chemicals that irritate larvae, causing them to climb higher in the grass to escape. Use liquid dishwashing detergent or 1–2% pyrethrin insecticide as larval irritants. Mix 1 tablespoon of detergent or pyrethrin with 1 gallon of water. Apply the entire gallon of solution with a sprinkling can over an area of 1 square yard. Repeat the treatment at 2 or 3 locations, testing both damaged and adjacent undamaged turf.

If larvae are present, they will surface in 5–10 minutes. Check the test area several times during this 10-minute period, because larvae will eventually re-enter the thatch.

The presence of adult moths flying over a lawn doesn't necessarily indicate an infestation. Moths may fly in from adjacent turf areas and not lay eggs. Therefore, you should not apply insecticides based solely on the presence of lawn moths.

Starlings, grackles, and other insectivorous birds often eat sod webworm larvae. Their probing for food may indicate a lawn has many sod webworms or other insects.

Control

Sod webworm damage can look like problems caused by other turfgrass diseases or insect pests. Always confirm that sod webworm larvae are present before treating.

Cultural

Small populations of sod webworms live on much of Wisconsin's established turfgrass. Proper turf care and the activity of beneficial natural enemies usually keep webworm numbers below damaging levels.

Ahealthy lawn can withstand limited sod webworm activity better than a diseased lawn, and it will recover more rapidly once larvae are gone. To maintain healthy turfgrass, fertilize properly, control weeds and diseases, mow frequently at a height of $2\frac{1}{2}-3\frac{1}{2}$ inches, and irrigate during dry periods.

Ahealthy, competitive turf also promotes the beneficial activities of the webworm's natural enemies. Spiders, predaceous ground beetles, certain parasitic flies and wasps, and other beneficial turf insects all help keep the population of webworm larvae below damaging levels.

Chemical

If your lawn is damaged and you find one or more larvae per square foot, we recommend chemical control. You can often make spot treatments, spraying just damaged areas.

Before using an insecticide, mow and rake the area to be treated. Applications made late in the day give better control.

If using a spray insecticide, water the lawn **before** treatment. If using a granular insecticide, a **light** watering, either just before or just after application, helps activate the insecticide.

Avoid heavy irrigation and mowing for 3 days after application. Aheavy rain within 24 hours of application may reduce the effectiveness of the insecticide, making a second treatment necessary.

Insecticides available to homeowners include chlorpyrifos, cyfluthrine, diazinon, Dursban, Sevin, and Orthene. Professional applicators can also use Mavrik, Oftanol, Scimitar, Talstar, trichlorfon (Dylox, Proxol), and Turcam.

References to products in this publication are for your convenience and are not an endorsement or criticism of one product over other similar products. You are responsible for using chemicals according to the manufacturer's current label directions. Follow directions exactly to protect the environment and people from chemical exposure.

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