

SOD WEBWORM AND CHINCHBUG CONTROL

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Sod webworms and chinchbugs are two thatch-inhabiting insect pests capable of inflicting visible damage to turfgrasses. Control of these pests is readily achieved by timely detection and treatment with effective insecticides.

SOD WEBWORMS

The term sod webworm includes a variety of species. The extent of injury from this group of pests varies with the species and location of occurrence.

Sod webworm adults are the small, grayish-white to beige moths with a wingspread of 3/4-inch fre-

quently seen flying over lawns at dusk or just after dark. The moths do not damage turf.

Sod webworm larvae are caterpillars varying in color from greenish to beige, brown or gray, depending upon the species. When mature, they are 3/4-inch long and most have characteristic dark circular spots scattered over the body length. As the larvae mature, they construct tunnels or burrows through the thatch, sometimes extending into the soil.

Feeding and consequent damage occurs at night. If feeding is extensive during dry weather, the plants may be killed.

Life Cycle. Female moths drop their eggs on the turf as they fly over the turf at dusk. Eggs hatch in a week to 10 days. About six weeks are required for development from egg to adult. The most common species on northern turfgrass, the bluegrass webworm and large sod webworm, have two generations each year and overwinter as larvae in silken webs

DETECTION OF INSECTS IN TURF



Pyrethrins and water sprinkled over turf will bring webworm larvae to the surface.

Flooding an area of turf inside a coffee can results in reliable chinchbug counts.



Sod Webworm. Flocks of birds (particularly starlings) that frequently return to a turf area usually mean that sod webworms or other larvae are present. Further evidence of bird activity is probe holes left by the birds searching for larvae. Close examination of the turf in such areas either reveals larvae, or the green pellets of excrement (frass) left by them.

An effective method of detection is to mix one tablespoon of 1 to 2% pyrethrins (a common garden insecticide) in one gallon of water and apply the solution uniformly over one square yard of turf. The solution irritates the larvae which soon come to the surface. This is for detection only, not control.

Chinchbug. Infestations of chinchbug are often masked by the general droughty appearance of turfgrass when under moisture stress. If adults are present, they are often seen wandering across sidewalks or driveways on warm afternoons. Close examination of the turfgrass, particularly thatch, usually exposes the insects.

Another effective method of detection is to remove both ends of an empty coffee can, cut the rim off one end to produce a sharp edge and push the can two or three inches into the soil in an area where chinchbugs are suspected. Fill the can with water and wait a few minutes. If chinchbugs are present, they will float to the surface. The tiny red nymphs may be difficult to see, especially for those color blind to red.



Successful control of insect damage is evident in treated areas of this lawn. Untreated areas are damaged.

within the thatch. In southern climates, species such as the tropical sod webworm have several overlapping generations each year. In south Florida, generations continue through the year.

Control. When large numbers of sod webworm moths are seen flying over turf just after dark or when many are flushed while mowing, an infestation of larvae may be expected. Insecticide, such as Aspon[®], applied two weeks after the moth population has decreased to a scattered few is effective in preventing damage. The two-week delay allows time for the eggs deposited by the moths to hatch into larvae that are then killed by the insecticide.

Insecticide may also be applied anytime a larval infestation is detected. Maximum effectiveness is obtained when the turf is thoroughly irrigated just before treatment. Irrigation *should not* be applied following liquid applications, but the turf *should be* irrigated as soon as possible after the application of granular insecticide.

CHINCHBUGS

Two species of chinchbugs are considered important pests of turf. The hairy chinchbug, a pest of northern turfgrasses, causes severe damage to bluegrasses, fine fescues, bentgrass, and zoysiagrass. The southern chinchbug feeds on bermudagrass and zoysiagrass, but is primarily a serious pest of St. Augustinegrass.

Chinchbugs generally occur in scattered patches rather than being evenly distributed over the turf. Sunny areas are most heavily infested with populations sometimes reaching 200-300 per square foot. Plant injury occurs as a result of the insect sucking fluids from the plant and at the same time injecting salivary fluids into the plant. The turf wilts and then turns brown.

Injury is particularly severe when heavy infestations occur in turf that is dormant from moisture

stress. Such dry conditions are particularly conducive to chinchbug growth and population development.

Adult chinchbugs are 1/5 inch long, black with white wings folded over the back. The wings of some extend to the tip of the abdomen, but others extend only halfway to the tip. The nymphs (immature stages) range from 1/20 inch long, soon after hatching, to nearly the size of an adult. Upon hatching, nymphs are bright red with a distinct white band on the abdomen. Their color changes first to orange, then orange-brown, then black as the nymph goes through five growth stages. Each of these stages inflicts injury on the turf.

Life Cycle. Adult chinchbugs insert eggs in or on the lower leaf sheaths of grasses, stolons or in the thatch. The number of eggs laid is known to range from 233 to 289 per female.

The development of eggs and stages thereafter is directly dependent upon temperature—and therefore location—in the United States. One generation may take six weeks at 83°F and 17 weeks at 70°F. In south Florida and Louisiana, generations may be continuous with up to seven per year; three to four generations in north Florida; two generations in Ohio; and one in an area such as Rochester, N.Y.

In southern regions, chinchbugs remain active during the winter months, but in northern areas they become inactive and go into a resting state. In Ohio, these adults become active again in March and early April, laying eggs in May that develop into damaging populations in July and August. They produce another generation in September which develops into adults that overwinter in the turf or nearby sheltered areas.

While some adult chinchbugs are capable of flight, crawling is their usual means of mobility.

Control. Infestations of chinchbugs may be treated with insecticides, such as Aspon with up to 90-day control, anytime they are detected. Turfgrasses should be monitored closely during droughty periods to detect infestations before injury occurs.

Both liquid and granular forms of insecticide are effective. Irrigation before treatment helps maximize control. If a low volume of spray is applied (2 gal. or less per 1,000 sq. ft.) a light syringing or irrigation immediately after treatment helps wash the insecticide off the grass plant and into the thatch where chinchbugs live. Irrigation after treatment is usually not necessary when higher volumes of spray are applied. The turf *should be* thoroughly irrigated after applying granular formulations.

NOTE - Insecticides are commonly labeled for control of both chinchbugs and sod webworms. Since summer infestations of the two pests often occur simultaneously, application of insecticide for control of one usually controls the other.