

TURF INSECTS

Insecticides are pesticides. Most of the commonly used insecticide products that are recommended to control insects affecting turf are known as contact poisons. To effectively control turf insects one must insure contact between the insect and insecticide. Controlling soil inhabiting insects, such as grubs, is best achieved by drenching the insecticide into the soil. Control for foliar feeding insects, such as sod webworms, is only achieved by keeping the insecticide in contact with the foliage.

In most cases, insecticide applications are applied after the insect becomes a problem and this usually isn't discovered until early signs of injury have been observed. One exception, however, comes to mind when discussing grubs. Usually an insecticide is soil drenched as a preventative.

There is no single insecticide that will adequately control all turf pests. The first step in turf control is to identify the culprit. Once you've learned to recognize early signs, wide scale turf loss will be avoided.

WHITE GRUBS — The June beetle (May beetle) are the adults of the true white grub, (grub worms). The grub worm has a U-shaped body and brown head. It's about half the size of your little finger. The body is white with the tip of the abdomen shiny and transparent, the body contents showing through the skin.

The adult June beetle deposits individually, pearl white, spherical eggs preferably in lush green grass.

Most common to the true white grub is a three year life cycle. Tiny grubs that hatch from the eggs live in the grass and feed near the surface until the first cold spell in late September. They then tunnel downward, overwintering about 18 inches below the ground surface. The following May they return near the surface to feed on the grass roots again until late September when they overwinter deep in the soil. The following year, in early June, they pupate in an earthen cell. Within four weeks they change to adults but remain in this stage until late May or June of the following year when they emerge to feed and lay eggs.

The annual white grub, also known as, the false June beetle or masked chafer, is another turf pest closely related to the true white grub. The life cycle, however, lasts only one year.

The adults in both species of grubs feed on the foliage of shrubs and trees. In severe infestations, the leaves on trees, particularly oak, may show extensive damage.

The grubs feed on the roots of many plants. They often kill large patches of sod in lawns, golf greens, cemeteries and parks. Damage usually occurs in patches. Small areas may be entirely destroyed while others are apparently not affected. When damage is severe, patches of turf can easily be rolled back as if being cut by a sod cutter. Examination of the roots will show severe root pruning.

In heavily grub infested lawns, skunks, raccoons, moles and other small animals have been known to invade the lawn in search of the grubs for food. By removing their food supply (the grubs), you will eliminate the secondary problem of these animals coming onto your property in search of food.

Control — Areas of turf grass, such as homeowners' lawns and golf courses, are not always seriously attacked by grubs to warrant control. However, when severe grub damage occurs, control is best accomplished by incorporating a residual insecticide into the soil.

SOD WEBWORM — Sod webworm moths are night flyers and attracted to lights. They have a wing span of approximately one inch, are tubular shaped and buff in color.

The larvae are gray to light brown in color and contain small, dark spots. Feeding is near the crown of the grass plant causing irregular browning. Close examination of the grass is needed to find webworms. Getting down on one's hands and knees is often necessary to find an indication of silken tubes and feeding tunnels of the larvae. Observe small greenish fecal pellets adjacent to injured areas. Another method that is effective in discovering larvae in your turf is to mix one tablespoon of pyrethrum emulsion or two to three teaspoons of household detergent to a gallon of water and pour it over one square yard of turf. This will bring the larvae to the surface. Early detection is important for control. The presence of unusual numbers of birds, especially robins, may also indicate that larvae are present.

FRIT FLIES — This is probably one of the up and coming insects which at present is getting more publicity than others, especially on golf courses. It is a very small, black fly. The maggots tunnel into the grass stems near the surface of the soil causing the upper portion of the plant to die. On greens, damage usually first appears near the periphery and moves inward. Blue grasses are susceptible. On sight identification is usually not very reliable. Laboratory study of the larvae is needed for a positive identification. The adult frit flies will settle on white golf balls when they are dropped on the golf green. If this is the case, note to see if browning has started about the collars of the green.

ARMYWORM AND CUTWORM — The armyworm moth, which is about an inch long, is tan to grayish brown and has a tiny, white dot in the center of each forewing. It's wingspread is about one and one-half inches. They deposit their eggs, which are small, white, globules, in rows or groups on the leaves of the grass and then roll the grass blade around the egg mass.

It is usually very hard to find the larvae as they feed at night and hide in the soil or groundcover during the day. Damage is similar to that of the sod webworm. They chew the leaves of grasses, causing brown patches.

Cutworms are similar to armyworms in their life cycle. Both are caterpillars of moths (Miller's). Damage is also similar.

CHINCH BUGS — Chinch bug injury is characterized by the lawn turning a yellowish color in scattered patches. If the feeding continues the patches enlarge and turn brown. The damage is caused by the nymphal stage of the insect as it sucks out the plant juices. The greatest amount of damage appears in July and August, especially in the sunny areas of the lawn. Chinch bugs are sun lovers.

The adult chinch bug is about one fifth of an inch long, black in color with white patches on the wings. Chinch bugs are true bugs from the order Hemiptera. (Hemi means half; ptera means wings). All insects that belong to this order have the same characteristic--the wings are half hard and half membraneous. All bugs are insects but not all insects are bugs--just those that belong to the order Hemiptera.

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