

when they hatch the young begin feeding and small patches of small grass begin to appear. If the problem is ignored, the patches get bigger.



Leatherjacket. These flies, which also resemble mosquitoes, are primarily in coastal areas and feed on roots of grass plants resulting in a yellow-colored and wilted turf. If heavy infestations occur, turf can become brown or, even worse, the turf can completely die. Adults emerge mid-July through early October and begin mating immediately. Eggs hatch within a couple of weeks and larvae begin feeding throughout the fall and spend the winter below the surface of the turf. By March and April, heavy feeding occurs as larvae reach maturity. Larvae continue feeding until about mid-July. At this time they begin to pupate, then later transform into adult crane flies. Leatherjacket larvae are more easily controlled in fall or early winter while they are still young. Spring treatments are the best to control this pest.

MANAGEMENT

When it comes to pest management, you must treat the issue immediately in order to restore the turf back to its original, healthy state and to prevent the problem from reoccurring.

Normally, nature creates a balance between insects, natural predators and food supply. But if something such as a change in the weather pattern happens to change that balance, then insect populations increase and may cause extensive damage.

In addition to a solid pest management program that may include preventive and curative strategies, aeration can help to establish a sound root foundation that will be better able to withstand unwanted pests.

Remember, pest management starts with overall plant/turf health. ■

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Annual Bluegrass Weevil

By Laurence Mudge and Rich Hanrahan

WHAT DOES IT LOOK LIKE?

The annual bluegrass weevil (ABW) has a long snout with an antenna that starts at the tip of the snout rather than the base. The blunt snout often causes the ABW to be mistaken for a turf-infesting billbug. ABWs typically measure 3 to 4mm long and their color differs between newly emerged adults and mature adults. Young adults, known as “callows” or “teneral,” are chestnut to brown in color, while the mature adults are darker ranging from gray to black. The body of an ABW is covered with thin, chestnut-colored hairs that shed with age, thus making the older adults appear shiny and black. These pests have rice-shaped eggs, about 1/32-inch long and gray. The larvae are cream colored with a C-shaped body and a distinct brown head. Young larvae are 1/32 inch and burrow and feed inside grass stems. After the larvae mature, they grow to be about 3/16 inch and feed externally.

ABW adults spend the winter protected near sites such as golf courses and other well manicured turf. In the EARLY spring, adults become active and migrate to shorter-cut turf where females lay eggs inside the leaf sheath of grass plants. By late May or early June, the damage becomes highly visible due to the larvae feeding on and killing stems. A single individual can injure up to 20 stems. The second-generation adults emerge in late June to early July and start the cycle again. This generation will reach the fifth instar by mid-July to early August. Damage from the second brood may become more severe if the first generation is left untreated.

The first recognized ABW to damage turf grass was reported in Connecticut in 1931. Since then, the insect has spread and is found most often in highly maintained turf in the Northeast and Mid-Atlantic. From 2006 to 2007, ABW was identified in Ohio, West Virginia and Virginia. And in 2008, the

first-ever report in North Carolina came from a golf course near Asheville. Although ABW has spread throughout many states in the US, it still causes the most damage in the New England.

Prevention tips. Cultural management recommendations include proper nutrition and irrigation, which often help avoid symptoms of ABW damage. Converting from a susceptible turf species to one that is tolerant to ABW is also an effective strategy. Overwintering adults often populate in tree litter. However, tree removal is not recommended as these sites are not actually preferred locations for ABW.

TREATMENT TIPS

Controlling ABW with insecticides is currently the most effective strategy. Applications should be timed to control adult weevils as they depart overwintering sites and move into grass areas. Insecticide with the active ingredient imidacloprid provides optimum control when applications are made before the egg hatch.

The most important strategy to effectively prevent, manage, and treat ABW is to maintain optimum timing and rate of treatment with your applications. Applications should not be made when grass areas are waterlogged or the soil is saturated with water. Due to the level of infestation and the nature of the crop, as well as fluctuating water dilution rates, rainfall, mowing and other factors that can affect control, it is important to follow insecticide label instructions or contact your state cooperative extension service for more detailed information concerning the application timing. ■

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