

Bluegrass Billbugs

Lancaster County

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Bluegrass billbug adults are weevils with their mouth parts located at the end of a distinct snout. The insects are about a fourth inch long and black in color. They are slow moving and frequently play possum when disturbed. During April, May and June and again in September and October they can be observed walking on sidewalks and driveways in the vicinity of infested turf.



Adult Bluegrass Billbug (magnified)

Larvae (grubs) are legless and white with brown heads. When fully developed, they are about a fourth inch long, slightly curved and appear almost like a grain of puffed rice with a brown head. At this stage of development, they are usually found in the crown or root area of turf, just below the thatch layer.

Life Cycle

A single generation of bluegrass billbugs occurs each year in Nebraska. Winter is spent as an adult in sheltered locations in and around turf areas. Adults become active in late April or May, depending upon temperature. Eggs are deposited in bluegrass stems near the crown. Upon hatching, larvae

first feed in stems, in some cases killing the plants. As they grow, larvae leave stems and move into the soil to feed on roots. When the feeding is completed in mid-July, larvae pupate in the soil or thatch. Adults begin to emerge in late July, feed for a brief period, then move to overwintering sites.

Injury

Adult billbugs feed on stems and blades but cause only minor damage. Newly hatched larvae feed inside the grass stems. Billbugs hollow out the stem and crown leaving behind very fine sawdust like plant debris and excrement. Larger larvae feed on roots as much as 2 to 3 inches below the soil surface. When large numbers of larvae are present, root systems can be almost completely destroyed causing the grass to turn brown. Billbug damage is sometimes mistaken for white grub or sod webworm injury, disease, heat or drought stress. Careful examination of the damaged area, however, should confirm the cause of injury. The greatest injury from billbugs usually occurs from late June to late August, during the time of maximum heat and drought stress. Where grass has been killed by billbugs, the sod becomes loose and separates easily from the soil.

Control

Before considering any control measure verify that the turf injury was actually caused by billbugs. Larvae are difficult to find until they move down into the soil in late June and July. By

this time, considerable damage may have occurred. Adults are also difficult to detect, even when numerous. The best time to examine lawns for billbug adults is from mid-April through May, when adults are moving from overwintering sites but before peak egg laying occurs. Flush adults from turfgrass by applying 1 tablespoon of 1-2% pyrethrins in one gallon of water over one square foot of surface area and waiting about 15 minutes for them to come to the surface. Treatment with an insecticide is suggested when one or more adults is found per square foot of turf. The most reliable control for billbugs involves applying an insecticide in early to mid-May to kill overwintering adults before eggs are deposited. Once larvae are present in stems or feeding on roots, control is extremely difficult since chemicals may not be able to penetrate the thatch and reach feeding larvae below. In these cases, it is probably better to water and fertilize damage turf areas to stimulate new growth rather than to attempt control with insecticides.

Insecticides suggested for control of adult bluegrass billbugs are:

Sevin 10G

Merit 75WP

All insecticides must be used with caution to avoid injury to humans, animals, bees and other beneficial insects. Always read, understand and follow label directions. Keep people and pets off turf areas until sprays have dried.