

LOUISIANA HOME LAWN SERIES

A guide to maintaining a healthy Louisiana lawn



Billbug

Description

The hunting billbug, *Sphenophorus venatus vestitus* Chittenden (Coleoptera: Curculionidae), is a common species that affects turfgrass in Louisiana. Larvae tunnel through stems and feed on the base parts and roots of plants. Billbug injury usually appears as small, scattered patches of brown, dead grass that can merge together into one large area. Injury is observed in mid-to-late summer. Although most turfgrass species are susceptible, hybrid bermudagrass and zoysia are more commonly targeted by billbugs.

Identification

In Louisiana, hunting billbugs are active all year long and can complete several overlapping generations in a year. Females lay eggs from early spring through summer in leaf sheaths and stems. Larvae emerge from eggs after several days, depending on temperature, and mature into adults after three to five weeks. The life cycle usually takes about one month to complete. Larvae have short and thick white bodies with a brown head. Their bodies appear segmented with ridges, and they are legless. Adult hunting billbugs are hard-bodied and reddish brown to dark brown in color. They can be distinguished by their snout-like chewing mouthparts.



Figure 1. Billbug larva



Figure 2. Hunting billbug adult



Figure 3. Billbug turfgrass injury

Indicators of Insect Presence

Adults are active on the surface of turfgrass just before sunset until about one hour before sunrise.

- Use a flashlight to inspect for adults just before or after sunset.

Larvae cause injury by chewing on grass stems and roots.

- Look for scattered, hollowed out stems with fine, white, powdery fecal droppings.
- Look for small scattered patches (2 to 3 inches wide) of dead turf.
- Small patches may merge into one large dead patch if infestation is heavy.

Larval populations begin in early spring and injury appears in mid-to-late summer.

January	February	March	April	May	June	July	August	September	October	November	December



Injury common



Injury occasional



Injury rare

Cultural Control Practices

One way to reduce insect injury and accelerate turfgrass recovery is to maintain a healthy lawn through proper cultural practices. Never apply more than 1 pound of nitrogen per 1,000 square feet per application, and always follow soil test recommendations for proper fertility. Irrigate as needed while taking rainfall into account. Mow regularly, but never remove more than one-third of the leaf blade height at one mowing. Thatch can develop over time and may need to be reduced through vertical mowing. Compaction can form more quickly on finer texture soils and in areas where there is high traffic. Dethatching or aeration need to be performed in late spring to summer when the turfgrass is actively growing.

Properly maintaining a lawn through these cultural practices promotes dense and vigorous turfgrass and can increase tolerance to insect injury.

Chemical Control Practices

In addition to cultural practices, insecticide applications may be required to achieve effective insect control. Apply insecticides in the spring to manage adults before eggs are laid. To manage larvae, apply insecticides six weeks following first adult activity. When using any insecticide, you must follow the manufacturer's labeled directions concerning all application parameters.

For more information regarding insecticides for turfgrass insect pests, please reference the Louisiana Insect Pest Management Guide at the LSU AgCenter website, www.lsuagcenter.com.

Insecticide Active Ingredients	Adults	Larvae	Adults & Larvae
bifenthrin	✓		
chlorpyrifos	✓		
deltamethrin	✓		
imidacloprid	✓		
lambda-cyhalothrin	✓		
clothianidin		✓	
thiamethoxam		✓	
chlorantraniliprole			✓

To submit insect samples for identification send to:

Dr. Dennis Ring
404 Life Sciences, Department of Entomology
Baton Rouge, LA 70803

Need more information? Visit www.lsuagcenter.com to contact your local LSU AgCenter Extension Parish Office.

Authors:

Dennis Ring, Professor, Extension Entomologist, Entomology Department
Jeffrey Beasley, Associate Professor, School of Plant, Environmental and Soil Sciences; Kayla Sanders, Extension Associate, School of Plant, Environmental and Soil Sciences

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Figure 1. J. Saichuk, <http://www.lsuagcenter.com/topics/crops/rice/insects/photos/billbug/billbug10>
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Figure 3. David Shetlar, The Ohio State University, Bugwood.org

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