LOUISIANA HOME LAWN SERIES

A guide to maintaining a healthy Louisiana lawn

St. Augustine Decline

Description

St. Augustine decline (SAD) is a viral disease of St. Augustine grass and centipedegrass caused by the panicum mosaic virus. Initial symptoms appear as a mild chlorotic mottling or stippling of leaf blades. Infected leaves turn yellow in appearance, resembling nutrient deficiency symptoms. Severely affected turfgrasses become less vigorous and begin to thin and eventually die. The virus is mechanically transmitted and can be brought into a lawn if infected sod is purchased or can be spread through contaminated mowing and mechanical equipment. There is no cure. Cultural practices that promote vigorous turf growth help minimize some of the virus's effects on turfgrass.

Chlorotic spotting on St. Augustinegrass leaf blades.

Optimal Environmental Conditions

- SAD may cause decline of turfgrass over a period of three years after the first symptoms appear.
- Disease spreads through the transfer of leaf sap from an infected plant to a healthy plant. This usually happens through a lawn mower, edger or other mechanical equipment used in lawn care. Sap transmission is generally greater when the grass is wet.
- Can be introduced if infected sod is installed in the lawn.
- Turf affected by SAD also will be more susceptible to other diseases and stresses.

Chlorotic spotting on St. Augustinegrass leaf blades.

Signs and Symptoms

- Mild chlorotic mottling or stippling of leaf blades initially.
- As disease progresses, entire leaves appear chlorotic, resembling nutrient deficiency symptoms.
- Grass becomes less vigorous and begins to thin and weaken.
- Infected areas eventually die.
- SAD-affected turfgrass deteriorates faster in shady areas.
- SAD symptoms may also resemble those caused by mite feeding damage.

Cultural Control Practices

One way to reduce disease incidence and accelerate turfgrass recovery is to maintain a healthy lawn through balanced fertilization and irrigation and regular mowing. ***However, these cultural practices do not prevent or cure SAD.*** Some simple guidelines to grow vigorous lawns include:

- Maintain adequate soil fertility. Never apply more than 1 pound of nitrogen per 1000 square feet per application, and always follow soil test recommendations for proper fertility.
- Irrigate lawns as early as possible in the morning while taking rainfall into account. Water deeply and as infrequently as possible without causing drought stress. Improve internal soil drainage and reduce compaction by aerating the lawn regularly.
- Minimize the amount of shade and improve air circulation over the lawn.
- Raising mowing height can help the turfgrass recover.
- Do not mow lawns when turfgrass is wet.
- Washing lawn mowers to remove turfgrass clippings may help reduce the disease spreading.
- Excessive thatch can negatively affect turfgrass growth and provide a suitable environment for disease. Dethatching may be necessary to improve turfgrass growth.

Chemical Control Practices

There is no cure for St. Augustine decline. To help prevent the spread of the virus from infected lawns to healthy lawns, steam clean mowing equipment after mowing. Disinfecting mowing equipment with a 10 percent bleach solution can also help prevent the spread of the virus.

To submit turfgrass samples for disease identification, send to the Plant Diagnostic Center.
For information on sample collection and submission guidelines visit:
www.lsuagcenter.com/PlantDiagnostics
Plant Diagnostic Center
302 Life Sciences Building
LSU Campus
Baton Rouge, LA 70803

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

Authors:
Raghuwinder (Raj) Singh, Associate Professor, Director, Plant Diagnostic Center
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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William B. Richardson, LSU Vice President for Agriculture
Louisiana State University Agricultural Center, Louisiana Agricultural Experiment Station, Louisiana Cooperative Extension Service, LSU College of Agriculture