

LOUISIANA PLANT PATHOLOGY

DISEASE IDENTIFICATION AND MANAGEMENT SERIES

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St. Augustine Decline (SAD)

Panicum Mosaic Virus

St. Augustine decline (SAD) is a viral disease of St. Augustine grass in Louisiana and across the Gulf Coast region. The virus that causes this disease, *Panicum mosaic virus*, also causes a disease of centipede grass called centipede mosaic. Once plants are infected with the virus, there is no cure, but following the recommended management practices for growing healthy turf should help mask or reduce the severity of the disease. Turf affected by SAD also will be more susceptible to other diseases and stresses.

Symptoms are first evident as a chlorotic mottling or stippling of the leaf blades that are generally mild and may go either unnoticed or be attributed to feeding damage from mites (Fig. 1). As the disease progresses, infected leaves take on a general chlorotic (yellowing) appearance that resembles symptoms of iron or other nutrient deficiency (Fig. 2 and 3). Severely affected turf becomes less vigorous and begins to thin, allowing the establishment of weeds or other grasses. This deterioration is particularly true for turf growing in shaded areas. Eventually the affected turf will die out.

SAD may be introduced into the landscape when infected sod is installed or on contaminated equipment. Once established in a lawn, the pathogen is transmitted only by mechanical methods, such as mowing, edging or other cultural practices that allow the exchange of infected sap from diseased to healthy plants. Sap transmission is generally greater when the turf is wet, so mowing and other cultural practices should be restricted to periods when the turf is dry.

No chemicals can control SAD, and its management relies solely on the use of resistant varieties and cultural practices that promote vigorous growth. In some cases, it may be necessary to remove and replace the infected turf. Alternatively, affected areas may be sprigged with a resistant variety such as Floratam, Floralawn, Raleigh or Seville. The resistant variety will gradually outcompete and replace the weaker SAD-infected variety.



Fig. 1. Mild symptoms of SAD.



Fig. 2. Yellowing of St. Augustine grass due to SAD.



Fig. 3. Severe symptoms of SAD.

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