

Gray Leaf Spot¹

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Pathogen: *Pyricularia grisea*

Turfgrasses Affected: St. Augustinegrass (primary host), centipedegrass

Occurrence: This disease is most often observed from late spring to early fall, especially during prolonged periods of rainfall. Excessive applications of quick-release nitrogen sources enhance disease severity, as does compacted soil. Application of the herbicide atrazine increases the susceptibility of St. Augustinegrass to this disease.

Symptoms/Signs: Initial symptoms include small pinhead-sized spots that are olive green to brown in color. These enlarge and form circular to oblong spots that are tan to brown in color with distinctive dark brown margins (Figures 1 and 2). During periods of high humidity, the fungus produces abundant spores in the center of these spots, giving them a velvety-gray appearance.

Many spots can occur on a single leaf, such that severely affected leaves wither and turn brown. No distinct patches are observed, but areas may appear thin. A severely affected turfgrass area may appear as though suffering from drought.



Figure 1. Leaf spot symptoms of gray leaf spot on St. Augustinegrass. Credits: M. L. Elliott



Figure 2. Severe gray leaf spot symptoms. Note leaf tip dieback. Credits: G. W. Simone

Once St. Augustinegrass is established in the landscape, the disease is chronic but not severe.

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During the summer months, individual St. Augustinegrass plants always have a few spots on the leaf blades, but the overall health of the turfgrass is not affected unless the grass is placed under severe stress.

Cultural Controls: Avoid excess nitrogen during potential disease development periods. Limit readily available forms of nitrogen, such as soluble liquids or quick-release nitrogen sources, just prior to or during these periods. Instead, use slow-release nitrogen sources. Apply a balanced fertilizer containing equivalent amounts of potassium and nitrogen, preferably a slow-release potassium form.

If soils are compacted (walking paths, for example), alleviate the compaction or reduce traffic in those areas.

Limit atrazine herbicide applications. If it is necessary to use atrazine, apply it only to weed-infested areas and not the entire lawn. Before and after atrazine applications, be sure the turfgrass is being managed correctly and that optimal fertility, mowing, and watering practices are in place. Monitor the turfgrass area for disease development. Refer to "Weed Management in Home Lawns" (<http://edis.ifas.ufl.edu/ep141>).

Chemical Controls: Azoxystrobin, chlorothalonil, mancozeb, metconazole, polyoxin D (suppression only), propiconazole, pyraclostrobin, thiophanate-methyl, triadimefon, and trifloxystrobin

For a homeowner's guide to turfgrass fungicides, see http://edis.ifas.ufl.edu/document_pp154. Check fungicide labels for site application restrictions as some fungicides cannot be used on residential lawns. Follow label directions and restrictions for all pesticides. The presence of a fungicide on this list does not constitute a recommendation.

Refer to the "Turfgrass Disease Management" section of the *Florida Lawn Handbook* (<http://edis.ifas.ufl.edu/lh040>) for explanations of cultural and chemical controls.