

Gray Leaf Spot

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Pathogen

Pyricularia grisea

Turfgrasses Affected

St. Augustinegrass

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 size spots that are olive-green to brown in color. These enlarge and form circular to oblong spots that are tan to brown colored with distinctive dark brown margins (Figure 1 and 2). Under humid conditions, 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 it is suffering from drought.

Once St. Augustinegrass is established

in the landscape, the disease is chronic but not severe. During the summer months, individual St. Augustinegrass plants will 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. Do not use 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, 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, only apply to weed infested areas and not the entire lawn. Before and after atrazine applications, be sure the turfgrass is being managed correctly - fertility, mowing and water. Monitor the turfgrass area for disease development. Avoid herbicides by learning how to manage the turfgrass to limit weeds.

Chemical Controls

azoxystrobin, chlorothalonil,

propiconazole, thiophanate methyl, trifloxystrobin.

Chlorothalonil cannot be applied to a residential lawn, but it can be applied to turfgrass in a business or industrial landscape.

Refer to “Turfgrass Disease Management” PPP-64 for explanations of chemical and cultural controls.



Figure 1. Leaf spot symptoms of Gray Leaf Spot on St. Augustinegrass.



Figure 2. Severe Gray Leaf Spot symptoms. Note leaf tip dieback.