

# *The Plant Doctor*

## **Gray Leaf Spot Of St. Augustinegrass**

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Gray leaf spot of St. Augustinegrass is a disease caused by a fungus that is common during extended periods of hot, humid weather. Newly sprigged, sodded, or rapidly

growing grass is more susceptible than well-established grass.

Although primarily a disease of St. Augustinegrass, it also attacks centipedegrass and many ryegrasses.

The fungus causes irregular gray or dirty-yellow spots with brown, purple, or water-soaked borders on leaf blades. Spots may be covered with gray mold in warm humid weather. Lesions also may occur on stems and spikes. A yellow halo or general chlorosis may occur around or near some spots. Usually you notice the disease first in shaded areas that stay moist longer than other areas (see Information Sheet 1670, *Watering and Plant Disease*). In areas of heavy disease development, the grass may have a burned or scorched appearance resulting from death or spotting of the leaf blades.

The fungus thrives and the disease is most noticeable when air temperatures are 70 to 85 °F but can reproduce and increase at cooler temperatures. For spores to germinate and infect the turf, they need 16 hours of free moisture on the leaf surface. Germinated spores penetrate the plant either directly or through the stomates (natural openings in the leaf). Infection occurs about eight hours after spore germination. High humidity and extended free leaf moisture for more than 24 hours are necessary for an epidemic.

The fungus overwinters on infected plants and plant residue and as spores. Wind carries the spores to new infection sites as does splashed rain, irrigation water, and animals. Too much nitrogen fertilization can worsen disease on certain types of St. Augustinegrass (see Information Sheet 1668, *Plant Disease and Fertilization*). This disease usually doesn't kill an entire lawn.

## Management

1. Avoid too much nitrogen fertilization (water-soluble nitrogen) in summer wet periods.
2. Water properly (see Plant Doctor: Watering and Plant Disease, Information Sheet 1670) so foliage doesn't stay wet for extended periods. You can drag a hose or bamboo switch to knock the water off the plants, shortening the dew period and killing the infection process.

3. Repeated applications of fungicides will probably be needed to control this disease effectively in warm, wet periods. Consult the homeowner fungicide database at <http://www.extensionplantclinics.msstate.edu> for a current list of labeled fungicides. Read and follow label directions. At present, only fungicides with the active ingredients chlorothalonil or maneb specifically have gray leafspot on the label, but Fertilome Halt Systemic Fungicide or Green Light Systemic Fungicide (which have the active ingredient thiophanate-methyl) are labeled for leaf spots in general.

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