

Helminthosporium Leaf Spot¹

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Pathogen(s): *Bipolaris*, *Drechslera*, and *Exserohilum* spp. (previously classified as *Helminthosporium* fungi)

Turfgrasses Affected: All warm-season turfgrasses, but it is usually most serious on bermudagrass. Different species of these fungal pathogens affect different species of turfgrass.

Occurrence: This disease is caused by a group of fungi that is active over a wide range of temperatures. At any given time of the year, at least one species within this fungal group can be isolated. Thus, diseases caused by these fungi can occur at any time of year. However, as a general rule, the leaf spot disease occurs during mild, wet periods during fall and winter.

Symptoms/Signs: Leaf spot symptoms tend to vary with each pathogen/host pair from very small (pinhead size), solid brown to purple lesions or spots to expanded lesions with bleached centers that girdle the leaf blade (Figure 1). Severely infected leaves turn purple or reddish brown in color, giving the turf an overall purple cast. Severely infected leaves eventually wither and dry to a light tan color. Distinct patches or patterns to the disease are usually not obvious. In cases of severe infection, turf areas thin and die. Lesions on stolons are dark purple to black.

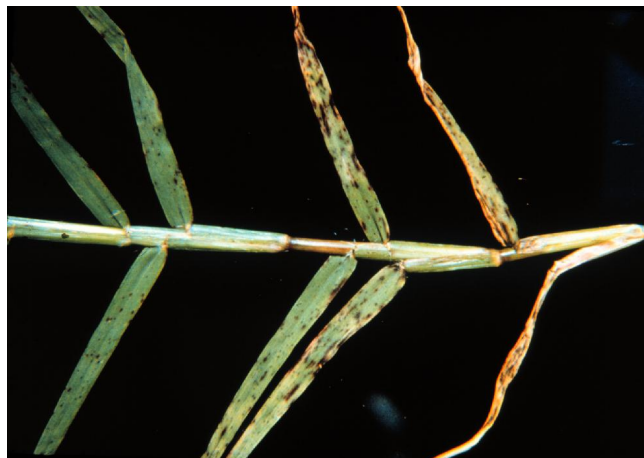


Figure 1. Example of *Helminthosporium* leaf spot symptoms on bermudagrass. Credits: G. W. Simone

Cultural Controls: Avoid excess nitrogen during potential disease development periods. The nitrogen level must be balanced with potassium; a ratio of 1:2 (N:K) is recommended. In areas that are affected routinely by this disease, increase the potassium level before the disease normally occurs. Use slow-release potassium sources or apply quick-release potassium sources more frequently. Raise mowing height during disease outbreaks.

Chemical Controls: Azoxystrobin, chlorothalonil, fludioxonil, iprodione, mancozeb,

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myclobutanil, propiconazole, pyraclostrobin, trifloxystrobin, triticonazole, and vinclozolin

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. DMI (demethylation-inhibiting) fungicides have shown the potential to damage bermudagrass turf. 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.