

The Plant Doctor

Dollar Spot of Warm-Season Turfgrasses



Dollar Spot

Common during

Most common in late spring and early fall, but also occurs during cooler summer weather with high humidity and extended periods of leaf wetness. Slow-growing turf.

Weather

Temperatures between 50°F and 95°F. High relative humidity or extended periods of leaf wetness are required.

Turf types affected

Most severe on bermudagrass and zoysiagrass, but can be found on other turfs.

Quick symptoms

Small circular areas of straw-colored turf.

Dollar spot is a common fungal disease in Mississippi that occurs on most grasses. In our warm-season turfs, it is generally most severe on bermudagrass and zoysiagrass.

Dollar spot occurs when temperatures stay between 50°F and 95°F. High relative humidity or extended periods of leaf wetness, such as from dew, are required for disease development.

The disease is most severe in slow-growing turf. For this reason, dollar spot is most common in the spring or fall, when warm-season turfgrasses are entering or leaving dormancy. It also occurs in cooler summer weather when heavy dews form on stressed, neglected turf. In lawns, such areas are usually under moisture or nutritional stress. Nutritional stress is mainly caused by a lack of nitrogen.

The first symptoms on individual leaves are chlorotic (yellow) areas that become water-soaked and, finally, turn a bleached or straw color. Leaf lesions are bordered by a tan to reddish-brown margin. The dollar spot fungus kills the grass in small, circular areas, producing straw-colored spots. The size of the spot varies with mowing height of the turf. In closely mowed areas, the spot will be one to two inches in diameter, about the size of an old silver dollar, hence the disease's name. In lawns that are mowed higher, the spot size may increase to eight inches in diameter. Individual spots may grow together to form larger areas.

You may see a white, cottony fungal growth (mycelium) on diseased grass during early morning hours, when there is dew. This cottony growth is sometimes mistaken for another disease, Pythium root rot, leading to wrong application of expensive fungicides.

The dollar spot fungus overwinters as dormant mycelium and as pellet-like lumps (sclerotia) in the crown and roots of infected grass. It spreads by pieces of diseased plants carried from place to place by mowers, sweepers, and other lawn maintenance equipment. Basic sanitation helps prevent spread.

You can have the disease professionally diagnosed and receive a full report and recommendation for only \$8. (See M1230 *Plant Disease and Nematode Diagnostic Services*.) Collect a four-by-four-inch sample, including two inches of soil and roots, from the edge of the disease area where it fades to the healthy turf. Wrap the sample in dry newspaper, place it in a plastic bag, box it, and send the box to 190 Bost North, Room 9, Mississippi State, MS 39762-9612. Make the check payable to Mississippi State University. Results are usually available within three to seven days of receiving the sample.

Management

Prevention is the best way to control disease. To prevent dollar spot or other lawn diseases from developing, practice the following disease control procedures.

- Maintain adequate soil moisture and nutrient levels. Maintaining nitrogen levels when the disease is most prevalent can reduce the severity of dollar spot by letting the grass outgrow the disease.
- Mow and collect the clippings regularly.
- Prevent the buildup of thatch.
- Do not water in the late morning or late afternoon/evening, because the moisture will not dry before dew appears, prolonging the period of leaf wetness and facilitating disease. See Extension Information Sheet 1670 *The Plant Doctor: Watering and Plant Disease*.
- Controlling dollar spot with fungicides may be difficult because of the development of fungus strains resistant to certain fungicides. To prevent resistant strains of the dollar spot fungus from developing, use several types of fungicides belonging to different chemical (FRAC)

groups. These fungicides are currently labeled for residential use and have an effect on dollar spot:

- Myclobutanil (FRAC group 3), sold as:
 - ♦ Fertilome F-Stop Fungicide Granules
 - ♦ Fertilome F-Stop Lawn and Garden Fungicide
 - ♦ Monterey Lawn Fungicide
- Thiophanate-methyl (FRAC group 1), sold as:
 - ♦ Bonide Infuse Lawn & Landscape Granules
 - ♦ Scotts Lawn Fungus Control (granules)

Alternate the use of these two types of fungicides. Myclobutanil belongs to a chemical group that can suppress turf growth and cause some phytotoxicity during hot weather. Do not use myclobutanil when temperatures much exceed 85°F.

Preventive applications every 14–28 days (depending upon the fungicides you use) are needed when conditions are favorable for dollar spot development. Curative applications will require higher rates and more frequent applications, and they may not work.

The information given here is for educational purposes only. References to commercial products, trade names, or suppliers are made with the understanding that no endorsement is implied and that no discrimination against other products or suppliers is intended. Always read and follow current label directions of any pesticide you use.

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