

The Plant Doctor

Dollar Spot of Warm Season Turfgrasses

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 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 turf grasses 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 about the size of an old silver dollar. That's where the disease gets its name. The size of the spot varies with mowing height of the turf. In closely mowed areas, the spot will be 1 to 2 inches in diameter, but in lawns that are mowed higher, the spot size may increase to 2 to 8 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.

Control

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

1. 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.
2. Mow and collect the clippings regularly.
3. Prevent the buildup of thatch.
4. Do not water in the late morning or late afternoon/evening, because the moisture will not dry before dew, prolonging the period of leaf wetness and facilitating disease. Please see the Plant Doctor publication Watering and Leaf Wetness (Information Sheet 1670).
5. 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. Consult the homeowner fungicide database at <http://www.extensionplantclinics.msstate.edu> to help select appropriate fungicides to control this disease. Alternate contact fungicides (containing active ingredients of mancozeb, maneb, chlorothalonil, ipro-

dione) and a systemic fungicide (triadimefon or thiophanate-methyl). Not all of these fungicides are labeled for homeowner use. Please read and follow label instructions.

Preventative 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. They may not work.

Here are some fungicides labeled for control of dollar spot:

triadimefon (Green Light Fung-A-Way or Bayleton, Bayer Advanced Lawn)

iprodione (Chipco 26019)

chlorothalonil (Hi Yield Daconil 2787, Hi-Yield Daconil Lawn, Vegetable and Flower Fungicide, or Daconil)

mancozeb (Green Light Broad Spectrum Mancozeb Fungicide, or Fore)

thiophanate-methyl (Green Light Systemic Fungicide, Cleary's 3336, Fertilome Halt)

Read and follow label directions.

Dithane and Fore are labeled for golf courses, sod farms, industrial or municipal turf areas, and professional applications to residential lawns. They are not for use by homeowners.

The information given here is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended of other products that may also be suitable and that these products have maintained label clearance.

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