

## DOLLAR SPOT DISEASE OF TURFGRASSES



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The disease known as dollar spot is caused by the fungus *Sclerotinia homoeocarpa*. This fungus is widespread and extremely destructive to turfgrasses. The disease is known to attack most turfgrass species including annual and Kentucky bluegrasses, bentgrasses, fine leaf fescues, perennial ryegrass, bermudagrass and zoysiagrass. Dollar spot may become troublesome in tall fescue, a species once thought to be very resistant to this disease.

The symptomatic pattern of dollar spot varies with turfgrass species and management practices. Under close mowing conditions, as with zoysiagrass or bentgrass greens and fairways, the disease first appears as circular, straw-colored spots of blighted turfgrass about the size of a silver dollar.

With higher mowing practices and coarser textured grasses, such as Kentucky bluegrass, perennial ryegrass or tall fescue the straw-colored blighted areas are 3 to 6 inches in diameter and tend to be irregularly shaped. Affected patches frequently coalesce and involve large areas of turf. Grass blades often have straw-colored or bleached white lesions shaped like an hourglass, with leaves typically dying back from the tip.

The hourglass banding on the leaves often is made more obvious by a definite narrow brown, purple or black band, which borders the bleached sections of the hourglass from the remaining green portions. In tall fescue, however, the pathogen causes a die-back from the tip and produces irregularly shaped leaf lesions with brown borders that are not generally hourglass-shaped.

When the fungus is active and moisture is present a fine, white or gray cobwebby mycelium may cover the infected area during early morning hours. This mycelial growth may be promoted artificially by covering the infected turf overnight with a glass bowl.

Dollar spot tends to be most damaging in poorly nourished turfs, particularly when soils are dry, when humidity is high or a heavy dew is present. Dollar spot may occur whenever days are warm and nights are cool from early spring to early winter.



Typical appearance of dollar spot disease on perennial ryegrass. Over time, the dollar-size dead spots may coalesce into irregular patches.



Dollar spot lesions on Kentucky bluegrass leaves. Notice the bleached 'hourglass' appearance with dark band at the edge of the lesion.

### KEY POINTS

Dollar spot is the most common disease of turfgrasses.

Dollar spot generally occurs during periods of warm days and cool nights from mid-May through the summer months, and often into the fall.

Cultural measures and fungicides can be used to manage the disease.

In Maryland, dollar spot generally appears in mid-May, but causes most damage in June and July. Except for some very susceptible cultivars (e.g., Crenshaw creeping bentgrass), the severity of the disease often declines in August, but may recur and become very damaging in the autumn.

In general, an application of 1.0 lb nitrogen/1000 ft<sup>2</sup> to poorly nourished turf stimulates foliar growth at a rate which exceeds the ability of the fungus to injure turf. It is best to use a fertilizer that contains both rapid and slow release nitrogen sources.

Conversely, if dollar spot appears in turf that has been well fertilized, then nitrogen should be avoided. Use of

slow release nitrogen fertilizers (e.g., IBDU, methylene urea, sulfur coated urea and natural organics) applied in autumn may help to reduce dollar spot the following spring. Mow turf early in the morning to promote drying of foliage and leave clippings on lawns. Maintain good soil moisture, but avoid excessive soil wetness.

Some cultural and chemical approaches to minimizing dollar spot injury are provided in Table 1 and Table 2.

References to trade names do not constitute an endorsement or warranty by the University of Maryland. No discrimination is intended against products not mentioned.

**TABLE 1. Cultural Approaches to Minimizing Injury from Dollar Spot**

<b>Cultural Approaches</b>
<ul style="list-style-type: none"> <li>▫ Avoid drought stress</li> <li>▫ Control thatch and soil compaction</li> <li>▫ Maintain adequate and complete fertility (i.e., N + P + K)</li> <li>▫ Apply most fertilizer to cool-season grasses in the fall (Sept. to mid-Nov.)</li> <li>▫ Return clippings to lawns</li> <li>▫ Over seed with resistant cultivars</li> </ul>

**TABLE 2. Fungicidal Approaches to Minimizing Injury from Dollar Spot**

<b>Some Effective Fungicides**</b>	
Banner MAXX	Eagle
Bayleton	Echo
Chipco 26GT	Emerald
Cleary's 3336	Fungo
Concorde	Rubigan
Curalan	Manicure
Daconil Ultrex	Touche

\*\*See TT-38 "Maryland Turfgrass Disease Control Recommendations" for information about fungicides and application rates.

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