Dollar Spot of Turfgrass in the Home Landscape

Stephen Vann
Assistant Professor - Extension Urban
Plant Pathologist

Introduction

Dollar spot is a foliar fungal disease that can affect all species of warm- and cool-season turfgrasses. This disease is perhaps the most widespread turf disease in the home lawn. In Arkansas, bentgrass, hybrid bermudagrass and zoysia are the most susceptible turfgrasses. The disease is caused by the fungus Sclerotinia homeocarpa. This disease can occur in the spring, but it is most common in late summer and fall when temperatures are mild and conditions are moist. Dollar spot is usually more of a problem on drought-stressed grass. Low cutting heights and low nitrogen fertility can also increase disease severity.

Symptoms

Small, circular, straw-colored spots in the lawn which are 1 to 3 inches in diameter are the most common symptoms of dollar spot (Figure 1). These spots are most obvious on closely cut hybrid bermudagrass and zoysiagrass. The randomly occurring spots may grow together, forming larger dead areas of turf (Figure 2). The fungus produces white “cottony” growth or threads on the dead grass that are visible during the early morning hours when dew is heavy (Figure 3). These fungal threads quickly disappear once the dew has dried. On individual infected leaves, yellow to brown lesions with a distinctive dark brown border develop which eventually girdle the leaf blade.
Lesions have a distinctive dark brown border that surrounds this area (Figure 4). This distinctive symptom is useful for diagnosis. Most of the damage to the plants is restricted to the foliage, but the fungus may occasionally cause some problems with the crown.

Figure 4. Banding pattern of leaf lesions

Disease Cycle

The disease is favored by temperatures between 59 and 86 degrees F. and high humidity over extended periods. Dollar spot is particularly favored by hot days with cool nights. Heavy dews encourage disease development. The disease also tends to be more severe on dry soils and in sites that are nitrogen deficient. The fungus survives as mycelium in the diseased grass. Infected clippings left by the lawnmower contribute to future disease outbreaks. Dollar spot usually spreads by the movement of infected grass clippings by lawnmowers and other lawn maintenance equipment.

Management

Since the severity of dollar spot is closely related to how well the lawn grass is maintained, adequate nitrogen fertility and soil moisture are effective in controlling the disease. Fertilizer applications should be based on a recent soil test, and turf should be irrigated deeply but infrequently to minimize moisture stress. Early morning irrigation is best to help reduce the time the leaves remain wet. Always cut the grass at the recommended height using a sharp lawnmower blade. Temporarily raising the height the lawn is cut to minimize stress on the plants can be helpful in managing the disease. Soil aeration and excess thatch removal may also be beneficial. If this disease causes severe damage for several successive years, fungicide applications, in conjunction with cultural practices, may be necessary to prevent disease or reduce its severity. Fungicide choices for the home lawn include those that contain myclobutanil, triadimefon, thiophanate-methyl or propiconazole. For best results, applications should begin in the spring before the disease appears. Always read and follow label instructions for proper application rates and intervals.

Early recognition and identification of dollar spot as well as other diseases is essential to the maintenance of a beautiful lawn. A regular inspection of the lawn can easily help identify and correct a potentially serious problem. Laboratory evaluation by the Plant Health Clinic may be necessary to diagnose dollar spot in the lawn. If you need additional information about this and other turfgrass diseases, contact your local county Extension office.

Printed by University of Arkansas Cooperative Extension Service Printing Services.