



Brown patch disease causes problems in the landscape

A healthy green turf provides many benefits to a landscape. Unfortunately, brown patch disease can be a concern. Brown patch disease appears as brown patches up to three feet in diameter. Leaves first take on a dark color, then wilt and turn brown.

Brown patch disease commonly shows up on cool-season turfgrasses, especially tall fescue. It also occasionally appears on hybrid bermudagrass and zoysiagrass. Brown patch usually occurs in hot, humid weather when night temperatures are above 60 degrees Fahrenheit and foliage remains wet for prolonged periods. These conditions are what Oklahoma experiences often during the summer months and can be enhanced in shady areas where turf-type tall fescue is often grown.

Poor soil drainage, lack of air movement, cloudy weather, heavy dew, overwatering and watering in late afternoon favor prolonged leaf wetness and increased disease severity. The application of high rates of nitrogen and/or deficiencies of phosphorus and potassium, especially when weather conditions are favorable for brown patch, can increase disease severity. Excessive thatch, mowing when wet and leaf fraying by dull mower blades also can enhance the severity of brown patch.

There are varieties of turf-type tall fescue that are considered resistant to brown patch. However, even resistant varieties succumb when growing conditions are less than ideal for growth of strong plants and environmental conditions are highly favorable for disease development.

So how is a homeowner supposed to cut the risk of brown patch disease? Control starts with good management practices. When environmental conditions favor disease, avoid application of excessive rates of nitrogen. Fertilizer should be applied judiciously, and adequate amounts of phosphorus and potassium are essential to ensure the highest possible levels of plant resistance.

In general, cool-season turfgrasses should not receive more than one pound of actual nitrogen per 1,000 square feet at any one time. Use very low rates or avoid applying nitrogen in late spring or summer to cool-season turfgrasses. In a typical home lawn situation, the last application of fertilizer in the spring should be applied no later than early May. Obviously, we are past that point on the calendar, but it is something to note for next season. Ensure adequate amounts of phosphorus and potassium by applying these nutrients based on soil test results.

Reduce prolonged leaf wetness by watering less frequently to a depth of 6 to 8 inches and at a time when the foliage is likely to dry quickly. Avoid watering in late afternoon and evening, and allow for better air movement by removing unwanted vegetation and selectively pruning trees

and shrubs. Removal of morning dew reduces prolonged leaf wetness and exudates that favor disease development. This can be accomplished by dragging a hose across the turfgrass or by running the irrigation system for a short time period. Good surface and soil drainage must be present to reduce disease incidence.

Make sure mower blades are sharp to reduce the amount of wounded turfgrass in which the fungus can enter the plant. Collect and promptly dispose of clippings on infected areas or when conditions favor disease development. Avoid mowing turfgrass when it is wet, and don't mow too low so that the turfgrass will be better able to resist the disease.

Applications of effective fungicides, when the first disease symptoms appear, will give good control of brown patch on highly maintained turfgrass. A preventative fungicide program should be considered in areas where the conditions are difficult to control or change and when conditions are favorable for disease development.

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