

Lawn Diseases

By

By Scott Hininger

University of Wyoming

Cooperative Extension Service

Sheridan County

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Gary Franc Professor and plant pathology specialist at the University of Wyoming's Department of Plant Sciences has diagnosed *Ascochyta* leaf blight as a common lawn disease in Sheridan County and other Wyoming locations. This fungus-caused disease develops best at cool temperatures and becomes less noticeable with the arrival of warmer temperatures in July or August.

Disease development is essentially a race between the fungus growing downward from infected leaf tips and the grass leaves, which grow upward. Although the fungus usually wins under cool conditions, under warm conditions grass growth is rapid enough so that infected leaf tips (new disease symptoms) are removed by mowing. Fortunately, *Ascochyta* seldom causes permanent damage to our lawns.

Ascochyta in lawns appears as patchy, straw-colored areas several inches in diameter that can merge to form much larger patches. Close inspection of patches reveals that healthy and infected leaves are actually interspersed. Leaves recently infected by *Ascochyta* will have bleached-brown tips that progress downward toward a normal-appearing area at the leaf base. The bleached leaf tip often appears to be pinched or rolled.

Disease management requires good cultural practices that provide water and fertilizer to meet the needs of the lawn without excess or deficiency. Mow the grass as necessary to maintain the proper height and to avoid other disease and pest problems favored by long grass. Here is the tricky part: mowing favors some diseases because mower blades spread the fungus and because freshly cut leaf tips become new infection sites. Disease spread is drastically reduced by mowing only when grass is dry and by maintaining a sharp mower blade to minimize leaf tearing and the creation of large wounds.

If infection in a lawn is severe, removing clippings from the lawn also removes the spores that spread and cause the disease. Normally, removal of clippings is not recommended. Water deeply and infrequently during the early morning according to the lawn's needs to minimize the period of time the grass is wet. Also, avoid excessive nitrogen fertilization, which stimulates growth and the need for additional mowing.

Dollar spot is another disease showing small, yellow-green blotches on grass blades. Turf becomes white, gradually becoming silver dollar size. This mainly occurs during hot summers with warm days and cool nights.

Fusarium patch is a browning and thinning of turf in large indefinite spots. This disease is most favorable in cool wet weather. Avoid excessive nitrogen and over watering and provide good drainage.

Helminthosporium diseases affect the root and crown of grass turning it yellow and thinning of the turf and may turn it tan to purple spots on the leaf. These diseases like moist cool weather on the leaf and warm moist area for the crown rot. Do not mow too low and allowing thatch to build up.

Necrotic ring spot causes dead circles, arches and patches several inches to several feet in diameter. Heat, drought and compaction with cultural practices promoting thatch are conditions favoring this disease.

Powdery mildew is white powdery spots on both surfaces of grass blades, with yellowish lesions sometimes developing. Cool shaded areas with stressed turf favor this disease. Plant shade tolerant grass varieties and try to increase light and air circulation with landscape modifications.

Summer patch shows small circular patches of slow growing, thin turf increasing to larger areas and shows straw colored turf with onset of hot weather. Soil compaction, hot weather, frequent light watering promotes this disease.

When these diseases are severe, a broad-spectrum fungicide may be the only option for control. As always, when using these products, read the label. With disease control not only is cultural practice changes needed but several applications of a fungicide over the spring and summer will be needed.

The University of Wyoming and the United States Department of Agriculture, Sheridan county Office cooperate.