

Be on the lookout for gray leaf spot**August 20, 2018**

The high heat and humidity of late summer can lead to the rapid development of gray leaf spot (*Pyricularia grisea*). This pathogen mainly affects perennial ryegrass and tall fescue turf. It has been artificially produced on creeping bentgrass but isn't normally found on this species (Smiley et al., 2005). The symptoms first appear as small, water-soaked leaf lesions. These can quickly coalesce together and lead to leaf necrosis. As the leaves die, the tips can twist and have a shepherd's hook appearance. Mixed stands of ryegrass or tall fescue with resistant species like Kentucky or annual bluegrass can lead to a very sparse canopy. These stand symptoms are sometimes confused with wilt or heat stress.

This disease is more common when growth rate is very high (excessive nitrogen fertilizer) or there is sufficient environmental stress (soil compaction, drought, etc.). Air temperatures in the 80s F are most conducive for disease development. Under these conditions, peak infection can occur in as little as nine hours of leaf wetness (Smiley et al., 2005). Disease can develop under slightly cooler temperatures, but only when leaf wetness exceeds 24 hours.

To minimize the risk of gray leaf spot irrigate to prevent drought in the morning and not the afternoon or evening, avoid large applications of quick-release nitrogen fertilizer (>0.5 lbs N per 1000 sqft), alleviate soil compaction with aeration, and mow to the 1/3 rule. The QoI fungicides (strobilurin) and thiophanate-methyl provide the most effective chemical control.

You can read more about this fall disease in the [NebGuide by Dr. Loren Giesler](#).

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Reference: Smiley, R.W, P.H. Dernoeden, and B.B. Clarke. 2005. Compendium of Turfgrass diseases. APS Press.



Figure 1. There have been reports of gray leaf spot in central Nebraska. Close inspection of the leaves reveal necrosis and "shepherd's hooks." The annual and Kentucky bluegrass is not affected and causes this patchwork appearance.