

Disease ravaging perennial ryegrass and bluegrass**September 21, 2018**

We have received numerous reports from golf courses of severely thinning and dead turfgrass following the record rains in early September. The thinning is occurring on stands of perennial ryegrass and older varieties of Kentucky bluegrass. Leaf spot/melting out is the primary cause on the bluegrass while gray leaf spot is the primary culprit on the ryegrass. See this Turf iNfo from August for more [information about GLS](#). Areas that don't receive regular fungicide applications have been hardest hit in Nebraska.



Figure 1. The thinning of common Kentucky bluegrass varieties caused by melting-out.

Leaf spot and melting-out diseases are caused by a group of fungi in the genera *Bipolaris*, *Drechslera*, and *Exserohilum*. These fungi were previously referred to as *Helminthosporium* and this term continues to be incorrectly used. Every cool-season grass species has a leaf spot/melting-out disease associated with it and Kentucky bluegrass is highly susceptible. The causal fungi usually first infect the leaves, producing small brown spots. As the disease progresses, the spots on leaf blades expand and produce a dark purplish-red oval border around a tan center (smoke ring). The spots enlarge until the entire width of the leaf blade is blighted. The leaf-spotting or leaf-blighting phase is less damaging to the turfgrass than is the melting-out (crown and root-rot) phase of the diseases. In melting-

out, the crowns and roots are damaged, causing severe thinning of the turf. These organisms, under pasture and native grassland conditions, cause leaf spots of little consequence. However, as cutting height is reduced and traffic is increased, leaf spot diseases may become so severe that complete loss of the turf can occur. Over or under fertilized turf showing more severe infections.

Fungicides can effectively control leaf spot and melting-out diseases, but correct application and timing are critical. Fungicides applied at the melting-out stage, when damage is readily apparent, usually produce little improvement. Recovery of the turf at this stage becomes a matter of encouraging regrowth of the thinned turf. For the summer leaf spot diseases, fungicide applications should begin as soon as the first leaf spots appear. Given cooling trends we do not anticipate further stand reduction or infection. Nitrogen fertilizer once conditions improve can help promote recovery. If damage is severe, re-seed with resistant cultivars. Here are links to the Kentucky bluegrass [leaf spot](#) and [melting out](#) NTEP results and the NTEP results for [gray leaf spot resistance](#) in perennial ryegrass. Facilities that chronically struggle with these diseases should consider reseeding with more resistant varieties of Kentucky bluegrass. The seeding window is still open for much of Southeast Nebraska. Here are [tips to reseed](#) in the fall.



Figure 2. Common bluegrass on the left and new and resistant cultivars on the right.

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