

Earth Carpet[®]

THE SCIENCE IS IN THE SEED[®]

THE BLADE



TURFGRASS DISEASES OF SUMMER –

Summer Patch, Necrotic Ring Spot, Brown Patch

An article by Dr. Leah Brillman, Ph.D

As heat and humidity rise, we see an increase in questions about many diseases. Three we see the most in landscape and sports settings during summer are summer patch, necrotic ring spot and brown patch. The first two are root diseases that were once both included under the name Fusarium patch.

The first line of defense against serious turf diseases should be using improved cultivars, adding in different species if needed and modifying your management. Learn more about these diseases and how to combat them below.





Necrotic Ring Spot is caused by *Ophiosphaerella korrea* and primarily affects Kentucky and annual bluegrass. Root infection occurs in cool (60-75 F), wet periods in spring and fall but symptoms are often not noted until summer due to drought stress from damaged roots. As it progresses, the areas that have died back enlarge and surviving plants appear in the middle giving a “frog-eye” appearance. Summer patch looks almost identical but if it starts in May or early June it is likely Necrotic Ring Spot.

The first line of defense can be establishing Kentucky bluegrass with higher levels of resistance, or repairs can be made with perennial ryegrass or fine fescues. Many recent NTEP trials had few ratings for necrotic ring spot resistance. The cultivars mentioned in many University Turf bulletins have not been in production for many years. **Fielder, SR 2284, Arcadia and SR 2100 show high resistance** and many other cultivars currently have no ratings for this disease.

Cultural management strategies include using sulfur products to acidify the soil, planting on good soil or improving it by aeration, not over-watering or over-fertilizing, and removing thatch. When you remove thatch or aerify is an excellent time to add seed for better long-term resistance. If fungicides are used, it is best to hire a service and ensure they treat when the disease is actively growing with products that reach the root system.



Summer Patch, caused by *Magnaporthiopsis poae*, is a very destructive root disease of Kentucky and annual bluegrass. Fine fescues can be infected by *Magnaporthiopsis poae* and *Magnaporthiopsis meyeri-festuca*, with hard fescue being more susceptible than other fine fescues. Creeping bentgrass has also been reported as a host. This disease can look very similar to Necrotic ring spot but tends to express later in the year, infecting when soil temperatures are between 65-80 F.

Ratings for summer patch resistance can be variable across NTEP trials. In general Granite, **SR 2100, Fielder and SR 2150 have rated excellent for summer patch resistance**, even in traffic trials. Perennial ryegrass, tall fescue and red fescues, including Chewings and strong creeping red fescue, have shown better resistance to this disease and can be inter-seeded to help with control. Acidifying fertilizers, relief from compaction, and deep irrigation to relieve stress all help in combating this disease.



About La Crosse Seed

Leading the Industry for 100 Years

La Crosse Seed is an independent company that has paired an unmatched portfolio of turf, cover crop, forage, wildlife and native seed with knowledgeable and experienced sales and support staff since 1919. No other specialty seed company matches our level of experience, product knowledge or product availability. To learn more visit lacrosseseed.com.



Brown patch (*Rhizoctonia solani*) is a foliar disease that can attack all cool-season grasses but is most severe on tall fescue and perennial ryegrass. It is not a disease of crowns or roots so it can thin or damage turf but does not typically kill it. Brown patch typically appears when dew is on the grass for more than 10 hours and nighttime temperatures are above 65 F. It tends to be more severe with high levels of summer nitrogen.

The disease spreads by mycelium in a circle and individual lesions may be present on leaves. Newer cultivars of tall fescue, including **Rowdy, Rebounder, SR 8650 and Guardian 41**, and perennial ryegrass, including **SR 4650, SR 4660ST, Sideways and SR 4600** show improved resistance to this disease plus increased density and turf quality. Although Kentucky bluegrass can get this disease, it can usually break leaf to leaf transmission in a strand of tall fescue or perennial ryegrass.



Landscapes Get Noticed. We'll Help You Stand Out For The Right Reasons. Need an Earth Carpet turf mix?
Contact us at lacrosseseed.com/contact

About La Crosse Seed

Leading the Industry for 100 Years

La Crosse Seed is an independent company that has paired an unmatched portfolio of turf, cover crop, forage, wildlife and native seed with knowledgeable and experienced sales and support staff since 1919. No other specialty seed company matches our level of experience, product knowledge or product availability. To learn more visit lacrosseseed.com.

