

Disease Worries on Lawn Seed and Seedlings?

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Summer 2024 was a stressful season for lawns in Indiana and throughout the region. Temperatures often spiked to uncomfortable levels, particularly towards the end of August, and were accompanied by either sweltering humidity or an abrupt halt to rainfall. Diseases such as brown patch on tall fescue were prevalent and leaf spot/melting out diseases on Kentucky bluegrass and perennial ryegrass lawns were kicked off early in spring with frequent rains and didn't let up through much of the season. These diseases were particularly severe on shaded and over-irrigated lawns, driven by longer periods of leaf wetness.

As discussed previously, fall is the perfect time to rehabilitate the lawn and restore density with seed. Fall has shorter daylengths but still enough sunlight and heat to enable germination and establishment before winter arrives. Combined with fertility and aeration or heavy raking to ensure good seed soil contact, seeding a lawn in fall is a great way to get back what summer stresses may have taken.



Young turfgrass seedlings are susceptible to damping off diseases caused by *Rhizoctonia* and *Pythium* spp. However, planting during the cooler fall period greatly reduces this likelihood.

Figure 1. Young turfgrass seedlings are susceptible to damping off diseases caused by *Rhizoctonia* and *Pythium* spp. However, planting during the cooler fall period greatly reduces this likelihood.

But what about those dastardly diseases that harmed the lawn in the first place? Diseases that impact newly seeded or newly emerged seedlings are termed "damping off". Preemergence damping off results in poor establishment, and postemergence damping off results in flimsy and weak seedlings that rapidly decline and return back to bare ground. In larger seeded stands, symptoms will normally start in a small area and expand. In conducive morning conditions, pathogen mycelium (the signs) may even be present along leaves or seed bases.

These diseases are one of the main reasons we do not seed in late spring or summer. The hot, humid environment is conducive for these diseases to dine on tender baby seedlings, and planting during the heat of summer is throwing them right in the boiling pot. By planting in the fall, this summer stress is in the rearview mirror instead of the windshield, quelling this threat.

Preventive fungicide applications for damping off on lawns are often unnecessary and not suggested. Other practices can effectively reduce or eliminate the likelihood of seedling diseases including:

- Seed at the appropriate rate. If restoring lawn density is the goal, putting out enough plant seed is the key. Overseeding rates should be in the 1.5-2 lb per 1000 sq ft range for Kentucky bluegrass and 6-8 lb per 1000 sq ft for tall fescue.
- Irrigate the seedbed in frequent, small doses throughout the daylight hours. Note this is exactly the opposite of the recommendation for established lawns. A useful adage is to irrigate a seedbed enough to make the soil dark, but don't water so much that it glistens.
- When seedlings do emerge, water more often in the morning hours than in the evening.
- Provide good surface and subsurface drainage to the seedbed.
- Attempt to alleviate barriers to air movement and shade. This doesn't mean knocking down walls, but sliding the grill or some outside chairs around may help.

- Light applications of mulch or straw can be left in place after seedling emergence. Do not over apply. A good rule of thumb is about half of the soil or surface should be visible after application. If using straw, 1 bale should cover approximately 1,000 sq ft.
- If using a non-biodegradable seed cover, remove it as soon as seedlings emerge.

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