



Musings About Turf Diseases During— or After—A Cool Wet Spring

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It's been difficult for me to realize that we are no longer in a dry weather era. But after rains nearly every day for a month, and an accumulation of more than six inches above normal precipitation already for this year, I guess it's for real. Entomologists are predicting mosquitoes — and I'm predicting disease — no real risk in either one of those predictions, you'll probably agree.

Foliage diseases on trees and shrubs will be the highest in years, in my judgment. Look for an avalanche of anthracnose on ash, white oak and sycamore. Rust diseases will turn susceptible flowering crab and hawthorns yellow. Leaves will be falling off most crabs everywhere from scab by the Fourth of July. Many diseases we see only sporadically will be with us in 1990 — guaranteed — because we've already had the right kind of weather that these organisms, long dormant during the dry years, have been waiting for.

But what about turf diseases? The interesting thing about Wisconsin grasses is that they all thrive nicely under the cool, moist weather we've been having. A lot of turf has patched together areas that have been weak for several years. So it's a mixed bag. But my hunch is we'll see the effects of current weather patterns before the season is out. I'll offer you some thoughts about what might happen.

1. First, the obvious. **Leaf spot and melting out.** There's more leaf spot occurring on Kentucky bluegrass around the state than we've had in many years. We can see the value in "Helminthosporium" resistant bluegrass, or early season fungicide treatments, everywhere we look this spring. Old, susceptible turfs are going to be very thin before this spring's effects are over and the melting out phase has taken its toll, but the resistant cultivars have never looked better.

But why hasn't this affected our bentgrasses? Very few courses have treated so far this spring, according to

comments I've received, and yet I've seen very little evidence of activity up to the present. The answer is probably the **temperature** we've been having. What's working on bluegrass is *Drechslera poae*. It's favored by temperatures about 55°-65°F., and it **quits** about 80°F. And this fungus does **not** attack our bentgrasses. There are a couple species of *Drechslera* which can attack bent, and which do well at these temperatures, but they're not common in Wisconsin, by my experience.

The most common "Helminthosporium" that I've seen on bentgrass here has been *Bipolaris sorokinianum*. Optimum temperatures are higher, more like 70°-90°F., so if the rains continue as the temperature goes up, consider yourself warned! This fungus, by the way, in contrast to the *Drechslera* species, works on a broad number of grasses, including Kentucky bluegrass.

If you have encountered a good case of "Helminth" this spring on your bentgrass, I wouldn't mind seeing a sample of it, for the sake of knowing which organism is involved.

2. **Patch diseases.** We again have a sizeable investment in evaluating springtime applications of fungicides for summer patch diseases on *Poa*. Plots are located at Pine Hills and Nakoma. The intent of early treatments, as you may know, is to get the fungicide in place at the time the fungus first becomes active. But *Magnaporthe poae* is a warmer temperature fungus. It probably takes temperatures about 65°F, along with a wet spring, to get it going in time to rot out the roots and cause symptoms in August. So, based on the present theory, summer patch shouldn't be a problem this year. (I'm hedging on this one — I think that favorable June temperatures might do the job as well as May temperatures, so let's see what June brings.)

By contrast, the necrotic ring spot fungus is probably really enjoying the month of May! We've not seen much

of that disease for the last few years, and I think the reason is the dry, but also the relatively warmer springs, that we've had. Some of those same bluegrass areas that look so good now because of Helminthosporium resistance may be showing dead rings and patches if the weather ever warms up and dries off a bit. And I'm thinking that our newer golf courses, particularly, may experience some take-all patch this summer and fall. That fungus likes this spring weather, too.

3. **"Odd-ball" diseases.** Unusual weather patterns like we've been having will spawn strange problems. We've already encountered a damaging level of foliage-attacking Fusarium of *Poa* this spring. In past years we had outbreaks of Ascochyta disease. If stripe smut fungus is still alive after the several unfavorable years, these weather patterns are ideal for it. So it should be another interesting year. And why not? Why should this year be different!?!

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