Summer Lab Update

By Bruce Schweiger, Turfgrass Diagnostic Lab Manager, O.J. Noer Turfgrass Research and Education Facility

I received the friendly reminder from Dave Brandenburg that my next article for the Grassroots and was due and he said, "Hopefully there will be no talk of excessive rain, cold, heat, snow, hail or locusts." So there I sat with a thousand ideas of what I could write about and then that comment. OK, I hope you have enjoyed my article!

I know that will not fly, so I will share the happenings around the OJ Noer and TDL. The lab has had a steady stream of sample submissions. The two most common sentences in the lab this year have been: "Paul do you have a minute to check on my diagnosis?" Or "Paul do you have minute, what is this?" Ok three sentences, "They call this a what?" Ok so looking at these samples through a microscope is different than in the field, but I am getting a good handle on the process. I am thankful to a good, patient teacher, thanks Paul! I will apologize to Dr. Kerns and Dr. Koch for all the trouble I caused them in the past, there is so much going on here every day, I guess they were working and not just playing golf. My number one goal this year is to get Dr. Koch an afternoon to play golf somewhere! Any volunteers to find Dr. Koch a tee time, call me I will make it happen?

The spring soil temperatures were able to stay in that 50-65 degree ranges for a long period of time. This meant that the period for active infections of Necrotic Ring Spot (Ophiospherella korrea), Take-all-patch (Gaemannomyces gramminis var. avenae) and Summer Patch (Magnaporthe poae) was longer than usual. Dr. Koch and I had been discussing the possible increase in these diseases this summer. We did not have to wait long and the Take-all-Patch (Gaemannomyces ssp.) samples began arriving. To date we have seen many samples with Take-all-patch but to a lesser degree so that is may not be the only factor in the turf sample. I assume that the Take-all-patch (Gaemannomyces ssp.) is causing the plant to not function at its peak performance and we are seeing anthracnose and other secondary pathogens invading the plant. In the southern part of the state with all the rainfall and cooler early season temperatures the plants were not showing the usual signs of Take-all-patch (Gaemannomyces ssp.) due to the cooler weather pattern.

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The last few weeks the true story for the severity of our Take-all-patch (Gaemannomyces ssp.) has shown itself. Just a reminder we can find Take-all-patch (Gaemannomyces ssp.) in many samples but just because it is present does not mean it is causing the symptoms or the damage.

Earlier in the year we had many cases of Ascochyta leaf blight (spp.) and Septoria Leaf Spot (spp.) affecting many general turfgrass areas. Both of these diseases are most common during periods of cool moist conditions. Ascochyta can be distinguished from other leaf spot from the almost white necrosis on the leaf tip, whereas Septoria has a more normal leaf spot appearance with a general thinning and tan leaf with black or dark brown pycnidia. The best cure for both of these diseases is sunny days with low humidity, and to mow the area once the leaf blades have dried.

As usual we have many dollar spot (sclerotinia spp.) trials at the OJ Noer Research Facility. Unfortunately the dollar spot has not been cooperating. In June when our trials flooded Dr. Koch speculated that much of the dollar spot (sclerotinia spp.) inoculum might have washed away. I think he was correct because as I begin to write this article we are struggling to get dollar spot (sclerotinia spp.) on our bentgrass plots.

We also have a Brown Patch(Rhizoctonia solani) trial and a few weeks ago Dr. Koch made some adjustments to our maintenance program and we had Brown Patch everywhere, we were so happy. Three days later the morning lows were in the 40's and all of our hard work was gone. We decided to covered our Brown Patch trial with a tent and have added some nitrogen to try to encourage the return of the Brown Patch. The weather as I write this is 90+ degrees and plenty of humidity and we have been very successful. Come by during Field Days and check our brown patch.

They say it is hard to teach old dog new tricks; well they are doing a good job of it at the Noer. The other day I came in from walking the plots and I was so happy to report some disease activity. For the last ___(fill in the blank) years my main goals has to provide turfgrass with NO DISEASE, and if I saw disease I was disappointed the program had possibly failed., Now no disease means no research. Ok I will admit that this week, with the weather we have experienced, I have seen everything on the OJ Noer Facility, dollar spot, brown patch, pythium, cutworms and isolated dry spots. Now I am sleeping so sound knowing I have been successful!

Oh how my life has changed!

TDL
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