Staying Out of Hot Water

Field Day Reminder: Next Tuesday!! – Register Now

I hope to see you next Tuesday at our University of Missouri field day. Here is a link to last week’s post highlighting all of the wonderful events set to take place. I know it’s hot now but check out the 5-day forecast below!! That’s right folks a cool, breezy 91°F awaits us for next week’s event, and the overnight low is oh so close to the 60’s.

Participant registration is now open – click here to register.

Turfgrass Pathology Program Field Day Studies
A. Turf reaction to Trimmit/DMI combinations
B. Inoculation of brown patch on putting green trial.
C. Brown patch has been the plague of lawns this year, and is in abundance in our trials.

Again I’d like to briefly mention what you could miss from our pathology program if you don’t (or can’t) make it to field day. For lawn care operations and sod farms, we have a direct comparison between granular and sprayable formulations. We have A TON of brown patch in this tall fescue plot, and I will be discussing how to identify the disease, the cultural practices necessary to minimize severity, and this trial. For golf superintendents, I will be presenting a large research project investigating the benefits of DMI applications in the spring and how to schedule these applications with paclobutrazol targeted at Poa reduction. In addition, I made some low rate DMI applications this past Tuesday, and it will be interesting to see how these plots will react to this heat wave.
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Weather

Climbing the Temperature Mountain
A. And then summer set in. The high lows are going right along with the high highs this month.
- source: Pat Guinan, state climatologist
B. Believe it or not, this forecast is good news...
- source: weather.com

Hot. Dry. Holy Cow. The temperature graph above reminds me of the "Price is Right" game with the yodeling mountain climber, and I'm just wondering when he is going to fall off. The temperature was 82°F at 12 am this morning in Columbia, which does not leave a lot for relief for people or cool season grasses. Bentgrass putting greens are literally dancing on the coals, with 11 am 2-inch soil temperatures hovering around 88°F for the last few days. This is not the time to be doing too much to putting greens, particularly anything abrasive like brushing in topdressing or verticutting.

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I wrote my first entry to the nationwide golf turf disease blog today, and would like to mention it here. Not surprisingly, it has to do with the weather, and highlights a local golf course's battle with hot irrigation water. If you have not signed up for email updates from this blog, it is well worth your time to hear from some of my colleagues and experts in the field of turfgrass pathology.

Link to Turfgrass Disease Updates for Golf Courses

Quick Hits
- Much of the same story from last week... Brown patch, Pythium root rot, copper spot etc. Come out to field day and see a bunch of them in action!!
Summer Patch has just started to emerge as a problem on Kentucky bluegrass sports turf, golf course roughs, and lawns. Summer patch infected turf can sometimes develop frog-eye type symptoms where the middle of the patch has healthy turf. The disease is caused by *Magnaporthe poae*, a fungal pathogen which begins infection when soil temperatures reach 65°F, (around mid May for much of Missouri). The fungus is soil borne and attacks roots and crowns, so it is one of the “silent killers” that affect root function and really cause damage when heat stress arrives. The pathogen forms characteristic infection cushions, and infected roots in some cases remind me of a shrimp that needs to be deveined.

Until recently, summer patch was only thought to infect bluegrasses (annual and Kentucky), but there have been reports of summer patch infecting creeping bentgrass. I have observed the disease in a putting green sample from Arkansas, but have yet to see any infections yet in Missouri.

Summer patch is a disease that must be prevented. Applications of manganese sulfate in the spring at 2 lbs/1000 ft² can greatly reduce disease severity. These applications are not very expensive, and several turf managers have incorporated this into their management scheme with good success. Switching the nitrogen source to ammonium sulfate can also help to suppress this disease. If summer patch is still a problem on high amenity turf, fungicide applications should commence when soil temperatures reach reach 65°F in late spring. Applications should be made every 28 days, and usually a total of three applications suffice. These applications must be watered-in to with 1/8 – ¼” of irrigation to deliver the fungicide to the target zone. In a curative situation, application of ammonium sulfate at 0.2 lb/1000 ft² can hasten recovery.

Hope to see you Tuesday,
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