70F Soil Temp = Go Time

Weather

September is occasionally feeling like fall as temperatures are rocketing back and forth between above and below normal. Overall, we are nearly 4 degrees above normal at this point, but are looking down the barrel of a cold front that should bring the area some cooler weekend temperatures and welcome rain over the next 24 hours. In the long term, however, the NOAA does show a high likelihood that September could end warm and keep temperatures above normal for the month.

Some forecasts indicate an inch or more of precipitation is possible from the approaching system, and over the next 6-14 days we also should be getting average to above average amounts of precipitation. This, along with good September temperatures, should prime the soil perfectly for cool season turfgrass fertilization and over/re-seeding. Temperatures are currently in the germination range (68 – 86°F for tall fescue), and along with a warmer end of the month will encourage good establishment. If you followed the magic date of September 15th and got out earlier this week with the seed and fertilizer, you should be able to watch the grass grow. If not, it looks like the window of opportunity will be open over the next week, so get it out.

Quick Hits

- Not many new diseases to talk about hitting the diagnostic lab in the past two weeks. Brown patch has died down, and as expected dollar spot is spiking with the mid-September decrease in temperatures. Warm season turfgrass growth

Warm September

A. Recent conditions have us in line with other warm Septembers, but we should break into cooler temperatures with the weekend’s cool front.

B. The extended 6-10 day forecast shows a higher probability for a warm finish to September.

Source: NOAA
70F Soil Temp = Go Time

has started to slow with decreasing soil temperatures, and that’s where the true story lies now.

70 Degree Soil Temperatures = Get to Work

Tall Fescue

See above, but in short, go for it. The disease season should be squarely behind us and it is time to make hay, and roots, and plants. Aerify, overseed, fertilize. Rinse and repeat with another fertilization application in October.

Bermudagrass

Current research suggests the previous belief that fall fertilization of bermudagrass promotes winter injury is false. Research out of the University of Arkansas, Mississippi State, and Virginia Tech all demonstrated that late season nitrogen fertilization prolongs green color before dormancy and promotes earlier green up in the spring. An article for the Gateway STMA magazine regarding fall maintenance
practices on bermudagrass is set to be published shortly, so check it out for more details.

Spring dead spot should be on the mind of bermudagrass managers now, particularly if the disease has been severe in the past. Currently labeled fungicides include high label rates of tebuconazole* (i.e. Torque), propiconazole (Headway formulation w/azoxystrobin is better than propiconazole alone), and myclobutanil (i.e. Eagle). Rubigan was taken off the market over a year ago, and be forewarned that *tebuconazole is not labeled for sports fields or home lawns. After spring dead spot is established, it will take a multi-year approach with these fungicides to achieve adequate control. Remember this disease is soil-borne and therefore the fungicide must be watered in immediately post application with 1/8 – 1/4” of irrigation.

Last week, we inoculated an ~ 11,000 square foot plot of ‘Patriot’ bermudagrass (plus 1 plot of ‘Latitude 36’ and 1 plot of ‘Northbridge’) with the spring dead spot pathogen O. herpotricha. We plan on investigating a litany of different chemical and cultural control practices on this plot in the future. Stay tuned.

Zoysiagrass

Zoysiagrass lawns and fairways are starting to slow growth, which means large patch is looking to take advantage. In some of our inoculated areas which have had high disease pressure in the past, we are noticing orange, “firing” leaves indicating infection is taking place.
The 70-degree F soil temperature mark is the currently accepted threshold to initiate fall preventive fungicide applications for large patch control in areas with a history of the disease. Last fall, we conducted a few trials to investigate the impact of application timing on the disease. As can be seen in the graph above, we observed the longest residual control in 2 trials with one earlier September application as opposed to a single October application. From this preliminary trial data, my current suggestion is if only one strike is feasible it's best to use it now rather than later. We will be investigating other fungicide application strategies this year aimed at promoting longer spring residual efficacy from a single fall application.

Along with Dr. Megan Kennelly at Kansas State University, we also have a trial investigating the impact of different nitrogen sources and application timing on large patch prevention. As noted in a previous update, we have made two spring applications based on soil temperatures rising to 60 and 70-degree thresholds, and now we are making fall nitrogen fertilizer applications based on a soil temperature decrease to 70 degrees F. Perhaps as in the case with bermudagrass, we will change the thought process regarding fall nitrogen fertilization on zoysiagrass.

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