Disease Update – 3/4/11

Yellow Patch


To join reported activity last week in STL, a significant yellow patch outbreak was observed late this week on the disease putting green at the Missouri Turf Research Farm. Yellow patch is occurs solely on bentgrass putting greens in Missouri, and infects both bentgrass and *Poa annua* fairly equally. Patches were approximately 1-3 feet wide with some of them coalescing to larger areas. These patches were active, as evidenced by the copious amount of mycelium within the lower leaf sheaths (see figure above).

Yellow patch plant symptoms can easily be mistaken for pink snow mold, so if you are not sure of the outbreak based on past history you may want to send it in for diagnosis. Pink snow mold, in particular, warrants immediate fungicide intervention as it can severely impact bentgrass health through an extended range of temperatures in the spring. For the most part, yellow patch is a “transitory” or “cosmetic” disease that will clear up when temperatures rise out of the comfort zone for the pathogen and the bentgrass starts to actively grow.

That being said, **spot spraying** of curative fungicide applications may be necessary now in severe cases. There is no need to treat all of the greens now to stop the spread of this disease; it is just not that damaging. Fungicide treated turf will recover more quickly from plant symptoms when warmer temperatures arrive. Not all brown patch fungicides are labeled for yellow patch control, so make sure to check. Effective fungicides include the Qols (i.e. Heritage, Insignia, Compass), the DMIs (i.e. Banner, Bayleton, Eagle) or polyoxin D (Affirm).
DMI Fungicide – Plant Growth Regulator Connection

Fall DMI application impact on dormant bermudagrass color. Dark patches are previous spring dead spot symptoms.

A) 2/16/11: Significant yellowing in dormant bermudagrass treated with a DMI fungicide. Note where the boom was cleared outside the plot on the left.
B) 2/21/11: DMI fungicide footprinting in untreated plots by applicator.*

*Note the anonymous nature of this statement!

I will visit this topic consistently throughout the season, but wanted to show the above picture to emphasize the point. DMI fungicides are definitive plant growth regulators that can severely impact turf health if used without prejudice during high stress periods. The above picture is a spring dead spot trial at the Missouri Turf Farm with preventive fall DMI applications. The bright yellow bermudagrass areas are DMI treated. The overall impact on spring green up and residual turf health is not known, but it is a striking example of how DMIs affect turfgrass physiology.

Save the Date: July 26, 2011

Make plans to join us at the University Missouri Turf & Ornamental Research Farm on July 26th for our annual field day! We will be presenting the latest research on cultivar evaluations, pest controls, and management considerations for turf, trees, and woody ornamentals. It’s a fine day and a fine way to interact with colleagues and your local Mizzou research team.