



BY DR. DAVID MINNER Professor, Iowa State University

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## I've got questions, too

ATTENDED THE STMA CONFERENCE

**THIS YEAR** with a list of specific questions I wanted answered. But as usual I came away with a whole lot more from networking with speakers, sports turf managers, and exhibitors.

I've been having problems with summer patch on baseball fields that we have made over with a process of killing the existing grass, coring, topdressing, and planting the top varieties of low mow bluegrasses. We push the fields with 4-6 lbs N/1000 sq ft during the first year of grow in and mow at 0.5 to 0.75 inches. The fields make an amazing playing surface; pro quality at the high school level and everyone is really pleased.

The problem is that we are being inundated with summer patch even in the first summer season after fall planting. Dr. Mike Fidanza's disease management workshop provided answers to managing this disease along with a host of tips for battling other common sports turf diseases. The high 8.0 pH sand we use combined with a low mowing height favors the disease, but most sands in Iowa have a high pH and the low mowing height is needed for the playing quality and ball roll we wanted to achieve. Based on his recommendation we will switch to acidulating fertilizers like ammonium sulfate to help lower the pH in the surface layers where this soil-borne fungus attacks crowns, surface roots, and rhizomes.

The frogeye patches are most noticeable June thru September but the fungus actually grows undetected in May before it begins to show in hand-sized wilted patches of sunken turf. Fungicides applied after the frogeye patches have formed are less effective so fungicide applications need to go out before you see severe symptoms. Since we are seeing patches in late May/early June Dr. Fidanza recommends making preventative fungicide applications April 15 and again on May 15 when the undetected fungus is first starting to become infective. A third application may be applied in mid-June if needed.

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Since these high profile fields are starting to host district playoffs in late July we will likely make the third fungicide application. He also strongly recommended to solid tine/needle tine/core the area before applying fungicide. Apply the product in 2 gallons of water-carrier per 1,000 sq ft and then immediately waterin the fungicide with several turns of the irrigation heads to get the material off the turf canopy and into the upper rootzone, where the fungus is most active; get that upper soil rootzone wet.

Dr. Fidanza also presented research showing the benefits of selecting the right nozzles types for improved disease control. To further get the fungicide dispersed into the surface he suggested a wetting agent like Revolution applied at 6 fl oz per 1000 sq ft. The DMI fungicides like Banner and Bayleton are good choices and they also have a plant growth regulator effect that reduces mowing. For one of my fields where equipment limitations require only granular application I use a QoI type fungicide such as Heritage G or Pillar G with the same emphasis on punching holes in the surface and wateringin the product.

Another question I wanted answered involves phosphorus fertilizer applications. Most of you are aware that farmers and landscapers are trying to do their part to keep P out of water. The Clean Water Act of 1972 is finding its way into P restrictions for turf and landscape applications in some states and it is likely that this will eventually impact all states.

Most states that completely restrict P usually give an exception when soil tests show a need for P or without a soil test when areas are newly seeded because of the past research that shows benefit from P application during seedling establishment. Dr. Beth Guertal gave an excellent presentation on the proper use of phosphorus in turf but there remains a question about what is the soil test level where no more P application is needed for enhance seedling growth. Sports turf managers are constantly overseeding worn areas; should P be applied to these areas even if a soil test of 20 ppm is already in the very high category? Perhaps Dr. Guertal will have that sorted out by the time we meet next year.

If you didn't make it to the conference this year you can check out some of the online presentations at STMA.org. The ability to quickly assess information today is remarkable, but for me there is nothing like being able to have your specific questions answered and discussed with the leading experts in our field today. See you January 20-24, 2014 in San Antonio, TX for next year's conference.