

PURPOSE: To pass on what we learn willingly and happily to others in the profession so as to improve turf conditions around the country.

ROUNDUP READY BENTGRASS: Toward the end of summer I received a letter inviting me to come to the Indiana Convention Center to ask questions about Roundup Ready bentgrass. I responded with the letter below. It has now been announced that Scotts and Monsanto have pulled their application for release. I'm sure they will be back. In the letter you will find some questions to ask their tech-reps when the time comes. They will probably come back with the terminator gene installed which in this case will be good and eliminate the problem mentioned in question two.

October 18, 2002

Eric Nelson, Ph.D. Director, Turfgrass Development 14111 Scottslawn Road Marysville, Ohio 43041

Dear Dr. Nelson:

I emailed a note to Melissa Barton saying that although I did not wish to come to the Indiana Conv. Center on Nov. 11<sup>th</sup> I would like to have some written questions answered as I assume would my readers and consulting customers. I am very glad to read of your "policy of open communication" because over the last

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few years I have come up with some questions about Roundup Ready crops. I'll restrict those I ask you to turf.

Those questions are:

- 1. It has been shown that Roundup Ready Creeping Bentgrass (RRCB) can be easily controlled by Finale, Fusilade, Envoy, Kerb, and Vantage herbicides. What if these herbicides are pulled from the market by the manufacturers or by the EPA?
- 2. With more golf courses going to the "Scottish" look or to having more unmowed rough areas there is an increasing possibility that a course that planted RRCB or is near one that did will have RRCB flowering in their roughs. Thus, increased chance that RR genes will move into the other grasses. Is this not going to be a problem?
- 3. If a golf course adjacent or nearby one that used RRCB on their course finds they have RRCB on their course is Monsanto or The Scotts Co. going to sue that golf course like the Canadian canola farmer who was sued a few years back?
- 4. If RRCB contaminates a nearby golf course, home lawn, sod farm, or other turf area who is responsible? I ask that question because the owner/manager of the contaminated turf is going to be very unhappy when he/she finds out that Roundup does not kill the undesired RRCB, for not only has he wasted time but money.
- 5. To the best of my knowledge no RRCB are being tested in nationwide university tests. How are superintendents going to be assured of quality when they buy a RRCB cultivar?

I and my customers would like answers to these questions. I will publish them in TurfComms in approximately 30 days or more, with the answers if reasonable in length, or without if none are received.

Yours for Better Turf, Douglas T. Hawes, Ph.D.

## I did not receive a reply to this letter!

**MONSANTO AND GENETICALLY ENGINEERED FOOD:** I am not opposed to GE foods or plants of any kind provided they are well tested and industry is willing to assume responsibility for the release of such plants as well as animals. Is Europe stupid? They won't let our GE crop products and processed foods into their countries. Yet, Monsanto and the rest of the genetically engineered plant and animal producers have seen to it, in my opinion, to prevent any labeling of their GE products as such. Thus we'll never know and we have no rights to make our own decisions on whether we want to eat GE food. Not only that, laws have been passed to make these companies immune for lawsuits if their GE products do turn out to be harmful. How did they do this? One way

was having Michael Taylor, a lawyer, "appointed to the new Food and Drug Administration position of deputy commissioner for policy. Taylor's job was to supervise the formulation of FDA policy on genetically engineered food." After he got that done to industry's satisfaction he was hired by Monsanto. From pg. 76 of <u>Restoring the Heart of America</u> by Clyde J. Cleveland and Edward F. Noyes. Pub. 2002.

**NEW NEMATODE CAUSED DISEASE:** Having suggested to all readers that they get on Dr. Karl Danneberger's email list for updates of his SK TURFNOTES I imagine most of you read about this in his Nov. 25<sup>th</sup> posting. It seems that Dr. Kate Entwistle, et al, have identified a Meloidogyne spp. of nematodes to cause a yellow patch like disease in English turf. All creeping bentgrass cultivars are susceptible. Might be wise to have all those golfers going to Scotland next spring apply dilute bleach to the bottom of their golf shoes.

**TEXAS TURFGRASS CONFERENCE** – December 2-4, 2002. I made it to the Tuesday sessions and the Wednesday morning session. Dr. David Chalmers, formerly at VPI and now with TX A&M in College Station, talked about career development for golf course superintendents. I never would have made it as a golf course supt.

Dr. Richard White, TX A&M researcher, gave an excellent talk on **TRANSITION**. First he noted that shoot density of the bermudagrass cultivars declines as thatch develops. Champion at 0.4" of thatch drops to one seventh of the density at zero thatch. Or, in other words if you let it get thatchy you lose all the advantages of these new dense cultivars. Tifeagle loses  $\frac{1}{2}$  of its density at 0.6" of thatch. Tifdwarf has a lot less density to start and loses very little with thatch development.

With Miniverde he obtained the best transition at low nitrogen level. That was 6 lb./M, but once **bermudagrass decline** sets in, this is no longer the case.

He found that thatch was greater in the spring on overseeded bermudagrass greens and finally had to conclude that the overseeding was responsible for this increase. This then creates an interesting situation. With lots of readily decomposable organic matter in the thatch layer the turf now needs extra nitrogen as the microbes break this down. A fact that helps explain perhaps why bermudagrass greens require so much nitrogen. Jim Moore, USGA Green Section, interrupted at this point to note that one can start with a 30 inch/hour percolation rate but if allow thatch to build up, the resulting percolation rate is the same as the green that started with only a 6 inch percolation rate.

Dr. White noted that greens with a thatch layer warm up more slowly in the spring, especially cool-wet springs. But, most importantly he noted that, "Hollow tine core aerifier was the best tool for managing the thatch layer on bermudagrass greens." He suggested that the Bermuda greens be aerified with the largest tine size when actively growing and the smaller sizes when not. But, the next day he surprised us as to when that actually was.

**USGA soil mix specifications or recommendations:** While touring the exhibits I got in a discussion with one old time superintendent now in the supporting industry. His contention was that what the USGA recommends for soil mixes for bermudagrass greens has too high a porosity or too little moisture holding capacity for good winter survival. This is a problem with newly established bermudagrass greens as they are then very prone to drying out during the winter. Also the cold will penetrate deeper in this very porous media and increase the amount of death by freezing.

I feel he has a valid point. So if maintaining new sand base bermudagrass greens be sure to keep the irrigation system on through the winter and/or use covers.

Larry Gilhuly, Director of the NW USGA Green Section Region, talked to us about **Paspalum as a turf species**; that is the salt tolerant seashore paspalum that Dr. Duncan is researching on in Georgia. Larry has dealt with this grass primarily in Hawaii. He took awhile to realize how good and well suited it was to their golf course environment. First, it uses a lot less nitrogen for superior turf. And on the Islands they are very worried about nitrogen in the runoff polluting the surrounding ocean waters. He noted that the main problem with it on the Islands is that it was a contaminate of bermudagrass and as such grew puffy and unmanageable under the high nitrogen fertility of that grass specie.

This puffiness makes it a poor choice where the height of cut is to be above one inch. It makes a lousy rough; or let us say it makes a rough you would love to see your opponent in, but sure would work hard to avoid yourself.

He noted that its aggressive growth resists weeds and mentioned two new golf courses over there that had been grown in without the use of herbicides. Rock salt has been used to remove most weeds including bermudagrass. (Ed. but beware on soils that do not have a single grain sand structure as the sodium will destroy the soil structure.) Seashore Paspalum has excellent traffic tolerance. It produces a thick rhizome which means it can come back from divots easily. It also means it is difficult to kill when you want to.

It is very susceptible to Dollarspot, but a little nitrogen lets it outgrow of the disease. It has developed some patch diseases which at this time have not been fully diagnosed. You can water it with seawater. But, can't use postemerge crabgrass herbicides on it. When properly managed it has no grain. 'Salam' the cultivar used on Hawaii does better in their mild winters that do the bermudagrasses.

He did note that you need frequent irrigation to establish. You should spoon feed fertilizer to it with the main periods of fertilization on the Island to be spring and fall. It does need a lot of vertical mowing. Its drought tolerance appears to be equal to bermudagrass.

Larry was extremely enthusiastic for paspalum. He is a good speaker and a good golfer.

In the next issue we will discuss Wednesday's session.

END