



## Fungicide Use Patterns on Golf Courses — How Much Are We Using?

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I recently attended a two day workshop dealing with the concern for preventing possible buildup of resistant fungi to the sterol inhibitor fungicides in turf diseases before it happens. Uses of such products as Banner, Bayleton and Rubigan are increasing rapidly, and several new and somewhat different compounds with the same mode of action are due to appear within the next 18 months.

Both the concern over potential resistance and the emerging new fungicides are important topics which we'll discuss at a future time. I really became intrigued by several incidental conversations that emerged, however, and one of them was the amount of fungicides we are using today on the nation's golf courses! No one knows how much that is, but in this day and age, it's a question that is going to surface, and I'm wondering whether we ought to set about finding an answer before we are asked!

The chemical industry has a pretty good perception of what is going on. But there is no organized system to accumulate such information, and in fact the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) precludes their being asked such a question. It's regarded as "privileged information". That same question is being asked for all pesticides on all food crops today, and if you have a chance to read the details of the new farm bill, you'll likely see plans and budget that will solicit such information from production agriculture.

On what crops in the U.S. would you expect the greatest use of fungicides to be? How about potatoes? Or maybe apples or tomatoes? Well, on a worldwide basis, it is cereal crops, mostly wheat, which is produced under very intensive management in Europe. Regarding pesticide use as a whole, it is probably corn first, then soybeans — and this is primarily herbicide use. Cereal crop fungicide use is in third place among all pesticides.

But according to "closet comments", fungicide use on turf ranks first among all crops in the United States!

I hope you will treat that statement as "privileged information", too, something not to be bandied about loosely. My perception is that it's both good and bad at the same time. Their rapidly increasing use is a recognition of the important role they play today in providing and assuring quality turf. It also increases our chances substantially in encouraging the Chemical Industry to devote more attention to the needs of the Turf Industry. I believe this has been happening, and that's why we can expect some more useful chemical tools to assist us with our jobs.

But there's the economic issue to be considered. What has your own fungicide bill been lately? Some superintendents tell me it has doubled over the last few years, in some cases considerably more. The biggest reason for that in Wisconsin is our increased attention to quality fairways, and our recognition that quality Poa can be grown and maintained under intense management, including fungicide use. Warmer summers and more Pythium and Rhizoctonia have also had their impact.

Environmental and human health issues probably are even greater concerns that we are going to be required to have answers for. Not that we are causing problems with our use, but can we convince others of that? I'm told that a Congressional Hearing is scheduled sometime this spring relating to pesticide use on turf (same hallway source of information!). And the Environmental Protection Agency has announced a pilot project dealing with IPM on golf courses. I've tried to follow up on that announcement, and my information says that is likely to occur in or around Maryland.

Should we be gathering information now — before anticipated headlines — that support our contention

that golfers are still healthy after playing Wisconsin's courses? Should we be voluntarily posting our courses when they are treated? Can we obtain reliable information telling us about "dischargeable residues" that remain on the grass blades after spraying?

Should we also be gathering some data regarding Wisconsin pesticide use on our golf courses? If so, how would we do it, and how should the information be used?

Is it possible that we are using more fungicides than we really have to? What can be done about doing a better job about diagnosing the problems we see, and predicting disease outbreaks? We don't have really good tools to do either of these right now. You might keep your ears open to a bill being introduced in Wisconsin's legislature this month having to do with efforts to increase IPM research and use. Perhaps there's something in that for golf courses.

It's easy to raise these questions. The answers come harder. But I'd welcome any comments you wish to share with me!

### TURNER PRESENTS NOR-AM SCHOLARSHIP TO MONGE

John Turner, representing the NOR-AM Chemical Company, presented the 1989 NOR-AM Scholarship to University of Wisconsin-Madison turfgrass student Todd Monge. Todd is a senior student and has gained much of his golf course experience at the Nakoma Golf Club, working for WGCSA members Randy Smith and Chuck Frazier.

Turner's leadership in the turfgrass industry is well established; he holds several offices in midwest associations. He is also responsible for including the University of Wisconsin in the scholarship program sponsored by NOR-AM today and earlier by TUCO Division of Upjohn.