



What Happened to Bayleton in 1987?

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The first hint of a problem came on July 21. Ray Knapp was sharing with me his problems with Bayleton on Poa fairways. It wasn't protecting like it had in previous years. What was happening, and what might be used in its stead?

We had conducted trials at Tuckaway with Ray in 1983 on Poa summer disease problems. It was a good plot, as a matter of fact, the first one that had given us clear evidence in Wisconsin that anthracnose, acting by itself, was capable of causing considerable damage to Poa. And Bayleton offered excellent control, as it has for Ray in subsequent years, until this year.

But 1987 was different. Spring started earlier than normal—just as it did in 1985 and 1986—but *summer* also started earlier, and tenaciously, with continued hot weather. Poa was under stress; pathogens were working earlier, and the wand of Bayleton had lost its magic.

You may recall that we have been working with Harvey Miller at Oconomowoc C.C. ever since the first Wisconsin Turfgrass Association Field Day, which they hosted, on a puzzling response we observed there. We have experienced relatively poor results on Poa health where we rotated Bayleton and Daconil. Both chemicals—especially Bayleton—gave good results when used alone, and we were trying to figure out why the effect of the rotation. But when Mike Lee and I took notes in Harvey's plots, two days after Ray's call, we had to take a double on our data—the poorest of 22 entries we had in the trial was Bayleton!! It had been applied biweekly since June 15, at the one ounce rate. Soon after we received several similar calls and reports, and our plots at Nakoma confirmed the same general trend. We've had to accept the fact that Bayleton did not provide the performance that it had previously.

Bayleton was the first of the sterol-inhibiting fungicides to enter the turf market, and its impact has been dra-

matic. I don't know of any chemical, except for nitrogen and H₂O, that brought about such excellent resuscitation of Poa, and helped give it more respectability than it had enjoyed in the past.

So what is the explanation for its failure? Could it be that fungal resistance has emerged? That would be a plausible answer, but I don't really think so, for two reasons. First, there were several sterol inhibitors in our trials as well, and most of these performed satisfactorily, some almost spectacularly. Cross-resistance, that is, similar responses among members of the same fungicide group to fungi developing tolerance to chemicals, did not appear to occur. Secondly, dollar spot control was excellent, both in our plots and on users' fairways. Since the dollar spot organism is notorious for its tendency to develop fungicide-resistant strains, it's likely that we would have seen breakdown in dollar spot control before some other disease.

Were we too late in our applications this year? Previous experiences have taught us that Poa protection required preventive applications—before any symptoms of decline were evident. We applied at the calendar date we've found to be very effective in previous years, e.g. June 15, but perhaps we were simply too late with the biological calendar this year. Maybe Bayleton is slower in uptake by the plant than some of the other compounds that gave good control. Or maybe something else, another pathogen that we failed to diagnose, for instance, could have been active this year. Certainly summer patch was active, and nothing we tried, preventively or curatively, was any good for that this year.

While we cringe at experiences like this, there's still some good to come out of it. First of all, not everyone experienced disappointment this year, some superintendents remained pleased with their results. Even in our plots, Bayleton usually looked better than non-treated areas. And there was no problem with dollar spot control. So

there's something salvageable, especially if we can ultimately figure out the details. We shouldn't, as the old adage goes, throw the baby out with the bath water! Bayleton has served us too well to walk away from it.

Bayleton—what's your experience?

If you would like to share your observations on the effectiveness of Bayleton this year, please take a moment to jot them down and forward them to: **Gayle Worf, 285 Russell Laboratories, Department of Plant Pathology, University of Wisconsin-Madison, Madison, WI 53706.** Indicate your treatment schedule, e.g. chemicals, rates and dates, and whether the results were better, equal to or poorer than previous years. Any other appropriate comments, such as diseases observed, changes in management strategies, etc., would also be useful. Worf would like to receive those comments by **December 1, 1987.**

Rules Quiz Answers

(From page 15)

1. A (Rule 13-2, Dec. 13-2/25.5) *Comment: If a player worsens his line of play, he is not entitled to restore the line to its original condition.*
2. A (Rule 25-1b, Dec. 25-1b/15) *Comment: Pine needles piled for removal are either loose impediments or ground under repair.*
3. B (Rule 18-4, Dec. 20-1/4) *Comment: There is no penalty in stroke play for the action.*
4. B (Rule 25-1b, Dec. 25-1b/10) *Comment: The ball must be placed, not dropped.*
5. B (Rule 20-5, Dec. 19-5/6) *Comment: Both balls are cancelled and the balls are replayed.*