

Twenty-Year Observations on Snow Mold Control

By Dr. Gayle Worf Department of Plant Pathology University of Wisconsin-Madison

I was asked recently to prepare a report covering our experiences with snow mold over the past two decades. It's a challenge to dust off old data, examine them against more recent observations, and try to see what trends and ideas have stood the test of time.

A good example of an old axiom that was accepted by everyone until about a decade ago was the firm belief that fall fertilization would substantially increase snow mold and winter injury problems. While there are probably some who are still very nervous about that possibility, and are waiting for the year that proves the old story to be correct, I believe most people are in the camp that says reasonable applications, e.g., up to a pound of N, won't cause snow mold problems, and will probably aid in any spring recovery that is required.

Another one was the assumption that mercurials were "always" effective, and that any failure was simply due to the application or the applicator. And if you had a problem one year, all that was necessary was to increase the dosage (there wasn't too much concern about label rates 20 years ago!) Or maybe-we thought-it was applied "too early". It was almost a contest to see who could be the last one to apply his chemical. (The word "he" was purposely chosen. There were no women in the business then-and still not very many!!) The assumption was that the later the application date, the better the performance of the chemical, and the greater the chances of remaining effective throughout the long, hard winter.

Most of us have backed off the very late application dates, realizing that we can get trapped by earlier than expected permanent snowfalls like we did on November 8 in 1985.

The ideal treatment date is still somewhat elusive. Our trials the last few years have included that question. We've also had some help these past two years from several superintendents who have made earlier versus later applications for comparison. Fortunately for the courses—but unfortunately for the question—snow mold activity has generally been too low to give us good readings in most instances.

Here's a general summary of observations and thoughts we've made on snow mold control over the years:

1. You can't predict snow mold from one season to another. Last year's experiences don't help much, though they may indicate the most sensitive areas on your course;

2. No cultural practices will control snow mold, including top dressing, greens covers, or fertility manipulation. Late season snow removal and/or treating with Milorganite or perhaps lampblack to absorb heat from late winter sunshine can sometimes help;

3. There's no such thing as a "no fail" treatment when snow mold conditions are severe enough! However, you can *greatly* reduce the damage with a few well chosen treatments, even under these circumstances;

4. Inorganic mercuries still give us the most dependable base treatment in tough situations. This is in spite of the fact that some injury to the turf is often encountered by mercury application. But they should be supplemented with PCNB or chloroneb, depending on location, to broaden spectrum and dependability. Combinations work much better than simply increasing the rate of one chemical. Besides, you'll probably exceed the legal (label) rates on the package before you get the success you're looking for;

5. Other registered chemicals have been effective for courses under relatively low disease pressure, especially when summer, or at least early fall disease control programs have included considerable fungicide application;

6. Granular products are usually as effective as sprays on an active ingredient basis, although in any given year one formulation may look better than the other;

7. We can successfully apply over light snowfalls, e.g., one or two inches without trouble, and chemicals work equally well when applied dry or in the rain. But don't expect them to work through heavy snow;

8. Late season nitrogen applications (October 20-November 20) have little effect on snow mold control or activity. It sometimes helps with early spring repair work that may be needed;

9. Fusarium patch can sometimes cause injury before snows occur, and before the usual snow mold control is applied. That's another reason for considering early fall "supplemental" treatments;

10. Midwinter treatments have not been needed or useful for us to provide protection under late spring snows that bring about late snow mold activity. For us, it's often not possible anyway! Nor have heavy late fall or winter rains reduced efficacy. However, they probably won't protect against fusarium patch after temperatures warm up and some rains occur in April.

11. Depending on your part of the state, applications between October 25 and November 5 may be the best compromise on treatment dates.

