PATHOLOGICAL POINTERS

What to Consider For Snow Mold Management Before the Mercury Ban of 1994

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Winter problems for Minnesota golf turf is a two-part problem: one is disease and the second is injury.

For most, the disease management aspect was well under control and even the injury aspect was being managed. The disease problems are also multiple and several fungi are present during the winter. The most common fungi are Typhula and Fusarium, Grey and Pink snow molds. The Grey Snow Mold species most common is T. ishikariensis and it is the most difficult to manage with chemicals. The other T. species is incarnata, and it is more susceptible to fungicide management.

We also have Gerlachis nivalis (Fusarium) present to some extent every year. The cause of snow molds varies from year to year and from North to South. In seasons of heavy snowfall and cold long winters Snow Scald is present, especially in northern locations; in seasons of cool, wet, cloudy periods, especially in the fall, pink may be the major problem. Since it is not possible to predict with any great accuracy which organism will predominate, and since all are capable of doing extensive damage to fine turf areas, preventive measures are taken in the fall. We seldom have the luxury of a mid-season winter treatment to make up or cover up for a failure.

Present recommendations for snow mold are to apply a mixture of products or apply three fungicides. Mercury as Caloclor at 1 oz., with Chloroneb (Teremec SP) at 2 oz. and PCNB (Terraclor) at 2 oz. has provided 98 to 100 percent disease control for several years at the northern testing location. The better two-way combination of these three products is Mercury plus PCNB or Chloroneb, and the weakest two-way combination was PCNB plus Chloroneb. The performance of other products in winter disease-testing has always been poorer, and results are more varied. The northern testing location (Duluth) is an area prone to snow cover and is mostly Poa turf. Sites with more bent and less snow cover should be able to be managed with this program.

Those who wish to try other products for winter disease management should consider the following. Treatments with mercury are the most reliable, and I expect other programs to allow 5 to 10 percent disease development. The next most consistent product is Daconil at 8 to 16 fl. oz. This rate was tested several times, and little difference was seen. Daconil does not have as much residual control and may run out before the season is over.

This lack of long term control may explain the variability of its control. It also does not have the range of control, and combinations with Daconil may improve the level of control. It needs help with Fusarium, and addition of benomyl (Tersan 1991) at 2 oz. should help reduce pink snow mold. Daconil appears to be a product to try in your winter disease program. It can be applied in conjunction with Fungo 50 at 2 oz. or Chipco 26019 at 4 oz. Scotts FFII has performed well for many people, and other formulations of PCNB need to be tested. Reports of Chloroneb used alone often include failure as it does not do well against T. ishikariensis.

Those of you who have experience with other control products are encouraged to write me and share your success stores. I suspect the more southern courses have had success with alternate fungicide programs. Those with experience with covers are also on my list to be heard. Has disease been a bigger problem with covers or has the standard fungicide program provided a disease-free environment under covers? My experience is that covers increase the severity of disease and the mercury programs have adequately managed the problem.

Remember that regular mowing in the fall until growth has stopped and avoidance of fertilizer applications that stimulate fall growth will reduce winter disease.

"Semper Graminis Morbidis"