

Snow Mold Recovery Observations

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Introduction

Snow molds, caused by multiple cold-loving fungal species are an important disease on golf courses in Northern regions where extended snow cover occurs annually. For more information on snow mold biology and management, please see the UMass Extension [Snow Molds fact sheet](#). Damage from snow molds can be extensive and preventative fungicide applications before snowfall have been shown to be the most effective control option. Fungicide selection is mainly influenced by the snow mold species being targeted (i.e. the ones that regularly occur on the site) and expected snow cover duration (based on yearly averages and prior experience). In order to cover all bases, many practitioners routinely apply a combination of 2-3 different fungicide active ingredients to control snow molds at an acceptable level. Due to the multitude of control combinations, one question that has arisen from practitioners is whether or not certain fungicide combinations affect spring recovery from snow mold damage. Last year the UMass turf pathology lab was able to take a preliminary look at the effect of different treatments on recovery at two of the four 2010-2011 snow mold trial sites: Berkshire Hills Country Club, Pittsfield MA and Glens Falls Country Club, Queensbury NY. Pictures were taken at two time points, directly after snow melt and approximately three weeks after snow melt. We have included pictures of select treatments from both locations to give practitioners an opportunity to review our observations. **We want to stress that this is preliminary data that needs to be thoroughly investigated before any definitive conclusions are made.** In fact, snow mold recovery can be a complex process influenced by the following interacting factors: snow mold species, turfgrass species, fungicide treatment, location, and cultural practices before and after winter.

Materials and Methods

This evaluation was conducted at two sites: Glens Falls Country Club in Queensbury, NY on a mostly creeping bentgrass (*Agrostis stolonifera*) fairway with some annual bluegrass (*Poa annua*) maintained at 0.5-inch mowing height and at Berkshire Hills Country Club in Pittsfield, MA on an annual bluegrass (*P. annua*), creeping bentgrass (*A. stolonifera*) and Kentucky bluegrass (*P. pratensis*) fairway maintained at 0.5-inch mowing height. Individual plots measured 3 ft x 6 ft (18 ft²), and were arranged in a randomized complete block design with three replications and a one-foot-wide buffer strip between plots. Snow mold fungicide trial plots were not inoculated.

The fungicide trade names listed above each picture were applied based on labeled or suggested rates. All rates listed with pictures reflect oz/1,000 ft² spray rates. Individual treatments were applied at a nozzle pressure of 40 psi using a CO₂ pressurized boom sprayer equipped with two XR Teejet 8004 VS nozzles. All fungicides were agitated by

hand and applied in the equivalent of 2 gallons of water per 1000 ft². All fungicide applications were made on November 18th, 2010 at Glens Falls Country Club and November 19th, 2010 for Berkshire Hills Country Club. Snow mold severity (caused by *Typhula incarnata*, *T. ishkariensis* and *Microdochium nivale*) was visually assessed as percent disease covering plots on April 5th and April 29th, 2011 at Glens Falls Country Club and March 28th and April 21st, 2011 at Berkshire Hills Country Club and can be found in our [2010-2011 UMass Snow Mold Golf Course Fungicide Trial Results](#).

Summary Points

Here are some observational findings.

- Recovery rate was different between two locations. However, this is most likely a function of Glen Falls Country Club (GFCC) having higher initial damage and Berkshire Hills Country Club (BHCC) being located further south.
- Recovery rate may have been affected by different fungicide treatments; however, the initial snow mold damage had the largest impact on the recovery rate.
- Pigmented treatments all appeared to show good recovery, however, data analysis did not reveal any significant differences in recovery rate.









