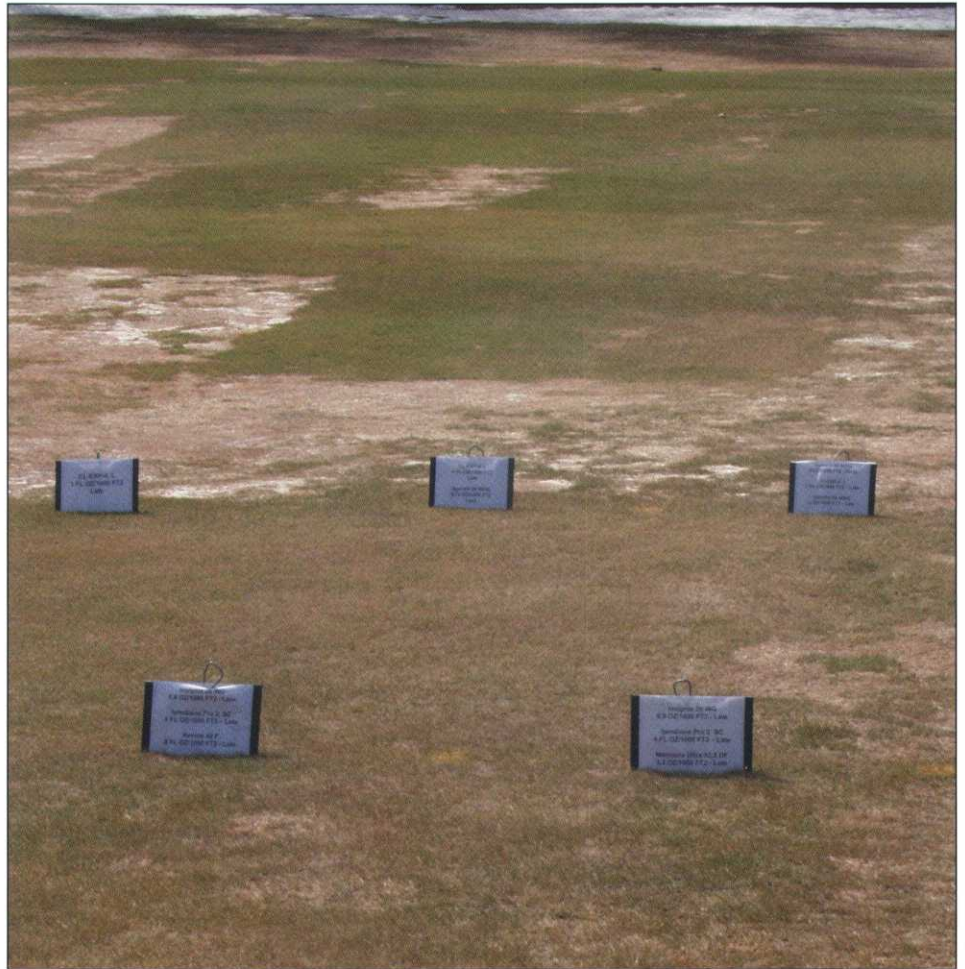


# Sick of Snow Mold?

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Finally, we've reached that point of the golfing season. The point where the days are still warm, the nights are a bit cooler, the sun sets at eight instead of nine, and adjustments are being made to maintain the golf course without the help of students. Believe it or not, it's also the point where our attention should begin to shift towards protecting our turfgrass this upcoming winter. Snow mold, be it from the pink or gray variety, can cause significant damage to golf courses in the northern tier of the country. Significant snow mold damage leads to poor course conditions in the spring, which will in turn lead to a drop in golfer revenue and possibly a hit on your maintenance budget. But with a little bit of planning and the use of research results obtained from our snow mold fungicide trials, excellent snow mold control can be obtained in any environment and with any budget.

Snow mold is not caused by a single fungus, but rather a compilation of different fungi that cause damage under a variety of environmental conditions (Smiley et al., 2003). Pink snow mold is caused by the fungus *Microdochium nivale* and can cause damage with or without the aid of snow cover. Symptoms of pink snow mold can vary, but as snow cover recedes pink snow mold can cause circular patches of tan or bleached turfgrass that may have a pink outer perimeter. Gray snow mold is caused primarily by the fungi *Typhula incarnata* and *T. ishikariensis* (also known as speckled snow mold). Symptoms don't differ dramatically between the two species, but the environmental conditions required for symptom development do. *Typhula incarnata* requires approximately sixty days of continuous snow cover to cause symptoms and primarily damages the leaf blades of the turfgrass plant, while *T. ishikariensis* requires approximately ninety days of continuous snow cover and can infect the crown region of the plant as well as the leaves. Because of the crown infection, recovery time is significantly slowed on those plants that have been damaged by *T. ishikariensis*. The main diagnostic tool in identifying which *Typhula* species is present on your turf is by sclerotial characteristics. Sclerotia are fungal structures developed as a way to survive through



the unfavorable conditions of summer until new infections can begin with the onset of cold weather again the following winter. Sclerotia produced by *T. incarnata* are approximately the size of fertilizer granules and red in color, while those produced by *T. ishikariensis* are smaller and black in color. The Turfgrass Diagnostic Lab, in cooperation with the University of Wisconsin-Madison and the University of Minnesota, has conducted snow mold fungicide research for over a decade. The past two years there have been five separate trials conducted in different parts of Wisconsin and Minnesota to give results under varying levels of snow mold disease pressure. The five locations were Lake Wisconsin CC in Prairie du Sac, Wis. just outside of Madison; Sentryworld GC in Stevens Point, WI; Gateway GC in Land O' Lakes, WI on the border with Michigan's Upper Peninsula; and two sites

at Giant's Ridge golf course in Biwabik, Minn.

With the probable elimination of PCNB from all turfgrass uses in the near future and new products for snow mold control introduced into the market in recent years, many superintendents may be in a state of transition concerning their snow mold control program. Damage from snow molds and winter injury can significantly affect the playability of the course well into springtime, which could reduce play and ultimately the revenue of the golf course. While options are limited in controlling other forms of winter injury such as ice damage, they abound in snow mold control. So take the time this fall to choose the products that will provide acceptable snow mold control at a price you can afford, and then sit back and worry about next summer's anthracnose.