Bent resistance to snow mold


This paper summarizes the relative susceptibility of 16 bentgrass varieties to *Typhula* blight, which was the predominate snow mold causing organism identified on the experimental area. The ratings were taken March 15th at the Ohio Agricultural Research and Development Center following a winter in which the temperature and precipitation were ideal for snow mold infection. The bentgrass plot area had a maintenance history involving two cutting heights of 0.25 and 0.5 inch. Each variety was replicated four times.

Bentgrass varieties exhibiting the least snow mold, ranked in order from least to greater infection, were Congressional, Pennpar, Astoria, Exeter and Nimisila. The varieties most severely infected with snow mold were Evansville, Springfield and Cohansey, ranked from most to less severely infected. Varieties ranked intermediate were Penncross, Seaside, Toronto and Highland.

An additional general observation from the experimental area was that the incidence of *Typhula* blight was greater on the bentgrass varieties when cut at 0.50 inch compared to the lower 0.25 inch cutting height.

Comments: *Typhula* blight (*Typhula itoann*) or gray snow mold results in grayish-white, circular patches of dead turf ranging in diameter up to 24 inches. When active, a light gray mycelium can be observed on the turfgrass leaves. It is most conspicuous immediately after the first spring thaws. The disease may cause turfgrass damage any time during the late fall, winter or early spring period when environmental conditions are favorable. Disease development usually occurs under conditions of high atmospheric humidity plus air temperatures in the range of 33° to 40°F. This is a condition that frequently occurs under a snow cover, particularly when the soil is not frozen.

It is quite evident from this research report and earlier observations that considerable variation in susceptibility to *Typhula* blight does occur among the bentgrasses.

Thus, relative *Typhula* blight susceptibility should be considered in selecting the particular variety to be used. This is more important on turfgrass areas where it is not economical or practical to apply a preventive fungicide.

The reduced incidence of disease at the 0.25 inch cutting height versus the 0.50 inch cutting height suggests that this cultural practice should also be considered in minimizing the incidence of *Typhula* blight on bentgrass turfs.

This discussion covered the *Typhula* blight winter disease only. There are several other organisms which can cause serious injury to turfs that are included in a general grouping of the snow mold diseases. The most common is *Fusarium* blight (Fusarium nivale) which produces similar circular patches of up to 24 inches in diameter but has a characteristic pink mycelium when the casual organism is actively growing. This latter disease is commonly known as pink snow mold. It may respond differently in terms of relative bentgrass varietal susceptibility, fungicide control and effects of cultural practices compared to the responses discussed in this article for the *Typhula* blight disease.