

## Best Management Practices: Snow Mold

### Description

Snow mold is a patch disease capable of infesting all major cool-season turfgrass types especially creeping bentgrass and *Poa annua*. There are major two types of snow mold: *Typhula snow molds* (Gray and Speckled) are primarily active under continuous snow cover and Pink snow mold (*Microdochium nivale*) can develop either in the presence or absence of snow.

Snow molds can become problems for all types of turfgrass managers from golf courses, sports fields, and home lawns.



### Environmental Condition

*Typhula* Snow Molds (Gray and Speckled): The two pathogens associated with these diseases are *Typhula incarnata* and *Typhula ishikariensis*. These snow molds occur under cold, wet conditions with prolonged periods of snow cover. The disease is most active at 32 - 36°F. Late fall fertilizer applications of soluble nitrogen can increase disease severity.

Pink Snow Mold/*Microdochium* Patch: This pathogen can develop either under snow cover and colder temperature or under cool, wet conditions but without snow. The pathogen is most active at 30-65°F. More severe disease development has been observed under alkaline soil pH. Like *Typhula* snow molds, late season soluble nitrogen applications may increase disease severity for Pink Snow Mold.

### Symptom and Identification

*Typhula* Snow Molds (Gray and Speckled): Initial symptoms begin as small as 1-2 inches diameter patches, pale green/yellow in color. Mycelial growth increases under snow cover creating larger patches (6-12 inches) gray to white in color.

During snow melt, white mycelium can be observed on the margins of the patches. Blighted leaf tissue eventually mat together and smaller patches can aggregate into much larger patches. Gray and Speckled snow mold produce distinct sclerotia. Gray snow mold sclerotia are described as reddish-brown in color while Speckled snow mold sclerotia are smaller and black found on dead leaf blades.

Pink Snow Mold/*Microdochium* Patch: Initial symptoms develop as small, circular patches 2-3 inches in diameter with a gray to white color. Under cool and moist conditions, pink mycelium can be observed around the border of individual patches. Disease activity under snow can result in larger patches, gray





to white in color due to blighted or matted down turf. Patches forming in an area with a high percentage of *Poa annua* may develop rust-colored borders.

### Management

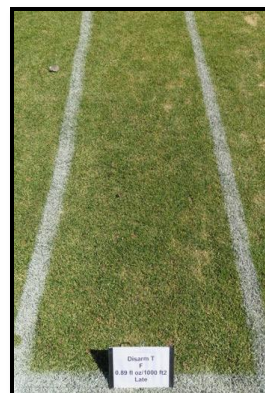
**Cultural:** Late season fertilization using soluble nitrogen should be avoided. This will reduce excess flush of growth around the time when environmental conditions favor disease development. Mowing turfgrass until dormancy will maintain consistent height of cut and reduce potential for matted down areas where disease can develop. In spring, raking away matted areas and normal fertilizer applications will aid in turfgrass recovery for those areas where severe damage did not occur. For Pink Snow Mold, maintaining a soil pH below 7.0 in the upper 1-2 inches will aid in reducing damage.

**Chemical:** Preventative control using fungicides is the most effective way to control snow mold. It is recommended that preventative applications be made prior to the first snowfall, typically between late October to early November depending upon geographical location. The most effective snow mold control programs incorporate both contact and systemic fungicides.

**Fame™ +T and Fame™ +C** fungicides are great examples of combining contact and systemic fungicides for snow mold control. Fame fungicides can effectively impact disease development both on the leaf surface as well as provide interior protection against fungal growth.



when applying systemic fungicides for snow mold control, It is important to remember to make applications when turfgrass is still able to absorb the fungicides. If applications are made after full dormancy, applicators run the risk of losing the activity of systemic fungicides due to reduced plant uptake. In certain geographies where cool, moist conditions persist late in the year a second fungicide application may be warranted.



### References

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