

### Plant Disease Diagnostic Clinic

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# Gray Snow Mold on Turfgrass: Typhula spp.

### Introduction

Winter diseases of turfgrasses are often associated with melting snow or cold, wet periods. Bluegrasses (*Poa* spp.), fescues (*Festuca* spp.), and ryegrasses (*Lolium* spp.) may be attacked, but bentgrasses (*Agrostis* spp.) are most susceptible. Two diseases, Gray Snow Mold (Typhula blight) and Pink Snow Mold, are common in New York, and may occur singly or side-by-side. Since different fungicides may be used to control each of these diseases, it is necessary to distinguish between them.



Figure 1: Infected spots on turf.

# Symptoms and Signs

Gray snow mold (Typhula blight) is caused by *Typhula incarnata* and related species. It is a true snow mold and appears as roughly circular bleached patches up to 60 cm in diameter (**Fig. 1**). Soon after the snow melts, the infected grass may be matted and surrounded by a white to gray halo of fluffy fungal growth. Examination of the diseased plants reveals tiny tan or brown pea-like structures (sclerotia) on, or imbedded in, infected leaves. The severity of the disease will vary. It may be particularly severe when turf has been subjected to a prolonged, deep, compacted snow cover. Although the disease is unsightly, it rarely kills the grass.



Figure 2: Clavula of sporocarps in close-up view of infected turf.

# **Disease Cycle**

The disease cycle for this fungus is nearly opposite that of most others. This fungus produces sclerotia

(resting structures) to help it survive the summer months. In late fall when conditions are favorable, these sclerotia may produce mycelium or basidiocarps (Fig. 2) that produce spores. Mycelium from the spores or sclerotia grows out and infects new plants under cover of deep snow during the winter. Where gray snow mold has occurred once, it is likely to recur if left unmanaged.

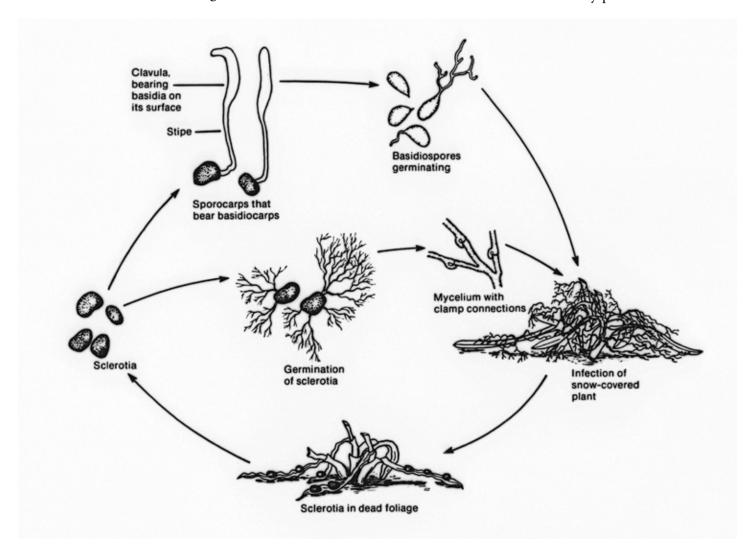
## **Management Strategies**

Development of gray snow molds can be reduced via cultural methods. Avoid late fall applications of fertilizer that would stimulate succulent growth. Such growth is very susceptible to infection. Also continue to mow turf as long as it continues to grow in the fall, and avoid compacting snow over the lawn. Where snow molds have caused damage, rake the matted

grass in order to encourage new spring growth. If reseeding areas where these diseases have been a problem, use disease resistant varieties.

If snow molds have been severe or wide-spread in past years, or if susceptible varieties or species are being grown, a preventative fungicide program may be used. Fungicide applications should be made in late autumn just before permanent snow cover is expected and, if possible, during a mid-winter thaw.

For a list of specific products that may be registered for homeowner use in NYS, please see our <u>turf fungicide table</u>. Be certain any formulation of pesticide you purchase is registered for the intended use, and follow the label instructions. The label may also provide information on frequency of applications to obtain better control and any precautions to take



Disease cycle of Gray Snow Mold.
(Provided by Compendium of Turfgrass Diseases, 2nd edition, APS Press)

to limit development of resistance of the pathogen to the fungicide.

Additional products may be available for use by commercial applicators. Commercial applicators should refer to the appropriate pest management guidelines for more information, or contact their local Cooperative Extension Office for more information on currently registered products.

#### Reference:

Compendium of Turfgrass Diseases, Third Edition, 2005. R.W. Smiley, P.H. Dernoeden and B.B. Clarke. APS Press.

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READ THE LABEL BEFORE APPLYING ANY PESTICIDE! Changes in pesticide regulations occur constantly. All pesticides distributed, sold, and/or applied in New York State must be registered with the New York State Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension Specialist or your regional DEC office.

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