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GRAY SNOW MOLD OF TURFGRASS IN HOME LAWNS

Gray snow mold, also called Typhula blight, is a common winter disease of turfgrass when lawn grasses are covered by snow for a long period of time. All cool season turfgrasses are susceptible to the disease. The damage is noticable as snow cover melts away in early spring. The disease may kill young seedlings that are seeded in the late fall, but most mature or newly sodded lawn grasses can regrow and revover from the damage in the spring. So, the damage of the disease to lawns is considered cosmetic.

SYMPTOMS AND DIAGNOSTICS

The initial symptom of gray snow mold appears circular spots, which then enlarge and coalesce to irregular patches as the expansion of the fungal mycelia under snow. After the snow melts in the spring, the damaged patches appear on the lawn (Figure 1). The size of spots and patches ranges from a few inches to several feets. When the

Figure 1. White or gray patches of infected grasses in a lawn.

ground is wet during or just after snow melt, white fungal mycelia are visible on the damaged grasses. The fungus only attacks above-ground parts of grasses, which results in bleeched or straw-colored blades (Figure 2). When closely examined, reddish-brown resting structures (sclerotia) of the fungus can be found on diseased grasses (Figure 3).

DISEASE DEVELOPMENT

Gray snow mold is caused by a fungal pathogen, *Typhula incarnata*. Sclerotia are formed in infected leaves in late winter and remain dormant in the leaves, thatch, and soil during the growing season. Sclerotia germinate and infect turfgrasses when the ground timberature is just above freezing and grasses are coverd with snow in the winter. The disease spreads between plants as radial growth of fungal mycelia under snow cover. Gray snow mold is more prevalent in the area



Figure 2. Diseased grasses with straw-colored or bleached blades.



Figure 3. Brown sclerotia (arrows) on infected leaves.

with prolonged snow coverage, such as thick snowbanks along driveways and sidewalks with heavy shade. The optimal temperature for disease development is between 32°F and 36°F. The condition of moist ground and wet leaves under snow cover favors fungal growth and infection. Once snow melts and lawn grasses are exposed to the air, the disease activity subsides. Over-fertilization with excess nitrogen in late fall can stimulate lush turfgrass that are prone to gray snow mold. Immature seedlings that are seeded late fall are more vulnerable to the disease. In most instances, the crowns and roots of infected turfgrasses are alive, they tend to recover quickly when leaf growth resumes in the spring.

MANAGEMENT

Cultural practices: In the fall, avoid applying excessive nitrogen fertilizers, appropriately mow grasses until they enter dormancy, and rake and remove fallen leaves from lawns. In the winter, avoid the accumulation of snow in piles along sidewalks and driveways. In the early spring, rake the damaged lawns and apply nitrogen fertilizers to encourage new growth and quick recovery from the damage.

Fungicides: Fungicide treatments for gray snow mold are not recommended in home lawns because fungicide treatments are

expensive, and the damage from the disease is usually cosmetic. If a high-value turf or a recently seeded lawn needs to be protected from gray snow mold, preventative fungicides should be applied prior to the first permanent snow cover in the winter. Registered fungicides for home lawn use include azoxystrobin and propiconazole. Applying fungicides in the spring is not effective. Read and follow the entire label of any product before treatment.

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