

Lawn Diseases

Spring and fall diseases: cool, wet weather

Powdery Mildew

Usually this disease occurs in the fall on your lawn, as well as on other plants such as lilacs. The fungus that causes the disease grows on the outside of the leaf blade. It is white and powdery and gives the appearance that the blades have been dusted with flour. It is most serious in shady locations or areas where there is less air movement. To prevent powdery mildew, increase sunlight and air circulation, or reseed with a resistant cultivar. Fescue are tolerant of this disease and the following cultivars of Kentucky bluegrass are fairly resistant: A-34, Baron, Nugget, Glade, Park, Touchdown, and Newport.

Red Thread

This disease often results in tan to reddish irregular dead patches. It first appears as water-soaked areas, but later as the disease progresses, one can see red threads protruding from the leaf tips and bridging from leaf to leaf. This is the mycelium (fungal threads) of the fungus <u>Corticum</u>. Insufficiently fertilized lawns are susceptible to this disease.

Melting Out or <u>Helminthosporium</u> Leafspot

You will usually see the symptoms in cool, moist weather, but they may develop in the summer also. This disease starts as reddish-brown or purplish-black spots on the leaves, and in cool, moist weather, can infect the crown and roots of the grass plants. The fungus *Helminthosporium* causes both types of symptoms. When the crowns and roots die, the disease is called "melting out," since large areas can be thinned out or killed. Often this disease is mistaken for drought injury. It is more common on closely clipped lawns, so be sure to avoid close mowing. Wait to fertilize after the early flush of growth because excessive nitrogen fertilizer, especially in early spring, can increase this disease. Remove clippings since the fungus can grow and spread in grass debris. If replanting, use a resistant variety, such as A-34, Touchdown, Cheri, Parade, Bonniblue, Flyking, Merion, Nugget, Vieta, Pennstar, Sydsport, or Adelphi.

Pink Snowmold and Gray Snowmold

These diseases are most active when snow falls on unfrozen ground. It is most serious where drainage is poor and grass remains under snow cover for long periods of time. The irregularly shaped patches are bleached tan to reddish-brown. The margins of the dead areas appear light pink when infected with pink snowmold, and gray when infected with gray snowmold. The result is dead patches on the lawn in the spring. Avoid late, heavy nitrogen fertilization. Keep the lawn cut in fall to prevent a mat of grass from developing.

Summer diseases: hot, humid weather

Brown Patch

This disease is caused by the fungus *Rhizoctonia*. Brown, water-soaked areas appear and under conditions of high humidity a smoke-colored ring develops on the outer edge of the dead spot. The dead grass will remain erect and does not lie flat. High nitrogen levels increase the severity of this disease, so avoid excessive nitrogen fertilization and also avoid over-watering. Remove clippings from infected areas.

Pythium Blight

The fungus *Pythium* causes this disease under high moisture conditions. The infected areas may feel greasy to the touch or have a fishy odor. The grass is matted and lies flat. When the disease is active and dew is present, you may see white, cottony growth of fungus near the edge of the dead area. To reduce the severity of this disease, avoid excess nitrogen, avoid over-watering and remove thatch.

Melting Out or <u>Helminthosporium</u> Leafspot

The leafspot phase of this disease can become a problem in the summer also. See description above.

Fusarium Blight

This disease is severe during the dry, hot periods after early wetness. There may be light brown dead spots on the grass blades, or if the crown of the plant has been infected, the wilting grass plants will usually turn straw-colored. Some dead areas may have been under stress before this disease appears. To reduce drought stress, adjust the mowing height upwards in mid-summer. Be sure to follow proper lawn maintenance practices. Don't let thatch accumulate because fungus can grow in the thatch and then infect the grass plants when they become stressed.

Dollar Spot

On individual grass blades, light tan dead spots usually span the width of the blade and have a reddish-brown border. These blades become bleached in color as the infected areas enlarge. The disease starts as a leafspot, but results in straw-colored patches of dead grass 1/2 inch to 2 inches in diameter, hence the name "dollar spot." The fungus that causes this disease, *Sclerotinia*, can survive for long periods of time on grass clippings and in thatch, so these should be removed from the diseased area. Be sure that the lawn is fertilized properly.

Using Pesticides

Pesticides are available for homeowners to control lawn diseases, but there are a few points to consider before using them. Many of the fungicides are preventive and must be applied before the disease appears, then several times throughout the season. If you don't apply them properly, you won't control the disease.

Spray equipment must be calibrated correctly and the fungicide spread uniformly. Unless the lawn has been dethatched recently, the material should be applied with enough pressure to reach the crowns of the plants. A hose proportioner, in addition to being difficult to calibrate, usually does not provide enough pressure for this. Agitate the material to ensure that it does not settle out. A spreader-sticker is often helpful for wettable-powder formulations. A fertilizer spreader that has been calibrated is good for granular materials. Be sure to read the label to see if you need to apply water after treatment.

When small infected areas are to be treated, use a convenient hand-held pressurized sprayer. Keep the walking speed constant and be sure that all affected areas are treated. If larger areas need to be treated and the use of a hand-held sprayer is not practical, homeowners should consider hiring a professional lawn maintenance company. **Stop!** Read the label on every pesticide container each time before using the material. Pesticides must be applied only as directed on the label to be in compliance with the law. All pesticides listed in this publication are contingent upon continued registration. Contact the Division of Pesticide Control at (603) 271-3550 to check registration status. Dispose of empty containers safely, according to NH regulations.

adapted 3/01 from an original fact sheet by Ann Hazelrigg, Plant Diagnostic Clinic Coordinator, University of Vermont Extension

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