# Lawn Fungus / Disease

This guide is a good place to see what affects lawns in our area so you can be a better informed customer. There are many different types of fungus which grow in every lawn and it's unlikely that you could eliminate all disease causing fungi, and you wouldn't want to if you could. Some of the fungi that cause turf grass diseases are also important in nutrient cycling, especially in breakdown of thatch.

A lawn disease caused by a fungus can create unsightly brown patches and can kill large patches of a lawn. Many lawn diseases are not easy to identify and to distinguish from other problems such as pests or poor maintenance. Much like human diseases, lawn diseases can be difficult to properly diagnose and even harder to treat correctly unless you have a professional with experience diagnosing and treating them.

Preventative maintenance and proper cultural practices are the best way to manage lawn diseases. There are several diseases which can infect home lawns in northern Illinois. The environmental conditions occurring on the lawn, how the lawn is managed, and weather conditions all impact lawn disease development. The best defense against home lawn disease is to maintain a healthy lawn through sound cultural practices (mainly mowing, watering, soil and thatch management), avoiding favorable conditions for disease. Once damage has occurred, these fungus problems are sometimes extremely difficult to control because disease outbreaks often occur when lawns are not managed properly or are under extreme stress, such as from poor soil and weather conditions. So mowing, watering, soil, type of grass and where the grass is planted play a large part in your success or failure when dealing with lawn disease. So control what you can because weather will contribute much more negatively to a lawn that is weak and not being properly cared for.

A good place to start is making sure you are following the directions we provide.

For Directions we provide click below:

http://www.aaronsgreenscape.com/page/guidemowing

http://www.aaronsgreenscape.com/page/guidewater

#### Organic / Non-chemical Options

We have over 20 years experience controlling these problems through the soil with amendments like organic fertilizers. http://www.aaronsgreenscape.com/page/organic

### **Chemical Options**

We also have a full line of contact and systemic fungicides to cover just about all of the diseases listed in our guide. http://www.aaronsgreenscape.com/page/lawncareful#insect



#### Snow Mold



Irregular Matted Areas "Moldy" Appearance in Spring

Snowmold is most common to Kentucky Bluegrass and Fescues in regions where snow falls and sits on the lawn for extended periods of time. Growth takes place at temperatures as low as freezing (to slightly below freezing) and continues after snow melt in the spring for as long as the grass remains wet and the temperatures cold. Grey snow mold activity stops when the temperature exceeds 45 F or the surface is dry. Pink snow mold develops under a snow cover on unfrozen ground and also can develop in cool wet weather in fall and spring as long as the temperature is between 32 and 60 F.

The best prevention for snow mold is to aerate often. Improving water drainage, raking leaves off lawn's surface, and follow a fertilization schedule to help prevent over-fertilization in the late-fall can also help. Fungicides are also available for sever cases.

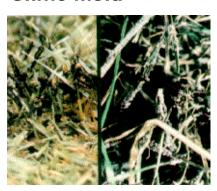
#### MORE DETAILED INFORMATION

http://www.aaronsgreenscape.com/2009snowmoldupdate.pdf

http://urbanext.illinois.edu/hortanswers/detailproblem.cfm?PathogenID=178

http://urbanext.illinois.edu/hortanswers/detailproblem.cfm?PathogenID=179

### Slime Mold



Like powdery mildew, slime molds covers grass with a powdery covering that looks almost like crystallized frost. Feeds on decaying organic matter found in the soil. As the powdery covering becomes thicker, it reduces the light reaching the plant cells, and they begin to turn yellow.

No prevention. Usually not harmful. In some cases, the grass blades an be hosed off with a forceful stream of water.

# Grease Spot

Grease Spot can effect all grasses in humid climates and can be recognized by the slimy-brown patches that often have a white, cotton-like fungus around it. Grease Spot gets its name for the "greasy" appearance it makes while matting together and can appear in streaks across the lawn.

The best prevention for Grease Spot is to aerate often, water in the morning hours only, remove excess thatch, reduce shade on lawn, and cutback on the nitrogen levels during fertilization.

### **Dollar Spot**



Dollar Spot Small Blighted Areas Hourglass Lesion Girdles Blade Colored Band on Lesion Edge

Dollar spots are most common to Kentucky Bluegrass, Bent Grass, and Bermuda in humid climates. They get their name from their small silver dollar-like shape, but can begin as the size of a small grapefruit. Usually looks brown or straw-colored in appearance. The spots may merge to form large patches several feet wide

Dollar spot is most common during warm, wet weather with heavy dews and in those lawns with low levels of nitrogen. Dollar Spot develops at temperatures of 60-85 degrees Fahrenheit with high humidity and low soil moisture.

The best prevention for brown patch is aerate often, water only in the morning hours if additional water is necessary, remove excess thatch, and follow a fertilization schedule to help increase the amount of nitrogen and organic content levels in your soil. Fungicides are also available.

### Red Thread



Red Thread Pink to Red Masses on Leaf Blades Threadlike Appendages from Leaf Tips

Red Thread (Laestisaria Fuciformis)

Red Thread is most common to Fescues, Ryegrasses, and Kentucky Bluegrasses during times of moist and cool weather. Red Thread gets its name from the pinkish-red threads that form around the leaf blades and bind them together. Eventually, the affected grass will turn brown.

It attacks only leaves and leaf sheaths and is seldom serious enough to kill a lawn. The red treads will be most visible when wet. The best temperatures for Red Thread development are 68-75 F.

The best prevention for Red Thread is aerate regularly and remove thatch. Mowing to proper levels, reduce shade on lawn, follow a regular fertilization schedule along with regular core aeration and add organic content to the soil. Make sure to include nitrogen and potassium. Fungicides are also available.

#### Rust





Rust Orange Pustules on Leaf Blades Orange Powder from Affected Grass Yellowish Lawn Decline

Rust gets its name from the orange, "rusty" appearance it gives leaf blades. Most common on sites with poor soil high amounts of clay/sand and low amounts of organic material. Common in new lawn installations because of several contributing factors. Most commonly effecting ryegrasses and Kentucky Bluegrass, rust tends to flourish in conditions of: morning dew, shade, high soil compaction, low-soil fertility. The best way to check for rust problems is by taking a white tissue or paper towel and rubbing a few grass blades through it. If an orange color remains, then it's usually rust.

Rust is favored by humid weather with night temperatures of 70-75 F, day temperatures of 85-95 F, wetness from dew lasting many hours after sunrise, and frequent light rain (or watering).

The best prevention for rust is to aerate your lawn, water well in the morning hours, reduce shade to grass, mow more frequently and bag grass clippings; follow a fertilization schedule to help increase the amount of nitrogen and organic content levels in your soil. Fungicides are available.

MORE INFORMATION http://urbanext.illinois.edu/lawntalk/rust diseases in home lawns.cfm

### Summer Patch, Necrotic Ring Spot, and Brown Patch

Summer Patch, Necrotic Ring Spot, and Brown Patch are root born diseases that make circles and frog eye shapes. Almost every lawn has had or does have these problems. These diseases are most evident in times of stress, like when it's dry and hot. Conditions such as excessive thatch, poor soil, sod installed over a poorly prepared site and poor cultural practices (mowing and watering) can give these fungus problems all they will need to do serious damage. In

### Summer Patch



most cases, light to moderately damaged areas will recover with minimum long term damage. In severe cases, Fungicide treatments may be needed to stop the damage from getting any worse and rescue the rest of the lawn from infection. Treating light to moderately damaged lawns with a special organic fertilizer and aeration suppresses disease by balancing out soil problems naturally, and

is a very cost effective and environmentally friendly long term option.

Summer Patch Circular/Crescent Shaped Patches Irregular Dead Areas

Light green patches that spread, turn reddish brown and then die. It is a warm weather root disease and grows best in temps between 80-85 degrees Fh and can occur in turf from mid-June through September and reappears during times of hot weather.

### Necrotic Ring Spot



Necrotic Ring Spot (Fusarium Blight) Circular/Crescent Shaped Patches Irregular Dead Areas

Thatch may decompose in the patch areas, giving them a sunken or depressed appearance. In warm weather, the red blades are seldom seen. Plants affected in the cooler weather of spring and fall are weakened and very susceptible to summer heat and drought stress. This stress may lead to the death of weakened plants and an apparent resurgence of symptoms, even though the fungus **may not be active** at that time.

Brown patch Circular/Crescent Shaped Patches Irregular Dead Areas

Brown patch may infect well-watered and fertilized lawns in hot, humid weather. Brown patch commonly starts as a small spot and can quickly spread outwards in a circular or horseshoe pattern up to a couple of feet wide. Often times, while expanding outwards, the inside of the circle will recover, leaving the brown areas resembling a smoke-ring.

The Rhizoctonia Blight fungus is most active at 80-90 F temperatures when grass leaves stay wet for a long time. It is most severe when excess nitrogen fertilizer has been used. A night temperature above 70 F and a long dew period favors rapid Rhizoctonia Blight development.

The best prevention for is to aerate often, and follow a fertilization schedule using organic base slow release fertilization.

#### **Brown Patch**



MORE DETAILED INFORMATION http://www.aaronsgreenscape.com/page/guidefungus http://urbanext.illinois.edu/lawntalk/managing\_patch\_disease\_in\_lawns.cfm



(815) <u>28-AARON</u> (815) 282-2766

(815) <u>33-LAWNS</u> (815) 335-2967

### **Powdery Mildew**



Grass looks as though it is sprinkled with flour. Kentucky bluegrass and shade areas are the most susceptible. Grass will wither and die. It is favored by temperatures of 60-72 F

Water only in the morning; reduce shade by pruning, aerate and check drainage in the area.

Fungicides are available.

### Fairy Rings



Fairy Rings can grow in most grasses, and are distinguishable by circular rings filled with fast-growing, dark-green grass. Around the perimeter of the ring, the grass will typically turn brown and often times grow mushrooms. Fairy rings typically grow in soils that contain wood debris and/or old decaying tree stumps.

The best prevention for fairy ring is to aerate the diseased area, water well in the morning hours, remove excess thatch, and follow a fertilization schedule to help increase the amount of nitrogen levels in your lawn. Organic fertilizer is a great choice because is also helps by feeding the microbes and good fungi that eat up thatch and it slowly release naturally through the soil.

Fairy ring can sometimes be controlled by using a tree root feeder and break up by flushing. Also is some cases regular heavy double pass aeration and broad spectrum fungicide kept it in check.

MORE INFORMATION

http://urbanext.illinois.edu/lawntalk/fairy ring and mushrooms in lawns.cfm



### Leaf Spot/Melting Out





Brown to Purple Lesions (spots) on Blades Irregular Dying Areas of Grass Lesions on Grass in Margins of Dead Areas

### Leaf spot-Melting Out

Brown to purple lesions (spots on blades. Irregular dying areas of grass lesions on grass in margins of dead area.

Caused by excess thatch build up and possibly excess fast release nitrogen fertilization. Use a slow release nitrogen when fertilizing, aerate and detach lawn. Organic fertilizer is a great choice because is also helps by feeding the microbes and good fungi that eat up thatch and it slowly release naturally through the soil. Fungicides are also available.

## Pythium Blight



Irregularly shaded spots of wilted brown grass. Cobweb-like mass of fungus on moist nights or mornings. Patches cluster to form streaks a foot or more wide Pythium Blight is most severe with day temperatures of 84-95 F and night temperatures above 68 F.

Do not over fertilize with quick release fertilizer or over water and don't mow when grass is wet. Organic fertilizer is a great choice because is also helps by feeding the microbes and good fungi that eat up thatch and it slowly release naturally through the soil. Fungicides are also available.