



Anderson's Seed and Garden, Inc.
www.andersonseedandgarden.com

"Our Seeds Succeed"

Lawn Diseases

Many of us have dead spots appear in our lawns occasionally. The first thing we assume is that it's caused by "some bug". Yes, in some instances this may be the case, but we often forget that there are many diseases that can plague our lawns that look similar, if not the same as insect damage. So how can you tell if what you have is a disease, and what can you do about it? First, let's take a look at what kinds of factors cause these diseases to appear in our lawns.

Both living and nonliving factors can cause diseases to attack our lawns. Some of the nonliving factors include things like nutritional imbalance, drought, over-watering, direct low-temperature damage, and phytotoxicity by pesticides and fertilizers. The living organisms that cause plant diseases include bacteria, fungi, viruses, phytoplasmas, parasitic plants, nematodes and other organisms capable of altering the physiology of the plant. However, most turf diseases are caused by fungi. Fungi are similar to plants, they differ from them because of a lack of roots, stems and leaves. They also cannot create their own chlorophyll – food – so they must obtain their food from other sources. Many fungi are beneficial because they use dead plant material as their food source. This constitutes much of the decomposition of organic debris that would otherwise buildup on the soil surface. However, the fungi that plague our lawns feed on live plant tissue, which leads to the brown spots in our lawns.

Diseases result from a complex of what is commonly known as the disease triangle: pathogen, host, environment. In order for a disease to take hold, all three of these items must be right for development. We can combat disease by altering one of these three aspects.

1) Alter the Host- The host is the grass species in your lawn. You can alter this by planting resistant varieties. Anderson's Select grass seed has a blend of 5 different hybrid bluegrasses which were selected for their disease resistance.

2) Alter the Environment- We can alter the environment around our lawns in many different ways.

One way is to increase air movement. If you have large trees that are blocking air movement, try to prune them back so as to let air flow more freely. Also grass growing in densely shaded areas are often more susceptible to disease. Pruning large trees or shrubs back can reduce this.

Watering at proper times (in the morning) will allow the canopy of your grass blades to dry out quickly and not sit all night.

Preventing lush growth from excessive nitrogen can also help to prevent diseases. Lush growth allows for easier colonization of pathogens. However, insufficient nitrogen can also lead to disease.

Having good drainage in your lawn is also good for disease prevention. You can do this through aerating, and adding organic materials into your soil like humate.

Having a thick thatch layer can harbor diseases and reduce drainage. If your thatch layer is thicker than ½ inch, consider applying humate to decompose it faster.

In general, try to reduce any unnecessary stresses to your lawn. This can be achieved by increasing your mowing height and keeping mower blades sharp and clean.

3) Alter the Pathogen – We may not be able to choose whether or not we have these pathogens in our soil, but we can help prevent and cure them with fungicides. We recommend Ferti-lome F-STOP. F-STOP is a broad spectrum granular fungicide containing Eagle®. It can be used as a preventative or a curative against many different types of diseases in established lawns.

So how can you tell if your brown spot is a disease and not an insect problem or other problem such as being dry, or a gasoline spill? First grab your grass in the center of the brown spot in both hands and give it a good tug.

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If the grass comes out VERY EASY, and has no root system left, most likely it is an insect problem. Further probing into the soil will confirm this suspicion, as the culprit often is lying just below the soil line. Check several spots as the insect (grub, billbug, webworm) may not be in that particular location. Make sure to check along the edge of the spots as where that is where they are currently feeding.

However if the grass is firmly rooted when you pull on it, it's possible it could be a disease. Here is a list of common diseases and some of the symptoms to look for:

DISEASE DETECTIVE

Diagnosing a particular disease is a difficult job because many diseases have similar symptoms. And as a disease develops over time, these symptoms may change. However, there are some general clues that can help you to make the call. For best results, you'll need to look closely at individual plants and at the lawn as a whole.

PLANT SYMPTOMS	CAUSE
FUNGAL GROWTH ON THE BLADE	
Long black streaks of powdery spores	Stripe smut
Powdery white dust	Powdery mildew
Red or orange powder	Rust
Gray fungus that is easily rubbed off	Slime mold
SPOTS ON LEAVES BUT NO FUNGUS VISIBLE	
Reddish brown to blue-black, circular or oval	Leaf spot
Straw-colored bands with a reddish brown border	Dollar spot
LAWN SYMPTOMS	
CIRCULAR DISEASED AREA	
Present in late winter or early spring	Snow mold
Present in summer, spring, or fall (1 inch to 4 feet or more in diameter)	
Mushrooms present	Fairy ring
No mushrooms	Brown patch
Present in summer, spring, or fall (1 to 8 inches in diameter)	
Throughout the lawn	Dollar spot
Only in full sun, showing green center	Fusarium blight
In low areas and often in streaks	Pythium blight
IRREGULARLY SHAPED DISEASED AREA	
New lawn seedlings wilt and die	Damping-off
Mature lawn affected, spots on leaves	Leaf spot

If you cannot spot any of these signs, you may want to check your sprinkler system to make sure it is watering these spots efficiently. This is often a common problem. Other possibilities include gasoline or fertilizer spills, dog damage, scalping from low mowing, or improper non-selective herbicide damage. If you have difficulty identifying what may be the cause of your dead or dying spots in your lawn, we would love to come help you. Please just call our lawn service at 227-0039 and set up an appointment for us to come diagnose your problem. Correct identification can be your best weapon against those ugly spots in your lawn!