

LAWN BLIGHT DISEASES



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Blight diseases usually occur on sodded lawns 3-4 years after they are established, although they may invade seeded lawns also. These diseases mostly strike bluegrass varieties. Fescue and perennial ryegrass are generally unaffected.

Symptoms include rings of dead grass with wilted grass that quickly turns light yellow or tan. The center of the ring stays green (sometimes only with weeds), producing a doughnut appearance. Sometimes spots run together, blurring the distinctive round shape. Grass roots turn a dark chocolate color and are rotted.

Blight diseases are caused by several different fungi commonly found in most soils. Stress from bad weather or poor cultural practices causes the turf to develop disease. The time of year and the weather present at time of symptom development will be the biggest clue as to what disease you are dealing with.

Yellow Patch is a cool season disease, usually developing in spring or fall with wet, cool (50-78 degree) weather. This disease develops on new sod with heavy soil underneath, on very compacted soil, or on lawns with a heavy thatch layer.

Necrotic Ring Spot also appears in spring or fall, but develops in 70-80 degree weather. The grass blade crowns will be blackish.

Fusarium Blight develops when night temperatures are above 70 degrees and day temperatures are very high (80-90+ degrees).

Blight diseases are difficult to control and may take up to three years to completely get rid of. The following recommendations are suggested:

1. Keep thatch to a minimum (under 1/2"). Thatch is the layer of partially decomposed grass just on top of the soil. Some thatch is necessary for a healthy lawn, but too much will prevent good rooting and will interfere with water and nutrient movement to the soil. A heavy layer of thatch is also an excellent location for disease fungi to overwinter and multiply. Thatch develops quickly when high nitrogen (30% or higher) fertilizer is used. Thatch is **NOT** caused by leaving grass clippings on the lawn. To dethatch, use a power rake (vertical mower) in the early fall. Core aeration is another procedure which will lessen thatch and reduce soil compaction. Aeration is best done in spring or early fall and is especially good for lawns growing on heavy soils. Core aeration and dethatching are stressful to a lawn in the short run and should not be attempted in hot, dry weather. Slow the development of new thatch by mowing 2 1/2" or higher and reducing the use of high nitrogen fertilizer, especially in the spring.
2. Moisture stress triggers symptom development. Under normal (non-disease) conditions, deeper watering is preferred. However, since diseases restrict root growth, it will be necessary to apply lighter, more frequent waterings, keeping the top 2" moist. As the lawn recovers, go back to the preferred practice of deeper, less frequent waterings. Never water so late in the day that the grass stays wet all night. Watering during the heat of the day may raise your water bills due to excessive evaporation, but it will keep the grass cooler and less stressed. Water in the morning if possible. If the disease appears to be Yellow Patch, water cautiously, as wet conditions will contribute to the disease.
3. Chemicals may be helpful but have not proven to be consistently effective. Fungicides may be tried in severe cases. In general, following the cultural practices outlined above will prove more effective.
4. If reseeding the lawn becomes necessary, use resistant grass varieties. Resodding is not a cure - diseases have been known to quickly reappear in new sod unless at least 8" of soil is removed and replaced.

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