

Key for Identification of Landscape Turfgrass Diseases¹

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Key for Identification of Landscape Turfgrass Diseases The following is a general key that may help in making a preliminary diagnosis. Symptoms are presented as a series of choices in pairs of statements (four choices in one case); each choice in the pair leads either to another choice or to an identification of the disease. Please see the section following the key for more specific diagnostic characteristics and information concerning the time of year the disease is most likely to occur.

A. Distinct patches of yellow to brown-colored turfgrass are present.

1. Patch areas are less than 3 inches in diameter. Leaf spot lesions present.

Dollar Spot

2. Patch areas are greater than 3 inches in diameter. Leaf spot lesions not present.

a. Ring or arc of lush growth or dead grass; mushrooms may be present.

Fairy Ring

b. No rings or arc of lush growth.
i. Affected areas are distinct circular patches. Leaf pulls out of leaf sheath very easily.

Brown Patch

ii. Affected areas are irregular patches of 8 to 24 inches diameter or larger with mixture of yellow and dead grass. Roots are short and black. Stolons may be rotted also.

Take-all Root Rot

B. No distinct patches are present.

1. Orange 'spots' present on leaves; 'spots' rub off easily.

Rust

2. Orange 'spots' not present on leaves.
a. Leaf spots present.

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- i. Primarily on bermudagrass and ryegrass. Leaf spots have wide range of sizes.

'Helminthosporium' Leaf Spot

- ii. Primarily on St. Augustinegrass in summer. Leaf spots oval to irregular with brown borders and tan to gray centers.

Gray Leaf Spot

- iii. Primarily on St. Augustinegrass in late spring and summer. Narrow, dark brown leaf spots initially, then become oblong, irregular spots with dark tan centers with brown borders.

Cercospora Leaf Spot

- iv. Primarily on centipedegrass. Reddish-brown to brown spots surrounded by yellow halo.

Anthracnose

- b. No leaf spots present.
 - i. Grass covered with an easily removed slimy or crusty growth.

Slime Mold

- ii. Grass is chlorotic (yellow) or has mottled leaves associated with general decline.

Pythium Root Rot **and/or** Nematodes

Diagnostic Features and Control of Turfgrass Diseases

The following section will describe the common diseases found on turfgrasses used in the landscape in Florida, primarily on St. Augustinegrass. It is set up in the following format:

Disease: This is the correct name for the problem.

Pathogen: This is the Latin name of the fungus that causes the disease. The first word is the genus name, and the second word is the species name.

Turfgrasses Affected: This is a list of the turfgrasses that are normally affected by this disease. If one or two turfgrass species are more likely to be affected than others, that is indicated.

Occurrence: The exact time when a disease will occur is dependent on the environment. The time of year when the disease is most likely to occur is indicated. Since there are distinct climatic variations in Florida (north vs. south; coastal vs. inland), these variations should be considered when diagnosing a disease problem. The situations (ex: rain or fog) or stresses (ex: nitrogen deficiency) that will cause the disease to occur or make it worse are stated.

Symptoms/Signs: This section describes the appearance of the turf when diseased.

Cultural Controls: This section describes the cultural controls you can employ to prevent the disease or to help the turfgrass recover from the disease. Cultural controls require that everyone involved with management of the turfgrass work together to solve or prevent the disease problem. Refer to the cultural control section of this chapter or other chapters in the *Florida Lawn Handbook* for more details on specific cultural practices such as nutrition or water management.

Chemical Controls: Chemical control treatments (fungicides) are listed by common name only. Since an active ingredient (common name) may have multiple trade names, only one example of a corresponding trade name is provided in table 5.4. Fungicide labels change frequently, so read the label to determine if the product is still legal to use on the turfgrass site. Many fungicides for lawns are available only through specialty outlet stores; for example, Lesco (look under Landscaping Equipment and Supplies in the yellow pages of your phone book). Alternatively, you can have them applied by a certified pesticide applicator. Note that mancozeb fungicides can be applied only by a certified pesticide applicator.

Fungicides suppress or inhibit fungal growth. They do not stimulate turf-grass growth. In many cases, diseases occur when the turf is not growing rapidly, usually because of suboptimal temperatures. Under these circumstances, recovery from a disease will be slow. After all, to replace diseased leaf tissue the grass plant must produce new leaves.