

TURFGRASS DISEASE IDENTIFICATION KEY

This key is intended to be a starting point for identifying landscape turfgrass diseases.
Contact your local county Extension office for further information, including disease management recommendations.

Disease	Turfgrass Affected	Occurrence	Symptoms/Signs	Other Notes	Photo
Brown Patch	All warm-season turf grasses, especially St. Augustine & Zoysia	Most likely to occur November to May when temperatures are below 80°F. Infection is triggered by rainfall, excessive irrigation, or extended periods of high humidity resulting in the leaves being continuously wet for 48 hours or more.	<p>The fungus infects the leaf area closest to the soil, eventually killing the leaf. A soft, dark rot occurs at the base of the leaf, and leaves can easily be pulled off the stem. The base of a pulled leaf has a rotted odor. Roots are not affected.</p> <p>Usually begins as small patches that turn yellow and then reddish brown/brown as leaves die. Patches can expand to several feet in diameter; not uncommon to see rings of yellow/brown turf with apparently healthy turf in the center.</p>	<p>This disease is often confused with herbicide damage on St. Augustine.</p> <p>Herbicide damage may cause the same overall symptoms of yellow or brown patches. The leaf may still pull out of the leaf sheath, but the base of the leaf is not dark and rotted. Instead, the leaf base is dry with a tan discoloration, and there is no distinct smell of rot.</p>	 
Dollar Spot	All warm-season turf grasses, especially Bahia & Bermuda	Occurs during mild to cool weather that is accompanied by frequent and prolonged moisture from dew or cloudy, rainy periods. Temperatures of 70° to 80°F are optimum for the disease.	<p>Small circular patches (2-3 inches in diameter) may coalesce into larger, irregular, dead areas.</p> <p>Individual leaves have lesions that usually begin at the leaf margin or folded edge of the leaf blade. The spot is tan in color, bordered by a narrow, dark brown to purple zone.</p> <p>During prolonged wet periods, especially in early morning, fluffy, gray to white masses of fungal threads can be seen in the patches.</p>	<p>Turfgrass that is drought-stressed, excessively irrigated, subjected to low mowing heights, and/or has excessive thatch buildup will be more prone to dollar spot.</p> <p>The white masses of fungal threads are sometimes confused with fine spider webs.</p>	 

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<p>Fairy Rings</p>	<p>All warm-season turf grasses</p>	<p>Fairy rings, especially the mushrooms, are commonly observed during the summer months. Occurs when large quantities of organic matter, such as lumber or tree stumps are naturally located or have been buried in a lawn. The fungi develop on this material.</p>	<p>There are three types of fairy rings:</p> <p>Type I rings have a zone of dead grass just inside a zone of dark green grass. Weeds often invade the dead zone.</p> <p>Type II rings only have a band of dark green turf, with or without mushrooms present in the band.</p> <p>Type III rings do not exhibit a dead zone or a dark green zone, but a ring of mushrooms is present.</p>	<p>Since some mushrooms are poisonous, they should be removed or destroyed.</p> <p>In some situations, the fungi make the soil hydrophobic (repels water) resulting in rings of dead grass. It is then necessary to aerate or break up the soil under the dead grass (using a pitchfork) and water only the ring daily to rewet the soil.</p>	 
<p>Gray Leaf Spot</p>	<p>St. Augustine (primary host) & Centipede</p>	<p>Often observed late spring to early fall, especially during prolonged periods of rainfall.</p>	<p>Initial symptoms include small pinhead-sized spots that are olive green to brown in color. These enlarge and form circular to oblong spots that are tan to brown in color with distinctive dark brown margins. During periods of high humidity, the fungus produces abundant spores in the center of these spots, giving them a velvety-gray appearance.</p> <p>No distinct patches are observed, but areas may appear thin. Severe infestations look similar to drought stress.</p>	<p>Excessive applications of quick-release nitrogen sources enhance disease severity, as does compacted soil. Application of the herbicide atrazine increases the susceptibility of St. Augustine grass to this disease.</p> <p>During the summer, St. Augustine grass always has a few spots, but the overall health of the turfgrass is not affected unless the grass is placed under severe stress.</p>	 

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Pythium Blight	Cool-season turfgrasses overseeded as winter cover of warm-season species & Bermuda	Occurs during wet periods and high temperatures. The pathogen can kill seedlings as well as an established turfgrass. Temperatures around 90°F are ideal for disease development.	The first symptoms often include turfgrass with a wilted, greasy, water-soaked, or gray appearance. As disease progresses, the turf will collapse and appear brown and matted, sometimes with a bronze or red tinge to the border of the affected area. Extended periods of high humidity or leaf wetness may result in a white cottony growth of mycelium on symptomatic turf.	Severe disease outbreaks commonly occur on turfgrass sites that are over-irrigated or poorly drained.	
Pythium Root Rot	All warm-season turf grasses	Symptoms may appear at any time of the year, but they are always associated with wet soil conditions, either from excessive rainfall or from irrigation.	The aboveground symptom is typically a nonspecific decline in turf quality. Small or large turf areas become a general yellow, light green or brown color and display thinning. Roots appear thin with few root hairs and have a general discoloration, but are not black and rotted.	This is a root rot disease. The symptoms observed are the result of fungal activity on the root system. Poor drainage conditions compound this problem. Turf seldom dies from the disease and no distinct patches are observed.	
Take-All Root Rot	All warm-season turf grasses	Naturally present on turfgrass roots. High rainfall and stressed turfgrass trigger the disease. Usually observed during the summer and early fall (rainy season).	Initial symptoms aboveground are irregular, yellow or light green patches (from a few inches to a few feet). Roots are initially thin and off-white in color with isolated black lesions. Eventually, roots become very short, black, and rotted. Stolons and rhizomes may also have black lesions and begin to rot creating bare patches.	Any stress placed on the turfgrass can encourage or worsen the disease.	