



Extension

UNIVERSITY OF WISCONSIN-MADISON

Provided to you by:

Lawn Disease Quick Reference

P.J. Liesch, UW-Madison Plant Pathology; Vijai Pandian, UW-Extension Brown County; and Jim Kerns, formerly of UW-Madison Plant Pathology

UW Plant Disease Facts



Snow Molds

(*Microdochium nivale* and *Typhula* spp.)

Occurrence: Early to late spring

Favorable Conditions: Cold wet weather with periods of prolonged snow cover over unfrozen ground often leading to the most severe damage

Hosts: Kentucky bluegrass, tall fescue, perennial ryegrass

Symptoms: Circular, matted, gray to straw-colored patches ranging from a few inches to a foot or more in diameter

Management: Remove leaf litter from lawns. Mow lawns until dormant in the fall. Avoid heavy fertilizer applications (greater than 0.5 lb. N/1,000 sq. ft.) late in the year. Rake and lightly fertilize damaged areas in the spring to encourage recovery. Reseed lawns as needed.



Necrotic Ring Spot

(*Ophiosphaerella korrae*)

Occurrence: Spring, summer and fall

Favorable Conditions: Cool (soil temperatures of 55 to 65°F) and wet conditions for infection, followed by heat and drought stress for symptom development; most severe when soil compaction limits rooting

Host: Kentucky bluegrass

Symptoms: Circular, straw-colored patches usually less than 12 inches in diameter; regrowth often occurring in the center of patches, creating a "frog-eye" appearance; most common in newly sodded lawns, but also occurring in seeded lawns

Management: Reduce soil compaction and improve lawn drainage. Maintain proper fertility.



Fairy Rings

(many mushroom-forming fungi)

Occurrence: Anytime

Favorable conditions: Warm, wet weather; significant thatch accumulation

Hosts: All cool-season lawn grasses

Symptoms: **Type I:** a ring or arc (up to several feet in diameter) of lush, dark green grass bordered by a band of dead turf, with or without mushrooms; **Type II:** a ring or arc of lush dark green grass with no band of dead turf, with or without mushrooms; **Type III:** a ring or arc of mushrooms with no band of lush green turf or dead turf

Management: Lightly fertilize and routinely core aerate lawns.



Extension
UNIVERSITY OF WISCONSIN-MADISON



Summer Patch
(*Magnaporthiopsis poae*)

Occurrence: Summer
Favorable conditions: Hot, moist conditions; alkaline (i.e., high) soil and thatch pH
Hosts: Kentucky bluegrass, fine fescues
Symptoms: Ring-like patches of wilted turf up to 3 inches in diameter, similar to those of necrotic ring spot (see above), and with rings often merging into larger irregular patches
Management: Avoid excessive watering during hot periods. Core aerate to promote root growth and reduce compaction. Use acidifying fertilizers to lower thatch pH to below 6.5.

Dollar Spot
(*Clarireedia jacksonii*)

Occurrence: Summer
Favorable conditions: High humidity; low nitrogen fertility
Hosts: Kentucky bluegrass, perennial ryegrass, fine fescues
Symptoms: Bleached patches ranging from a few inches to a foot in diameter, with leaf blades (inset) having bleached, hourglass-shaped areas
Management: Water deeply and infrequently early in the morning to minimize prolonged periods of leaf wetness. Apply nitrogen to alleviate symptoms.



Red Thread
(*Laetisaria fuciformis*)

Occurrence: Spring through fall
Favorable conditions: Wet, cool conditions
Hosts: Kentucky bluegrass, perennial ryegrass, fine fescues
Symptoms: Irregular beige patches ranging from a few inches to a few feet in diameter (oftentimes merging into irregular patterns) with red, thread-like filaments among the grass blades
Management: Collect clippings when disease is active. Maintain adequate nitrogen fertility.



Rust
(*Puccinia* spp., *Uromyces* spp.)

Occurrence: Summer and fall
Favorable conditions: High humidity, low soil moisture, low nitrogen fertility, shade
Hosts: Kentucky bluegrass, perennial ryegrass
Stand Symptoms: Reddish-brown, powdery areas (masses of fungal spores) that can discolor clothing and equipment
Management: Maximize light and airflow in lawns by pruning and thinning surrounding landscape plants. Water and lightly fertilize.

For more information on lawn diseases: Contact the University of Wisconsin Turf Diagnostic Lab (TDL) at (608) 845-2535 or hockemeyer@wisc.edu.