



Extension

UNIVERSITY OF WISCONSIN-MADISON

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# University of Wisconsin Garden Facts

## Lawn Disease Quick Reference

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### 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.



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### Summer Patch (*Magnaporthe 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 (*Sclerotinia homoeocarpa*)

**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:** See University of Wisconsin Garden Facts XHT1145, and XHT1150 (available at <https://pddc.wisc.edu>), UW-Extension Bulletin A3187 (available at <http://learningstore.uwex.edu>), contact the UW-Madison Turfgrass Diagnostic Lab (see <http://tdl.wisc.edu>) or contact your county Extension agent.