

COOL-SEASON TURFGRASS DISEASES

DISEASE	SUSCEPTIBLE GRASS	FAVORABLE CONDITIONS	MANAGEMENT STRATEGIES
Brown patch/ rhizoctonia blight	TALL FESCUE, ryegrass, Kentucky bluegrass, fine fescue	hot/wet	<ol style="list-style-type: none"> 1. avoid excessive nitrogen; 2. avoid excessive watering and poor drainage; 3. increase air circulation and sunlight
Dollar spot	BLUEGRASS, fine fescue, ryegrass	moderate/wet leaves and dry soil	<ol style="list-style-type: none"> 1. avoid nitrogen deficiency; 2. choose resistant grass varieties; 3. water to increase growth
Gray leaf spot	PERENNIAL RYEGRASS, tall fescue	warm/humid; wet foliage (often late summer and fall)	<ol style="list-style-type: none"> 1. avoid stress on turf; 2. water adequately but with extending time foliage is wet; 3. avoid high fertilizer in summer; 4. reduce soil compaction; 5. young ryegrass plantings are more sensitive than mature
Leaf spot/melting out	KENTUCKY BLUEGRASS, fine fescue, ryegrass, tall fescue	leaf spot — cool/wet (spring/fall); melting out — hot/dry (summer)	<ol style="list-style-type: none"> 1. raise cutting height; 2. mow frequently to avoid stress; 3. avoid excessive nitrogen; 4. avoid light frequent watering and prolonged wet grass
Necrotic ring spot	KENTUCKY BLUEGRASS, fine fescue	warm/extremes in soil moisture	<ol style="list-style-type: none"> 1. avoid low mowing heights; 2. reduce excessive thatch; 3. use Kentucky bluegrass and perennial mixtures; 4. avoid excessive watering or drought stress; 5. use slow-release fertilizer
Powdery mildew	KENTUCKY BLUEGRASS, fine fescue	moderate/high humidity; shade	<ol style="list-style-type: none"> 1. reduce shade; 2. increase air circulation by removing surrounding vegetation; 3. use resistant Kentucky bluegrass varieties
Pythium blight	PERENNIAL RYEGRASS and new seedlings of all types	very hot/wet	<ol style="list-style-type: none"> 1. improve soil drainage; 2. increase air circulation by removing surrounding vegetation 3. avoid excess watering; 4. avoid high rates of nitrogen
Red thread	PERENNIAL RYEGRASS, FINE FESCUE	moderate/wet foliage	<ol style="list-style-type: none"> 1. balanced fertilization program; 2. promote growth by aeration and watering; 3. use resistant varieties
Rust	PERENNIAL RYEGRASS, Kentucky bluegrass	moderate/wet foliage, dry soil	<ol style="list-style-type: none"> 1. avoid nitrogen deficiency; 2. use resistant varieties; 3. water if dry and promote growth
Summer patch	KENTUCKY BLUEGRASS, fine fescue	warm/extremes in soil moisture (fluctuating from wet to dry)	<ol style="list-style-type: none"> 1. avoid low mowing thatch buildup; 2. maintain soil pH between 6 and 7; 3. frequent watering in dry periods to avoid heat stress; 4. use slow-release nitrogen; 5. use Kentucky bluegrass and perennial ryegrass mix

* Turfgrass in all capital letters have highest potential for severe problems

* Check your county cooperative extension agent for fungicide recommendations

TURFGRASS DISEASES BY SEASON

TURF TYPE	SPRING	SUMMER	FALL
Kentucky bluegrass	snow mold; leaf spot; yellow patch; red thread; fairy ring	melting out; necrotic ring spot/summer patch; dollar spot; brown patch; powdery mildew; rust	leaf spot; red thread; rust; powdery mildew
Perennial ryegrass	snow mold; red thread; leaf spot/blight; fairy ring	brown patch; dollar spot; pythium; rust; red thread; leaf spot/blight; gray leaf spot	rust; red thread; leaf spot/blight; gray leaf spot
Tall fescue	snow mold; leaf spot; fairy ring	brown patch	leaf spot
Fine fescue	red thread; leaf spots; fairy ring	red thread; dollar spot	red thread; leaf spots

* These are general time frames for disease occurrence. Depending on local weather and site conditions, disease outbreaks and the duration of activity may vary. Remember the genetic susceptibility of the grass and the environment are the predominant factors driving the occurrence of disease development.

** All the above turfgrasses are prone to fairy ring when there are favorable weather conditions.

Source: Joseph Rimelspach & Michael Boehm, *Landscape Management*, May 1999, page 48.

WARM-SEASON TURFGRASS DISEASES

Disease	Susceptible grass	Favorable conditions	Management strategies
Brown patch	ST. AUGUSTINEGRASS, ZOYSIAGRASS, all major warm-season grasses	moisture/warm temperatures, heavy nitrogen applications	1. moderate nitrogen applications; 2. water when soil is dry and let it soak in; 3. apply fungicide when disease is diagnosed
Dollar spot	BERMUDAGRASS, ZOYSIAGRASS	dry soil/surface moisture, mild weather, low nitrogen	1. moderate nitrogen applications; 2. adequate morning irrigation to soil; 3. moderate fungicide applications to control
Pythium blight	OVERSEEDED COOL-SEASON GRASSES, bermudagrass, zoysiagrass	moist/warm (cool days for cool-season grasses)	1. use treated seed; 2. delay overseeding until cool weather or as late as possible; 3. water sparingly during disease activity times
Gray leaf spot	ST. AUGUSTINEGRASS	humid/warm, high nitrogen, semishade	1. use nitrogen sparingly; 2. water in the morning; 3. water infrequently but thoroughly; 4. treat with appropriate fungicides
Spring dead spot	BERMUDAGRASS	high nitrogen/low potassium, heavy thatch	1. remove thatch; 2. avoid excessive nitrogen; 3. promote slow, even growth for winter hardiness; 4. use appropriate fungicides

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**Check your county cooperative extension agent for fungicide recommendations.

SOURCE: ED A. BROWN, LANDSCAPE MANAGEMENT, MAY 1999, PAGES 42-46