

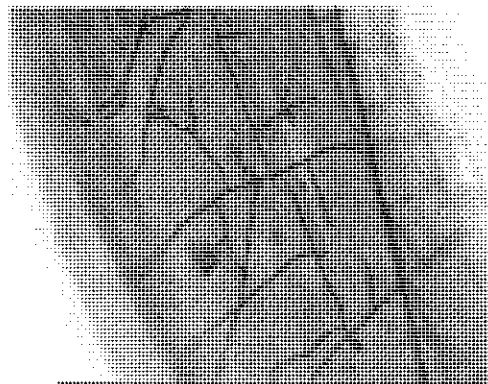
Control of *Rhizoctonia* Diseases on Turfgrass

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Rhizoctonia diseases are collectively the largest group affecting sports and landscape turf worldwide.

Rhizoctonia fungi have mycelia with 90° branching angles without spores but can be divided up into different species based on their rarely found sexual, sporulating state. Different species of *Rhizoctonia* cause different diseases depending on host and environmental conditions.

Disease	Teleomorph Name (Sexual State)	Anamorph name (Asexual State)	Optimal Temp. Range*	Typical hosts
Yellow Patch	<i>Ceratobasidium cereale</i>	<i>Rhizoctonia cerealis</i>	50-65°F	Annual Bluegrass, Creeping Bentgrass, Bermudagrass, Kentucky Bluegrass, Tall Fescue, Perennial Ryegrass, Zoysiagrass
Brown Patch of Cool Season Turf	<i>Thanatephorus cucumeris</i>	<i>Rhizoctonia solani</i>	77-90°F	All cool season species
Brown Patch of Warm Season Turf (Large Patch)	<i>Thanatephorus cucumeris</i>	<i>Rhizoctonia solani</i>	60-77°F	All warm season species
Sheath and Leaf Spot	<i>Waitea circinata</i> var <i>oryzae</i>	<i>Rhizoctonia oryzae</i>	83-97°F	Annual Bluegrass, Creeping Bentgrass, Bermudagrass, Centipedegrass, Kentucky Bluegrass, Tall Fescue, Perennial Ryegrass, St. Augustine, Zoysiagrass
	<i>Waitea circinata</i> var <i>zeae</i>	<i>Rhizoctonia zeae</i>	83-97°F	
Brown Ring Patch, Waitea Patch	<i>Waitea circinata</i> var <i>circinata</i>	none	77-86°F	Annual Bluegrass, Creeping Bentgrass, Rough Bluegrass

* typical max. daytime temp. disease is most active at

Fungicides Under Evaluation on 2008 Trials

Fungicide	Class	Ingredient(s)
Clearys 3336 4F	benzimidazole	thiophanate-methyl
Humabalance	biological	Bacillus spp.
Rhapsody 0.1AS	biological	Bacillus spp.
Prostar 70WG	carboximide	flutolanil
Daconil Ultrex 82.5WG	multi-site	chlorothalonil
Chipco 26 GT 2SC	dicarboximide	iprodione
Banner MAXX 1.3ME	DMI	propiconazole
Tourney 50WG	DMI	metconazole
Trinity 1.69SC	DMI	triticonazole
Triton Flo 3.1SC	DMI	triticonazole
26/36 3.8SC	mixture	iprodione + thiophanate-methyl
Concert 4.3SE	mixture	propiconazole + chlorothalonil
Headway 1.39EC	mixture	azoxystrobin + propiconazole
Instrata 3.61SE	mixture	fludioxonil+propiconazole + chlorothalonil
Renown 5.16SC	mixture	azoxystrobin + chlorothalonil
Tartan 2.4SC	mixture	trifloxystrobin + triadimefon
Medallion 50WP	phenylpyrrole	fludioxonil
Endorse 2.5WP	polyoxin	polyoxin-D
Disarm 480SC	Qoi	fluoxastrobin
Heritage 50WG	Qoi	azoxystrobin
Heritage TL 0.8ME	Qoi	azoxystrobin