

CREEPING BENTGRASS (*Agrostis stolonifera*)
ANNUAL BLUEGRASS (*Poa annua*)
Gray snow mold; *Typhula incarnata*

J.E. Kaminski, T.T. Lulis, and T.R. Russell
Department of Plant Science
The Pennsylvania State University
University Park, PA 16802

Preventative fungicide applications for the control of gray snow mold on a mixed stand of creeping bentgrass and annual bluegrass, 2018-2019.

Fungicides were evaluated for gray snow mold control at Pine Acres Country Club in Warren, PA on a 60/40 mixed stand of creeping bentgrass and annual bluegrass, respectively. The fairway turf was maintained at a mowing height of 0.5 in and received its final mowing in advance of trial initiation. Soil rootzone was a loamy clay with a pH of 6.8 and 3.2% organic matter. Individual plots measured 3 ft x 6 ft, and were arranged as a randomized complete block design with four replications. Fungicide treatments were applied with a CO²-pressurized backpack sprayer at 40 PSI with a single TeeJet AI9508 EVS nozzle calibrated to deliver 2.0 gallons of water per 1000 ft². All treatments were applied on 5 Dec 18. Disease severity was assessed on 28 Mar 19. Disease severity was visually assessed as percent area affected by *Typhula incarnata* on a 0 to 100% scale where 0 = entire plot area green and healthy, and 100 = entire plot area blighted. All data were subjected to analysis of variance and means separation by Fisher's Protected Least Significant Difference test ($P \leq 0.05$).

Disease severity was considered moderate, with non-treated control plots averaging 54% gray snow mold. Treatments of Cleary's 3336, Compass, Civitas Pre-Mixed, Prostar, or Iprodione + Trifloxystrobin + Propiconazole + Foursome had lower disease severity when compared to the non-treated but did not provide commercially acceptable control (>15% gray snow mold). All other treatments resulted in statistically similar disease severity that was considered acceptable (6 to 11%) to excellent (1 to 5%) control of gray snow mold for a golf course fairway.

Table 1. Percent gray snow mold on a mixed creeping bentgrass/annual bluegrass fairway treated with various fungicides.

Treatment and rate per 1000 sq ft ^z	Disease severity ^y
Iprodione 2.0SE 4.0 fl oz + Trifloxystrobin 50WG 0.25 oz + Propiconazole 1.3EC 2.0 fl oz + Civitas Pre-Mixed 22.0 fl oz	3.5 fg ^x
Iprodione 2.0SE 4.0 fl oz + Trifloxystrobin 50WG 0.25 oz + Propiconazole 1.3EC 2.0 fl oz	4.8 fg
Iprodione 2.0SE 4.0 fl oz + Trifloxystrobin 50WG 0.25 oz + Propiconazole 1.3EC 2.0 fl oz + Foursome 0.45 fl oz	15.3 def
Iprodione 2.0SE 4.0 fl oz + Propiconazole 1.3EC 2.0 fl oz + Civitas Pre-Mixed 22.0 fl oz	3.8 fg
Iprodione 2.0SE 4.0 fl oz + Propiconazole 1.3EC 2.0 fl oz	10.5 efg
Traction 3.2F 1.3 fl oz + 26/36 3.8F 4.0 fl oz	1.0 g
Traction 3.2F 1.3 fl oz + 26/36 3.8F 8.0 fl oz	2.5 g
Chlorothalonil 83WDG 5.03 oz	6.8 fg
PCNB 4.0SE 12 fl oz	7.5 fg
PCNB 4.0SE 16 fl oz	1.3 g
Iprodione 2.0SE 4.0 fl oz	3.5 fg
Banner Maxx II 1.3ME 2.0 fl oz	4.5 fg
Cleary's 3336 4.0F 2.0 fl oz	28.3 bc
Insignia 20WDG 0.9 oz	7.0 fg
Compass 50WDG 0.25 oz	38.8 b
Civitas Pre-Mixed 22.0 fl oz	21.8 cde
Prostar 50WDG 4.5 oz	23.8 cd
Heritage 50WDG 0.4 oz	7.0 fg
Medallion 1.0SC 2.0 fl oz	3.5 fg
Insignia 2.1SC 0.7 fl oz	1.5 fg
Concert II 4.3SE 8.3 fl oz	5.5 fg
Contend A 0.9SL 1.0 fl oz	1.5 fg
Contend B 1.7SE 4.5 fl oz	1.0 g
Non-treated	53.8 a

^z Treatments were applied on 5 Dec 2018.

^y Disease severity was visually assessed as percent area affected by *Typhula incarnata* on a 0 to 100% scale where 0 = entire plot area green and healthy, and 100 = entire plot area blighted.

^x Means within columns followed by the same letter are not significantly different at $P \leq 0.05$ according to Fisher's Protected Least Significant Difference test.