



2023-2024 Snow Mold Control Evaluation: Northland Country Club – Duluth, MN



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OBJECTIVE

To evaluate fungicides for the control of gray snow mold (caused by *Typhula incarnata*), speckled snow mold (*T. ishikariensis*), and Microdochium patch (*Microdochium nivale*) on golf course turfgrass.

MATERIALS AND METHODS

This evaluation was conducted at the Northland Country Club in Duluth, MN on a creeping bentgrass (*Agrostis stolonifera*) and annual bluegrass (*Poa annua*) golf course fairway maintained at a height of 0.5 inches. Individual plots measured 3 ft x 10 ft and were arranged in a randomized complete block design with four replications. Individual treatments were applied at a nozzle pressure of 40 psi using a CO₂-pressurized boom sprayer equipped with two XR Teejet AI8008 VS nozzles. All fungicides were agitated by hand and applied in the equivalent of 1.5 gallons of water per 1000 ft². All treatments were applied on 24 Oct 2023. The experimental plot area was not inoculated. Snow cover was present for approximately 35 days from early January to early February. Disease severity, turf quality, and turf color were measured on 20 Mar 2024. Disease severity was visually rated as percent area affected, turfgrass quality was visually rated on a 1-9 scale with 6 being acceptable, and chlorophyll content (turfgrass color) was rated using a FieldScout CM 1000 Chlorophyll Meter from Spectrum Technologies, Inc. (Aurora, IL). Treatment means were analyzed using Fisher's LSD method and are presented in Table 1.

RESULTS AND DISCUSSION

Disease pressure was moderate in Duluth with non-treated controls averaging 16.3% disease. The predominant snow mold disease present was pink snow mold. Most treatments were effective at suppressing the moderate disease pressure, with 11 of the 16 public treatments suppressing snow mold relative to the non-treated control and nearly all of the remaining treatments in the most effective statistical category of disease control (typically less than 5% disease). Turf quality largely mirrored disease severity. Phytotoxicity was not observed with any treatment.

Table 1: Mean snow mold severity, turf quality, and turf color were assessed on 20 Mar 2024 at Northland Country Club in Duluth, MN.

Treatment	Rate	Application Timing ^a	Disease Severity ^b	Turf Quality ^c	Turf Color ^d
1 Non-treated control			16.3a	5.3f	128.0f-i
2 Aramax	1.0 fl oz/1000 ft2	Late	15.0a	5.3f	121.3i
3 26GT	4.0 fl oz/1000 ft2	Late	1.8de	6.8bcd	131.8d-i
Turficide	8.0 fl oz/1000 ft2				
4 Aramax	1.0 fl oz/1000 ft2	Late	1.8de	6.8bcd	131.8d-i
Medallion	1.0 fl oz/1000 ft2				
5 Insignia Pro	0.8 fl oz/1000 ft2	Late	12.5ab	5.5f	126.3ghi
6 Insignia Pro	0.8 fl oz/1000 ft2	Late	2.5de	6.8bcd	128.0f-i
Medallion	1.0 fl oz/1000 ft2				
7 EXP 20	0.942 fl oz/1000 ft2	Late	12.5ab	5.3f	124.3hi
CA6242A	0.371 fl oz/1000 ft2				
8 A22011B	0.175 fl oz/1000 ft2	Late	7.5bcd	6.0def	130.3e-i
CA6242A	0.371 fl oz/1000 ft2				
9 A23543A	2.25 fl oz/1000 ft2	Late	1.3e	7.3abc	147.3a-f
CA6242A	0.371 fl oz/1000 ft2				
A23543A	2.25 fl oz/1000 ft2				
10 A6780L	2.0 fl oz/1000 ft2	Late	2.5de	7.3abc	139.8b-i
CA6242A	0.371 fl oz/1000 ft2				
A23543A	2.25 fl oz/1000 ft2				
11 A9898D	1.3 fl oz/1000 ft2	Late	0.0e	7.8a	150.5a-d
CA6242A	0.371 fl oz/1000 ft2				
A23543A	2.25 fl oz/1000 ft2				
12 A19858D	1.1 fl oz/1000 ft2	Late	0.0e	7.8a	145.8a-g
CA6242A	0.371 fl oz/1000 ft2				
A23543A	2.25 fl oz/1000 ft2				
13 A14212C	3.0 fl oz/1000 ft2	Late	1.3e	7.0abc	144.3a-g
CA6242A	0.371 fl oz/1000 ft2				
14 A23419A	4.0 lb/1000 ft2	Late	8.8bc	5.8ef	134.3c-i
15 A12704A	0.385 oz/1000 ft2	Late	15.0a	5.5f	143.5a-h
A15457R	0.233 fl oz/1000 ft2				
A21790A	6.0 fl oz/1000 ft2				
16 A21791A	2.0 fl oz/1000 ft2	Late	2.5de	7.0abc	149.0a-e
A12531B	5.5 fl oz/1000 ft2				
LSD P=.05			6.03	0.95	19.99

^aAll treatments applied on 24 Oct 2023.

^bMean percent diseased area assessed on 20 Mar 2024.

^cQuality was visually assessed where 1 = dead, 6 = acceptable, 9 = dark green.

^dColor was assessed using a FieldScout CM1000 Chlorophyll Meter from Spectrum Technologies, Inc.