



2014-2015 Snow Mold Control Evaluation Silver Bay CC – Silver Bay, MN



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OBJECTIVES

To evaluate fungicides for the control of Typhula blight (*Typhula ishikariensis* and *T. incarnata*), Microdochium patch (*Microdochium nivale*), and snow scald (*Myriosclerotinia borealis*).

MATERIALS AND METHODS

This evaluation was conducted at Silver Bay CC in Silver Bay, MN on a creeping bentgrass (*Agrostis stolonifera*) and annual bluegrass (*Poa annua*) golf course fairway maintained at a height of 0.5 inch. Individual plots measured 3 ft x 10 ft (30 ft²), and were arranged in a randomized complete block design with four replications. Individual treatments were applied at a nozzle pressure of 40 p.s.i using a CO₂ pressurized boom sprayer equipped with two XR Teejet AI8004 VS nozzles. All fungicides were agitated by hand and applied in the equivalent of 1.5 gallons of water per 1000 ft². All applications were made on November 4th, 2014. The experimental plot area was not inoculated. There was consistent snow cover on the experimental area from mid-November until mid-March, a total of about 120 days. Disease severity, turf quality, and color were recorded on March 30th, 2015. Disease severity was visually rated as percent area affected, turfgrass quality was visually rated on a 1-9 scale with 6 being acceptable, Normalized Difference Vegetative Index (turfgrass color) was rated using a GreenSeeker NDVI Turf Color Meter® from NTech Industries (Ukiah, CA). Treatment means were analyzed using the Waller Duncan method and are presented in Table 1.

RESULTS AND DISCUSSION

Shallow snow depth and cold temperatures prevented any snow mold from developing at Silver Bay CC in 2014-2015. Treatments that contained pigment were visibly greener in color and were rated slightly higher in turf quality, though no differences in color were detected using the NDVI meter.

Table 1: Mean snow mold severity, turf quality, and turf color assessed on March 30th, 2015 at Silver Bay CC in Silver Bay, MN.

Treatment	Rate	Application Timing ^a	Disease Severity ^b	Turf Quality ^c	Turf Color ^d	
1	Non-treated control		0.0a	7.0 c	0.350ab	
2	QP Strobe 50 WG	0.4 oz/1000 ft2	Late	0.0a	8.0a	0.375ab
	QP Enclave	4.0 fl oz/1000 ft2	Late			
	Foursome	0.5 fl oz/1000 ft2	Late			
3	QP Enclave	6.0 fl oz/1000 ft2	Late	0.0a	8.0a	0.373ab
	Foursome	0.5 fl oz/1000 ft2	Late			
4	QP Enclave	8.0 fl oz/1000 ft2	Late	0.0a	8.0a	0.368ab
	Foursome	0.5 fl oz/1000 ft2	Late			
5	QP Strobe 50 WG	0.4 oz/1000 ft2	Late	0.0a	8.0a	0.360ab
	QP Tebuconazole	0.6 fl oz/1000 ft2	Late			
	Foursome	0.5 fl oz/1000 ft2	Late			
6	Disarm C	5.9 fl oz/1000 ft2	Late	0.0a	7.0c	0.345ab
	Chipco 26GT	4.0 fl oz/1000 ft2	Late			
7	Disarm T	0.89 fl oz/1000 ft2	Late	0.0a	7.0c	0.358ab
8	Disarm 480 SC	0.36 fl oz/1000 ft2	Late	0.0a	7.0c	0.340b
	Daconil Weatherstik	5.5 fl oz/1000 ft2	Late			
	Chipco 26GT	4.0 fl oz/1000 ft2	Late			
9	Instrata	11.0 fl oz/1000 ft2	Late	0.0a	7.0c	0.338b
10	Interface	6.0 fl oz/1000 ft2	Late	0.0a	8.0a	0.358ab
	Mirage	1.5 fl oz/1000 ft2	Late			
11	Interface	6.0 fl oz/1000 ft2	Late	0.0a	8.0a	0.355ab
	Mirage	2.0 fl oz/1000 ft2	Late			
12	SP102000030109	5.0 fl oz/1000 ft2	Late	0.0a	8.0a	0.350ab
	Mirage	2.0 fl oz/1000 ft2	Late			
13	SP102000030109	6.0 fl oz/1000 ft2	Late	0.0a	8.0a	0.380a
	Mirage	2.0 fl oz/1000 ft2	Late			
14	SP102000030109	8.0 fl oz/1000 ft2	Late	0.0a	8.0a	0.358ab
	Mirage	2.0 fl oz/1000 ft2	Late			
15	SP102000028297	4.0 fl oz/1000 ft2	Late	0.0a	8.0a	0.358ab
	Mirage	2.0 fl oz/1000 ft2	Late			
16	SP102000028297	5.0 fl oz/1000 ft2	Late	0.0a	8.0a	0.365ab
	Mirage	2.0 fl oz/1000 ft2	Late			
17	SP102000028297	6.0 fl oz/1000 ft2	Late	0.0a	8.0a	0.358ab
	Mirage	2.0 fl oz/1000 ft2	Late			
18	Tartan	2.0 fl oz/1000 ft2	Late	0.0a	7.3b	0.383a

^aFungicide treatments were applied on Nov. 4th, 2014.

^bMean percent diseased area assessed on Mar. 30th, 2015.

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

^dColor was assessed using a Greenseeker NDVI Turf Color Meter from NTech Industries®.