



2014-2015 Snow Scald Control Evaluation Spring Hill Golf Club – Wayzata, MN



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OBJECTIVES

To evaluate fungicides for the control of Snow Scald caused by the fungus *Myriosclerotinia borealis*.

MATERIALS AND METHODS

This evaluation was conducted at the Spring Hill Golf Club in Wayzata, MN on a creeping bentgrass (*Agrostis stolonifera*) fairway. 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 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. Applications were made on November 25th, 2014. Snow cover was consistent from mid-December until late March, a period of approximately 100 days. Disease severity, turf quality, and turf color were recorded on March 18th, 2015. Disease severity was visually rated as percent area affected, turfgrass quality was visually rated on a 1-9 scale with 6 being acceptable, and Normalized Difference Vegetative Index (turfgrass color) was rated using a HCS 100 GreenSeeker® from Trimble Navigation Ltd (Sunnyvale, 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 scald from developing at Spring Hill GC 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 scald severity, turf quality, and turf color assessed on March 18th, 2015 at Spring Hill Golf Club in Wayzata, MN.

Treatment	Rate	Application Timing ^a	Disease Severity ^b	Turf Quality ^c	Turf Color ^d
1	Non-treated control		0.0a	7.0b	0.498a
2	Velista	0.5 oz/1000 ft ²	Late	7.0b	0.525a
	Banner MAXX II	4.0 fl oz/1000 ft ²	Late		
3	Medallion	2.0 fl oz/1000 ft ²	Late	7.0b	0.488a
	Velista	0.5 oz/1000 ft ²	Late		
4	Secure	0.5 fl oz/1000 ft ²	Late	7.0b	0.470a
	Medallion	2.0 fl oz/1000 ft ²	Late		
5	Banner MAXX II	4.0 fl oz/1000 ft ²	Late	7.0b	0.513a
	Secure	0.5 fl oz/1000 ft ²	Late		
6	Instrata	11.0 fl oz/1000 ft ²	Late	7.0b	0.480a
7	Instrata	11.0 fl oz/1000 ft ²	Late	7.0b	0.440a
	Revolution	6.0 fl oz/1000 ft ²	Late		
8	Interface	4.0 fl oz/1000 ft ²	Late	8.0a	0.525a
	Mirage	1.0 fl oz/1000 ft ²	Late		
9	Daconil Weatherstik	5.5 fl oz/1000 ft ²	Late	8.0a	0.523a
	Interface	4.0 fl oz/1000 ft ²	Late		
10	Mirage	1.0 fl oz/1000 ft ²	Late	8.0a	0.470a
	Revolution	6.0 fl oz/1000 ft ²	Late		
11	Lexicon	0.46 fl oz/1000 ft ²	Late	7.0b	0.490a
	Trinity	1.0 fl oz/1000 ft ²	Late		
12	Torque	0.75 fl oz/1000 ft ²	Late	7.0b	0.493a
	26/36	4.0 fl oz/1000 ft ²	Late		
13	Concert II	8.5 fl oz/1000 ft ²	Late	7.0b	0.465a
	Turfcide	8.0 fl oz/1000 ft ²	Late		
14	Revolution	6.0 fl oz/1000 ft ²	Late	7.0b	0.458a

^aTreatments were applied on Nov. 25th, 2014

^bMean percent diseased area assessed on March 18th, 2015.

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

^dColor was assessed using an HCS 100 NDVI GreenSeeker from Trimble Navigation Ltd®.