

# 1999-2000 Snow Mold Control Evaluation Sentryworld (Penneagle Nursery)

J. S. Gregos and G. Jung  
Department of Plant Pathology

## INTRODUCTION

To evaluate chemicals for the control of *Typhula* blight and pink snow mold.

## EXPERIMENTAL METHODS

This evaluation was conducted at Sentryworld, Stevens Point, WI on creeping bentgrass maintained under golf course tee management conditions, at 0.375-inch cutting height. Individual plots, 3 ft x 10 ft, were arranged in a randomized complete block design with three replications. The experimental area was not inoculated; all disease development was of natural occurrence. Treatments were applied with a CO<sub>2</sub>-powered boom sprayer, using XR Teejet 8005 VS nozzles, at 30 psi, in water equivalent to 2 gal per 1000 sq ft. Granular applications were applied using a shaker jar. Early applications were made on October 11, 1999 and late applications on November 3, 1999. Percent snow mold damage was evaluated on February 29, and March 24, 2000. Quality ratings were also made on March 24, 2000. Data obtained was subjected to analysis of variance and LSD was used to determine significant differences between treatment means.

## DISCUSSION

Ratings were very similar at both rating dates. Several treatments showed excellent control with either 100% or near 100%. One notable results was that the DMI chemistries such as Bayleton, Chipco Triton, and Banner Maxx performed very well with either little or no damage. Some of this treatment were only applied once at the early timing and could be a safe alternative for fairway applications. As in years in the past, PCNB alone performed less than desirable and should be tank mixed to improve its efficacy in this region of Wisconsin. The Standard three way mix of PCN, Chipco 26 GT, and Daconil WeatherStik had less control than some other treatments, but did not statistically differ.

Based on the results of this trial and several laboratory experiments, the DMI chemistry has proven to be an excellent candidate for snow mold control. Several future studies will explore more closely how they can be used throughout Wisconsin.

Table 1. Snow Mold Damage Ratings (Sentryworld)

Trt #	Treatment	Form.	Rate	Rate Unit	Apply Timing	% Infection 2-29-00		% Damage 3-24-00		Quality* 3-24-00	
1	Compass	50WG	0.25	Oz/1000ft <sup>2</sup>	Late	11.7	E-H	11.7	F-K	4.33	G-L
	Banner Maxx	1.24MC	2.0	FI Oz/1000ft <sup>2</sup>							
	PCNB	75WP	4.0	Oz/1000ft <sup>2</sup>							
2	Medallion	50WG	0.30	Oz/1000ft <sup>2</sup>	Late	3.3	GH	5.0	H-K	5.67	B-G
	Banner Maxx	1.24MC	2.0	FI Oz/1000ft <sup>2</sup>							
	PCNB	75WP	4.0	Oz/1000ft <sup>2</sup>							
3	Compass	50WG	0.25	Oz/1000ft <sup>2</sup>	Late	33.3	BC	45.0	AB	2.67	NO
4	Banner Maxx	1.24MC	2.0	FI Oz/1000ft <sup>2</sup>	Late	11.7	E-H	26.7	CDE	3.83	I-N
5	Medallion	50WG	0.30	Oz/1000ft <sup>2</sup>	Late	13.3	D-H	18.3	EFG	3.83	I-N
6	Chipco 26GT	2SC	4.0	FI Oz/1000ft <sup>2</sup>	Both	0.0	H	0.0	K	6.0	A-E
	Chipco Triton	1.67SC	1.0	FI Oz/1000ft <sup>2</sup>							
	Chipco 26GT	2SC	4.0	FI Oz/1000ft <sup>2</sup>	Both	3.3	GH	5.0	H-K	6.67	ABC
7	Chipco Signature	80WG	4.0	Oz/1000ft <sup>2</sup>							
	Turficide 400	4SC	8.0	FI Oz/1000ft <sup>2</sup>							
8	Chipco 26GT	2SC	4.0	FI Oz/1000ft <sup>2</sup>	Both	10.0	E-H	10.0	G-K	5.0	D-I
	Chipco Signature	80WG	4.0	Oz/1000ft <sup>2</sup>							
	Daconil Ultrex	82.5WG	5.0	Oz/1000ft <sup>2</sup>							
9	Chipco Triton	1.67SC	1.0	FI Oz/1000ft <sup>2</sup>	Both	0.0	H	0.0	K	5.33	C-H
	Chipco Signature	80WG	4.0	Oz/1000ft <sup>2</sup>							
	Daconil Ultrex	82.5WG	5.0	Oz/1000ft <sup>2</sup>							
10	Chipco 26GT	2SC	4.0	FI Oz/1000ft <sup>2</sup>	Both	8.3	FGH	15.0	E-I	4.17	H-M
11	Chipco Triton	1.67SC	1.0	FI Oz/1000ft <sup>2</sup>	Both	0.0	H	0.0	K	4.83	D-J
12	Chipco Signature	80WG	4.0	Oz/1000ft <sup>2</sup>	Both	33.3	BC	31.7	C-D	3.00	L-O
13	Chipco 26GT	2SC	4.0	FI Oz/1000ft <sup>2</sup>	Late	13.3	D-H	1.7	JK	5.00	D-I
	Chipco Triton	1.67SC	1.0	FI Oz/1000ft <sup>2</sup>							
14	Chipco 26GT	2SC	4.0	FI Oz/1000ft <sup>2</sup>	Late	13.3	D-H	13.3	F-J	4.33	G-L
	Chipco Signature	80WG	4.0	Oz/1000ft <sup>2</sup>							
	Turficide400	4SC	8.0	FI Oz/1000ft <sup>2</sup>							
15	Experimental	250SC	0.77	FI Oz/1000ft <sup>2</sup>	Late	11.7	E-H	16.7	E-H	4.17	H-M
16	Experimental	250SC	0.77	FI Oz/1000ft <sup>2</sup>	Both	35.0	B	36.7	ABC	2.83	MNO
17	Experimental	250SC	0.77	FI Oz/1000ft <sup>2</sup>	Late	5.0	GH	8.3	G-K	4.83	D-J
	Turficide 400	4SC	12.0	FI Oz/1000ft <sup>2</sup>							
18	Experimental	250SC	0.77	FI Oz/1000ft <sup>2</sup>	Both	0.0	H	3.3	IJK	5.67	B-G
	Turficide 400	4SC	12.0	FI Oz/1000ft <sup>2</sup>							
19	Heritage	50WG	0.4	Oz/1000ft <sup>2</sup>	Both	26.7	BCD	33.3	BCD	3.17	K-O
20	Heritage	50WG	0.4	Oz/1000ft <sup>2</sup>	Both	3.3	GH	6.7	G-K	5.17	D-I
	Turficide 400	4SC	12.0	FI Oz/1000ft <sup>2</sup>							
21	PCNB	75WP	4.0	Oz/1000ft <sup>2</sup>	Late	8.3	FGH	13.3	F-J	4.5	F-K
22	Turficide 400	4SC	8.0	FI Oz/1000ft <sup>2</sup>	Both	5.0	GH	11.7	F-K	5.33	C-H
23	Turficide 400	4SC	12.0	FI Oz/1000ft <sup>2</sup>	Both	5.0	GH	8.3	G-K	5.67	B-G
24	Heritage	50WG	0.4	Oz/1000ft <sup>2</sup>	Late	23.3	B-E	23.3	DEF	3.5	J-O
25	Daconil WeatherStik	6F	5.5	FI Oz/1000ft <sup>2</sup>	Late	4.0	GH	1.7	JK	4.67	E-J
26	Heritage	50WG	0.4	Oz/1000ft <sup>2</sup>	Late	11.7	E-H	11.7	F-K	4.5	F-K
	Daconil WeatherStik	6F	5.5	FI Oz/1000ft <sup>2</sup>							
27	Heritage	50WG	0.4	Oz/1000ft <sup>2</sup>	Late	1.7	H	0.0	K	6.00	A-E
	Daconil WeatherStik	6F	5.5	FI Oz/1000ft <sup>2</sup>							
	PCNB	4SC	8.0	FI Oz/1000ft <sup>2</sup>							
28	Heritage	50WG	0.4	Oz/1000ft <sup>2</sup>	Late	0.0	H	0.0	K	6.00	A-E
	Prostar	70WP	4.5	Oz/1000ft <sup>2</sup>							
29	Prostar	70WP	4.5	Oz/1000ft <sup>2</sup>	Late	0.0	H	0.0	K	6.17	A-D
30	Chipco 26GT	2SC	4.0	FI Oz/1000ft <sup>2</sup>	Late	0.0	H	3.3	IJK	5.33	C-H
	Daconil WeatherStik	6F	5.5	FI Oz/1000ft <sup>2</sup>							
	PCNB	4SC	8.0	FI Oz/1000ft <sup>2</sup>							
31	Chipco 26GT	2SC	2.0	FI Oz/1000ft <sup>2</sup>	Both	3.3	GH	5.0	H-K	6.0	A-E
	Daconil WeatherStik	6F	2.75	FI Oz/1000ft <sup>2</sup>							
	PCNB	4SC	4.0	FI Oz/1000ft <sup>2</sup>							
32	Chipco 26GT	2SC	4.0	FI Oz/1000ft <sup>2</sup>	Late	16.7	D-G	15.0	E-I	4.00	H-N
33	Daconil WeatherStik	6F	5.5	FI Oz/1000ft <sup>2</sup>	Late	20.0	C-F	13.3	F-J	4.67	E-J
34	Turficide 400	4SC	8.0	FI Oz/1000ft <sup>2</sup>	Late	11.7	E-H	13.3	F-J	4.33	G-L
35	Daconil Ultrex	82.5WG	5.0	Oz/1000ft <sup>2</sup>	Both	10.0	E-H	16.7	E-H	4.33	G-L
36	Bayleton	50WG	2.0	Oz/1000ft <sup>2</sup>	Early	3.3	GH	0.0	K	6.17	A-D
37	Prostar	70WP	4.5	Oz/1000ft <sup>2</sup>	Early	0.0	H	0.0	K	6.83	AB
38	Banner Maxx	1.24MC	4.0	FI Oz/1000ft <sup>2</sup>	Late	0.0	H	0.0	K	6.0	A-E
39	Caloclor	90WP	3.0	Oz/1000ft <sup>2</sup>	Late	0.0	H	1.7	JK	5.83	B-F
40	FF II 14-3-3	15.4G	104	Oz/1000ft <sup>2</sup>	Late	5.0	GH	8.3	G-K	7.33	A
41	Engage	4SC	12.0	FI Oz/1000ft <sup>2</sup>	Late	8.3	FGH	11.7	F-K	4.67	E-J
42	Turficide 400	4SC	12.0	FI Oz/1000ft <sup>2</sup>	Late	10.0	E-H	15.0	E-I	4.67	E-J
43	Teraclor	75WP	8.0	Oz/1000ft <sup>2</sup>	Late	3.3	GH	6.7	G-K	4.67	E-J
44	3336 F	4.5F	2.0	FI Oz/1000ft <sup>2</sup>	Late	20.0	C-F	15.0	E-I	4.67	E-J
	Daconil WeatherStik	6F	5.5	FI Oz/1000ft <sup>2</sup>							
45	Untreated Control					56.7	A	48.3	A	2.33	0
	LSD					14.9		13.31		1.43	
	CV					88.5		68.99		17.99	

Means followed by the same letter do not significantly differ (P=0.05, LSD)

\* Quality rating scale: 0-9, 0 = dead, 9 = no damage and dark green, 4-5 acceptable.