



FUNGICIDE EVALUATIONS FOR SNOW MOLD DISEASE CONTROL, 1991-1992

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Three locations were utilized for the trials this year. A primary reason for the trials was to assess possible replacement of mercury-containing fungicides. Two of the sites were located in northern Wisconsin where snow mold incidence is especially severe in most years. These were at Bass Lake (Bass Lake C.C., Perry Michael, Superintendent), Langlade County, where plot sizes were 5 x 6 feet, and at Eagle River (Eagle River C.C., Ken Smith, Superintendent), Vilas County, where plot sizes were 5 x 6 feet. Each treatment was replicated twice at these sites. The Daconil applications were made on October 17, 1991, and the other chemicals were applied on October 30, 1991. The third location was at Madison (Maple Bluff C.C., Tom Harrison, Superintendent), Dane County, where plot sizes were 5 x 6 feet, with four replications. This trial was established on November 4, 1991.

All treatments were applied to turf that was primarily bentgrass, maintained at 0.5 inch height or less. Liquid chemicals were applied with a CO₂ powered sprayer, 50 psi, equipped with two 8006 nozzles. Granular products were applied by hand using a pint plastic container.

Disease incidence in the north was quite severe this year, resulting in an excellent opportunity to evaluate efficacy against *Typhula canadensis*. Sporadic pink snow mold *Microdochium nivale* was observed at Bass Lake. Although we have identified the entries where it was found—and these are likely to be ineffective when used at the rates and/or combinations used—the absence of pink snow mold in other treatments may have been due to chance rather than control.

Note that we used Calo-clor (3 oz) + PCNB 75W (4 oz) + Daconil 2787 (4 fl oz) as our standard. This treatment has given us consistently good control in northern Wisconsin even during the most severe years. However, it contains mercury. While no other treatment measured up to this standard it was encouraging to note that several others significantly reduced the disease. Once again PCNB was useful in combinations, and Daconil appeared to help as well. S-2408 + CGA-173506 are new chemicals to us that appear quite interesting for future testing at higher rates or in combinations.

No disease occurred in the Maple Bluff plots again this year. However, southern test plots should be continued for several reasons, including different *Typhula* species when gray snow mold occurs, and the greater possibility of pink snow mold.

Assistance and cooperation by golf courses, superintendents, and chemical companies is acknowledged and appreciated.

Table 1. Response to fungicide treatments for the control of gray snow mold (*Typhula canadensis*) at Eagle River and Bass Lake golf courses 1991-92.

Treatment	Rate/1000 ft ²	Disease severity ¹ April 23	T Grouping ²
Calo-clor	3 oz+		
PCNB 75W	4 oz+		
Daconil 2787F	4 fl oz	0	H
S-2408 (Scotts)	46.7 g	5.75	HG
CGA-173506 75WG	4.7 g+		
Banner 1.1E	2 fl oz	7.5	HG
GS/SM-07	8 fl oz + 4 oz	8.25	HG
S-3122 (Scotts) ³	1022 g		
GS/SM-13 ³	4 fl oz + 3 oz + 2 oz	13.00	HGF
CGA-173506 75WG	13.3g	13.00	HGF
Flutolanil 50W*	2 oz+		
PCNB 75W	4 oz		
Flutolanil 50W **	4 oz+		
Daconil 2787F	8 fl oz	22.50	GF
GS/SM-06	8 fl oz + 2 oz	23.00	GF
GS/SM-04	6 oz + 2 oz	23.25	GFE
ASC66825 50W	1.2 oz	28.75	FED
Chipco 27019F	2 oz+		
Daconil 2787F	8 fl oz	29.25	FED
Flutolanil 50W **	2 oz +		
Banner 1.1E	4 fl oz	29.50	FED
Flutolanil 50W *	2 oz +		
Tersan 1991	2 oz	36.25	EDC
ASC66791 75WDG	8 oz	40.50	EDC
ASC66825 50W	0.6 oz	46.25	DC
Flutolanil 50W **	4 oz	53.75	CB
S-2621 (Scotts)	2610 g	68.75	B
SN84364 70WDG **	1.8 oz	71.25	B
No treatment		90.00	A
lsd (P=0.05)		18.34	

Dates of application:
October 17, 1991 applied Daconil to all designated areas. First application of S-2408 at this time. October 30 applied remaining chemical treatments. Temperatures 60-65F at treatment. Data recorded on April 23. Plot sizes: 5' x 6'; two replications/site, total of four.
*X-77 added to spray tank mixture.
1 Disease severity ratings were based on a percentage of the total plot area infected with snow mold.
2 Means with the same letter are not significantly different.
3 Pink snow mold detected in one replication.

Table 2. Color response to fungicide treatments for the control of gray snow mold (*Typhula canadensis*) on April 7, 1992 at Maple Bluff Country Club.

Treatment	Rate/1000 ft ²	Color Response ¹
1. Chipco 50WP	2 oz+	
Daconil 2787F	8 fl oz	2.0
2. Calo-clor	3 oz +	
PCNB 75W	4 oz +	
Daconil 2787F	4 fl oz	3.0
3. Flutolanil 50W *	4 oz	2.3
4. Flutolanil 50W *	2 oz +	
Daconil 2787F	8 fl oz	2.8
5. Flutolanil 50W*	2 oz +	
PCNB 75W	4 oz	1.8
6. Flutolanil 50W *	2 oz +	
Banner 1.1E	4 fl oz	4.0
7. Flutolanil 50W *	2 oz +	
Tersan 1991	2 oz	3.0
8. SN84364 70WG*	1.8	3.3
9. S-3122 (Scotts)	1022 g	2.8
10. S-2621 (Scotts)	2610 g (3X)	2.8
11. S-2408 (Scotts)	46.7 g	2.5
12. No treatment		
13. ASC66825 50W	0.3 oz	2.3
14. ASC66825 50W	0.6 oz	3.3
15. ASC66825 50W	1.2 oz	2.5
16. ASC66791 75WDG	8 oz	3.3
17. GS/SM-04	6 oz + 2 oz	2.8
18. GS/SM-13	4 fl oz + 3 oz + 2 oz	3oz
19. GS/SM-07	8 fl oz + 4 oz	4.0
20. GS/SM-06	8 fl oz + 2 oz	2.8
21. CGA-173506 75WG	9.4 g	2.3
22. CGA-173506 75WG	13.3 g	2.5
23. CGA-173506 75WG	18.8 g	3.5
24. CGA-173506 75WG	4.7 g +	
Banner 1.1E	2 oz	
25. Banner 41.8%GL	41.46 g	4.3

Treatment applications:
Daconil and first application of S-2408 applied two weeks prior to full schedule (November 5, 1991). Full schedule applied November 14, 1991. Phytotoxicity readings made April 7, 1992.
*X-77 added to spray tank mixture.
¹ Color response key:
1=distinct darker green,
2=moderately darker green, 3=average, 4=tan to brown response, 5=substantial brown response.