

Bayer Fungicides to Control Snow Mold on Fairways in Montana and Idaho 2011-2012

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Charles T. Golob and William J. Johnston
Dept. Crop and Soil Sciences
Washington State University
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Snow mold control trials were conducted at 3 locations in the Intermountain Region of the PNW, on fairways at City of McCall golf course in McCall, ID, at Meadow Lake Resort Golf Course in Columbia Falls, MT and at Chewelah Golf and Country Club in Chewelah, WA. Individual treatment plots were 6' x 7' with four replications in a randomized complete-block design. Treatments were applied 26 Oct 11, 28 Oct 11, 31 Oct 11, at McCall, Columbia Falls, and Chewelah, respectively. Fungicides were applied at 80 GPA with a bicycle-wheeled CO₂ pressurized (40 psi) sprayer with 11008 flat fan TeeJet nozzles. Continuous snow cover lasted from the beginning of December 2011 through the middle of April 2012 (approx. 140 days) at McCall and from the end of first week of December 2011 to the near the end of March 2012 (approx. 110 days) at Columbia Falls. At Columbia Falls, there was a brief period in the middle of January that the snow melted off. Snow cover at Chewelah was from the beginning of December through the first week of April (approx. 125 days). **However no data could be taken at Chewelah since there was severe ice damage to the fairway.** Individual plots were evaluated for pink (*Microdochium nivale*) and/or gray (*Typhula spp.*) snow mold disease severity (% area infected) and turfgrass quality (rated on a scale of 1-9; 9 = excellent and 6 = acceptable) on 27 Mar 12 at Pullman, 9 Apr 12 at Chewelah, and 6 Apr 12 at Columbia Falls.

At McCall, the untreated Check had approximately 38% of the area infected with snow mold (Table 1). All treatments resulted in snow mold control to <3% of the plot area infected with disease when rated on 6 Apr 2012. Even the lowest treatment rate of Interface 3 fl oz/M + Triton FLO at 0.5 fl oz/M provided control as good as the other fungicide treatments. Although not significant different, turfgrass quality of the Bayer fungicide treatments was better than Turfcide 12 fl oz/M. Figs. 1 to 3 show the fungicide treatments in reps 2 and 3.

At Columbia Falls, when rated on 6 Apr 2012, the untreated Check had 60% of the plot area infected with snow mold (Table 2). There was no significant difference in the percentage of snow mold among any of the treatments and all were significantly better compared to the Check. The lowest rates of Interface 3 fl oz/M + Triton FLO 0.5 fl oz/M or Interface 3 fl oz/M + Tartan 1 fl oz/M provided control as good as the same treatments at higher rates. Although not statistically significant, Instrata 7 fl oz/M had the highest amount of snow mold among the fungicide treatments. The addition of ES TC006 A (fertilizer) to the Interface 4 fl oz/M + Triton FLO 0.5 fl oz/M did result in a significant increase in turfgrass quality compared to Interface 4 fl oz/M + Triton FLO 0.5 fl oz/M. Turfcide 12 fl oz/M did have slightly better turfgrass quality compared to Instrata 7 fl oz/M. Many of the Bayer fungicide treatments had better turfgrass quality compared to Instrata 7 fl oz/M or Turfcide 12 fl oz/M.

At Chewelah, the study could not be rated due to severe ice damage.

Overall, the lowest rates of Interface 3 fl oz/M + Triton FLO 0.5 fl oz/M or Interface 3 fl oz/M + Tartan 1 fl oz/M provided control as good as the same treatments at higher rates. These treatments, for the most part, also resulted in higher turfgrass quality compared to Instrata 7 fl oz/M or Turfcide 12 fl oz/M.

Table 1. The effect of fungicides on turfgrass quality and control of pink and gray snow mold on a fairway at the City of McCall golf course in McCall, ID. Rated on 6 Apr 2012.

Fungicide	Snow mold		Turfgrass quality*
	Rate (fl oz/M)	(% area infected)	
INTERFACE (iprodione + trifloxystrobin) + TRITON FLO (triticonazole)	4 0.75	1.3 a**	4.1 a
INTERFACE (iprodione + trifloxystrobin) + TRITON FLO (triticonazole)	3 0.75	2.3 a	4.4 a
Turficide 400 (PCNB)	12	2.8 a	3.1 ab
INTERFACE (iprodione + trifloxystrobin) + TRITON FLO (triticonazole)	3 0.5	2.8 a	4.0 a
Check	0	38.3 b	2.3 b

*Turfgrass quality rated 1 to 9; 9 = excellent.

**Means within columns followed by the same letter are not significantly different. LSD ($P = 0.05$).

Fig. 1. Snow mold fungicide treatments on a fairway at the City of McCall golf course in McCall, ID. Rated on 6 Apr 2012.



Fig. 2. Snow mold fungicide treatments on a fairway at the City of McCall golf course in McCall, ID. Rated on 6 Apr 2012.



Fig. 3. Snow mold fungicide treatments on a fairway at the City of McCall golf course in McCall, ID. Rated on 6 Apr 2012.



Table 2. The effect of fungicides on turfgrass quality and control of pink snow and gray snow mold on a fairway at the Meadow Lake golf course in Columbia Falls, MT. Rated on 6 Apr 2012.

Fungicide	Snow Mold		Turfgrass quality*
	Rate (fl oz/M)	(% area infected)	
TARTAN (triadimefon + trifloxystrobin)	1.5	1.3 a**	7.8 a
INTERFACE (iprodione + trifloxystrobin) +	3		
INTERFACE (iprodione + trifloxystrobin) +	4	1.5 a	7.5 ab
TRITON FLO (triticonazole)	0.5		
ES TC006 A (fertilizer)	3		
INTERFACE (iprodione + trifloxystrobin) +	3	2.0 a	7.0 ab
TRITON FLO (triticonazole)	0.5		
TARTAN (triadimefon + trifloxystrobin)	1	2.3 a	7.6 ab
INTERFACE (iprodione + trifloxystrobin) +	3		
Turfcide 400 (PCNB)	12	3.8 a	6.4 cd
INTERFACE (iprodione + trifloxystrobin) +	3	5.0 a	6.8 bc
TRITON FLO (triticonazole)	0.75		
INTERFACE (iprodione + trifloxystrobin) +	4	5.5 a	6.4 cd
TRITON FLO (triticonazole)	0.5		
INSTRATA (propiconazole + fludioxonil + chlorothalonil)	7	9.0 a	5.5 d
Check	0	60.0 b	1.9 e

*Turfgrass quality rated 1 to 9; 9 = excellent.

**Means within columns followed by the same letter are not significantly different. LSD ($P = 0.05$).

Fig. 4. Snow mold fungicide treatments on a fairway at Meadow Lake golf course in Columbia Falls, MT. Rated on 6 Apr 2012.



Fig. 5. Snow mold fungicide treatments on a fairway at Meadow Lake golf course in Columbia Falls, MT. Rated on 6 Apr 2012.



Fig. 6. Snow mold fungicide treatments on a fairway at Meadow Lake golf course in Columbia Falls, MT. Rated on 6 Apr 2012.



Fig. 7. Snow mold fungicide treatments on a fairway at Meadow Lake golf course in Columbia Falls, MT. Rated on 6 Apr 2012.

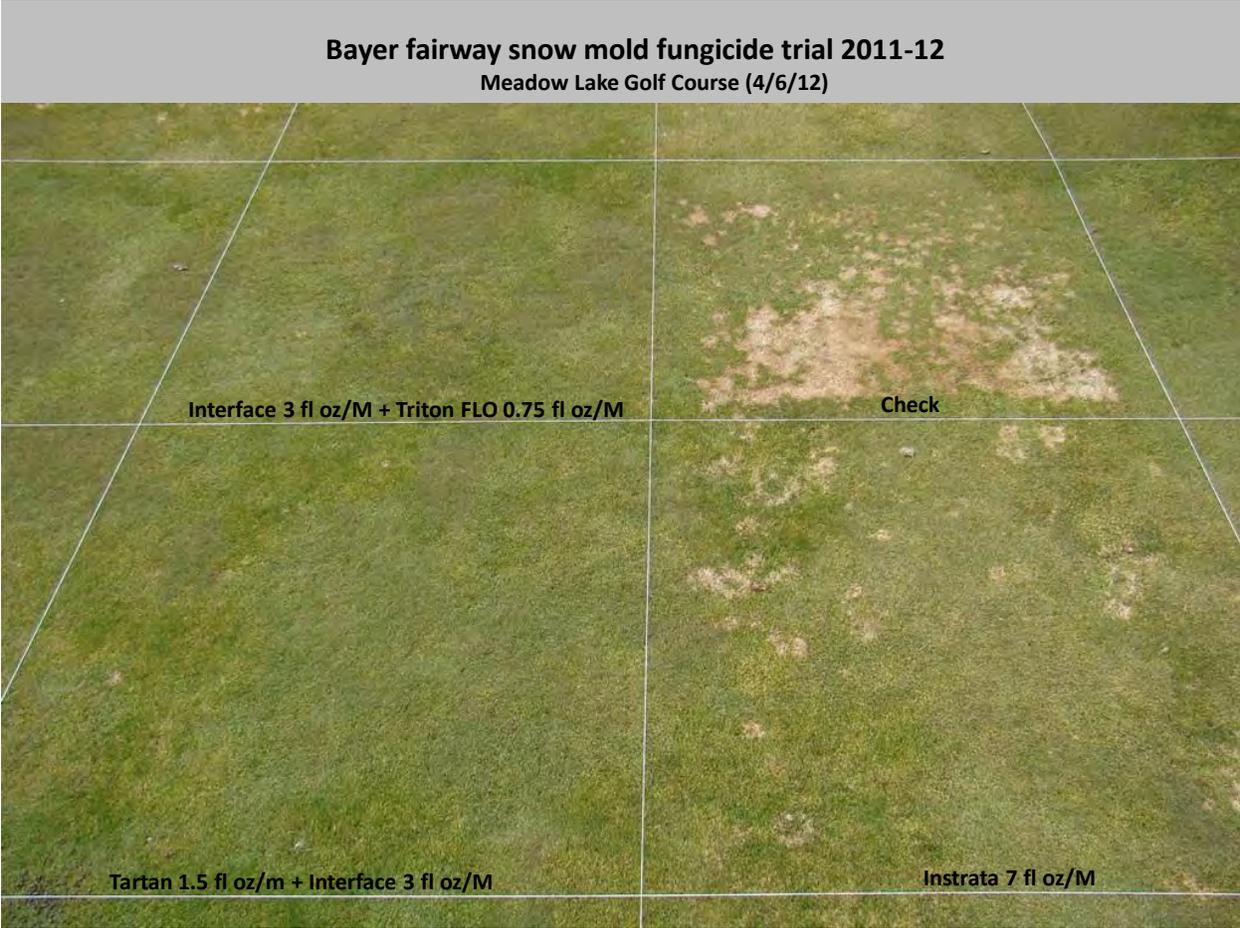


Fig. 8. Snow mold fungicide treatments on a fairway at Meadow Lake golf course in Columbia Falls, MT. Rated on 6 Apr 2012.

