Evaluation of Syngenta and Bayer Fungicides for Control of Pink and Gray Snow Mold in Idaho, Montana and Washington 2004-2005.

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Trials were conducted on a nursery green at the City of McCall Golf Course in McCall, ID, on a golf green at the Meadow Lake Resort Golf Course in Columbia Falls, MT and on a practice green at Esmeralda Golf Course in Spokane, WA. The nursery green at McCall was constructed on a cobbly sandy loam soil, the green at Columbia Falls, MT was constructed according to USGA specifications, and the practice green at Spokane was a push-up green. Individual treatment plots were 6' x 7' at McCall and Columbia Falls and 6' x 6' at Spokane with three replications in a randomized complete-block design. Treatments were applied 28 Oct 04, 8 Nov 04, and 12 Nov 04 at McCall, Columbia Falls and Spokane, respectively. Fungicides were applied at 88 GPA with a bicycle-wheeled CO_2 pressurized (40 psi) sprayer with 11004 flat fan TeeJet nozzles. Snow cover was from early Dec 04 to 30 Apr 05 at McCall and from late Dec 04 to mid-Feb 05 at Columbia Falls and snow cover off and on from early Jan 05 to mid-Feb 05 at Spokane. Individual plots were evaluated for disease severity (% area infected) and turf quality (rated on a scale of 1-9; 9=excellent) on 3 May 05 at McCall, 28 Feb 05 at Columbia Falls and 1 Mar 05 at Spokane. Typically, snow does not melt until the end of March to the first week of April at Columbia Falls, this year's rating was done more than a whole month earlier.

There was virtually no disease pressure (unusually low snowfall) at the Columbia Falls, MT and the Spokane, WA sites. The non-treated controls at each site had less than 2% area infected with snow mold (pink snow mold) and no disease was found on any of other the treatments. There was no treatment effect on turfgrass quality at either site.

Unlike the Columbia Falls and Spokane sites, disease pressure was more severe at McCall. Snow cover at McCall was much lighter than usual, however, permanent snow cover lasted from early Dec 04 through 30 Apr 05 (approx. 150 days). The non-treated control had 52% area infected with snow mold (Table 1). Roughly 70% pink and 30% gray snow mold. Typically, up until the last 2 years, gray snow mold has been the predominate snow mold disease in the non-treated control. Perhaps the milder winters may contribute to this shift in disease dynamics. No sclerotia were found in any of the control plots; therefore, no determination as to the percent of *Typhula incarnata* or *T. ishikariensis* could be made.

All treatments resulted in significant control of snow mold compared to the non-treated control (Table 1). Syngenta's experimental formulation (A14036) at the higher rates performed exceptionally well. Even though Turfcide 400 provided very good snow mold control it had significantly lower turf quality than the other fungicide treatments. The best turf quality resulted from Bayer's 4 way combination treatment of 26GT + Bayleton + Daconil Ultrex + Signature.

Table 1. Evaluation of Syngenta and Bayer fungicides in high snowfall areas of Idaho to control snow mold. City of McCall Golf Course. McCall, ID. Rated May 3, 2005

Fungicide treatment	Rate (oz or fl oz prod/M)	Disease (% area infected)	**Turf quality (1-9)
A14036	18.6 fl. oz.	*0.7 a	7.0 ab
A14036	9.3 fl. oz.	1.0 a	7.0 ab
Chipco 26GT (23.3% Iprodione)+ Bayleton 50DF (Triadimefon) + Daconil Ultrex 82.5WDG (Chlorothalonil) Chipco Signature 80WDG (Foseytl Aluminum salt)	4.0 fl. oz. 1.0 oz. 5.0 fl.oz. 4.0 oz.	1.3 a	7.7 a
Turfcide 400 (40% PCNB)	12.0 fl. oz.	1.3 a	5.0 c
Medallion 50WP (Fludioxonil) + Daconil WeatherStik (54% Chlorothalonil) + Banner MAXX (14.3% Propiconazole)	0.142 oz. 2.36 fl. oz. 1.71 fl. oz.	2.3 a	6.7 b
A14036	4.7 fl. oz.	5.7 a	7.0 ab
Chipco 26GT (23.3% Iprodione)+ Bayleton 50DF (Triadimefon) + Daconil Ultrex 82.5WDG (Chlorothalonil)	4.0 fl. oz. 1.0 oz. 5.0 fl.oz.	6.0 a	7.0 ab
Bayleton 50DF (Triadimefon) + Medallion 50WP (Fludioxonil) + Chipco Signature 80WDG (Foseytl Aluminum salt)	1.0 oz. 0.5 oz. 4.0 oz.	7.8 a	6.3 b
Non-treated Control	0	51.7 b	2.0 d

*Values within a column followed by the same letter are **not** significantly different LSD *P*=0.05.
**Turf quality rated 1-9; 9=excellent.