The Effects of Various Fungicides on the Control of Overwintering Diseases Greywolf Golf Resort - 2000

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Contained below is the current trial that was been initiated at the Greywolf Golf Resort in the fall of 2000. Results from last year's trial showed that this is an excellent site to conduct snow mould studies as disease pressure is consistently high. The cooperation of Superintendent, Tom Altmann and assistants Gerry Rousseau and Lee Lax has been very beneficial and greatly appreciated.

Introduction

Fine turfgrasses, which are not protected by fungicides, are predisposed to damage caused by snow molds. On golf greens, where creeping bentgrass (*Agrostis palustris*) is the predominant species, disease damage is a frequent occurrence. Turfgrasses weakened or damaged by snow molds are extremely slow to recover and are often invaded by opportunistic weedy grass species. As the possibility of chemical resistance to snow molds increases, new fungicides may be of benefit.

A typical snow mold prevention program consists of three or four fall applications and a single application in the spring. Usually fungicides with different modes of action are alternated from application to application. However, in this trial, only a single fall application was made so that the fungicide alone could be evaluated for the control of commonly occurring snow molds.

The site at Greywolf Golf Resort was chosen due to consistently high disease at the golf course and the fact that the club has creeping bentgrass fairways. This site is considered a worst case scenario for snow moulds due to the susceptibility of the grasses to snow mould and the long winters with deep snow cover.

Materials and Methods

Plots were laid out on a Penncross Creeping Bentgrass fairway at the Greywolf Golf Resort, Panorama, British Columbia. Each plot was a 1x2 meter rectangle laid out in a Randomized Complete Block Design. A 0.5 meter buffer has been maintained around each plot. Each treatment was replicated four times. Significant natural infections typically occur at this site.

Plots will be evaluated in the spring of 2001 for effectiveness of the various treatments. Disease ratings will be based on a percent of area infected with disease. This will be carried out on a visual basis where one hundred percent is complete area infected by disease and zero percent will indicate complete absence of disease.

Treatments are as follows (all treatments listed as amount of product per 100m²):

- 1) Untreated Control
- 2) Procloraz 11.1 ml/100m² single application
- 3) Procloraz 11.1 ml/100m² double application

- 4) Turfcide 400 400ml/100m²
- 5) Turfcide 400 600ml/100m²
- 6) Terraclor 75W 250g/100m²
- 7) Arrest 75W 375g/100m²
- 8) Heritage 12g/100m² and Daconil Ultrex 150g/100m² double application
- 9) Heritage 12g/100m² and Daconil Ultrex 150g/100m² and Terraclor 75W 160g/100m²
- 10) Heritage 24g/100m² and Banner 130EC 180ml/100m²
- 11) Heritage 24g/100m² and Terraclor 75W 160g/100m²
- 12) Eagle 40WP 30g/100m² double application
- 13) Eagle 40WP 30g/100m² and Royral Green 240ml/100m² double application
- 14) Eagle 40WP 30g/100m² and Daconil 2787 500SC 250ml/100m² double application
- 15) BAS 500 00 F 20WG 5.6g/100m²
- 16) BAS 500 02 F 5.6g/100m²
- 17) BAS 500 00 F 20WG 5.6g/100m² and BAS 510 UC F 2.8g/100m²
- 18) BAS 500 02 F 20WG 2.8g/100m² and BAS 510 UC F 2.8g/100m²
- 19) BAS 505 03 F 50WG 2.8g/100m²
- 20) BAS 510 UC F 70WG 4.0g/100m²
- 21) Heritage 50WG 5.6g/100m²
- 22) TTZ 32ml and Rovral Green 250ml/100m² double application
- 23) TTZ 16ml and Rovral Green 250ml/100m² double application
- 24) Banner 130EC 170ml and Rovral Green 250ml/100m² double application
- 25) Untreated control

Product	Formulation	Active Ingredient
Heritage	Wettable Granular	Azoxystrobin 50%
Daconil 2787	Liquid	Chlorthalonil 400g/l
Daconil Ultrex	Wettable Granular	Chlorthalonil
Eagle 40WP	Wettable Powder	Myclobutanil 40%
TTZ(experimental product)	Wettable Granular	Not available
Rovral Green	Liquid	Iprodione 240g/l
Banner	Emulsifiable Concentrate	Propiconazole 130g/l
BAS 500 00 F	Emulsifiable Concentrate	Not available
BAS 505 03 F	Wettable Granular	Not available
Turfcide 400	Liquid	Quintozene 40%
Terraclor 75W	Wettable Powder	Quintozene 75%
Arrest 75W	Wettable Powder	Thiram
		Oxycarboxin
		Carbathiin