

Snow Mold —

(Continued from Page 27)

Table 1. Snow Mold 1993-94 Minnesota

Snow Mold Treatment	Rate/1,000 sq. ft.	Average Disease Score	Range ±
SN 84364 NA314 Prostar	4.3 oz.	95-	5.0
SN 84364 NA314 Prostar & PCNB	4.3 oz. 4.0 oz.	0-	0.5
SN 84364 NA313 Prostar plus Triadimefon	3.6 oz.	54+	33.
Chipco 26019 F & Daconil 2787 F	4.0 fl. 8.0 fl.	2-	1.0
Chipco 26019 F & PCNB	4.0 fl. 6.0 oz.	13-	12.
Chipco 26019 F & PCNB	2.0 fl 4.0 oz.	32+	14.
Chipco 26019 & PCNB & Daconil 2787 F	4.0 fl. 4.0 oz. 8.0 fl.	0-	0
Chipco 26019 & PCNB & Daconil 2787 F	2.0 fl. 4.0 oz. 4.0 fl.	0-	0
Vorlan & Daconil 2787 & PCNB	2.0 oz. 4.0 fl. 4.0 oz.	2-	2
Calcolar & Tersan SP & PCNB	1.0 oz. 2.0 oz. 2.0 oz.	0.5-	0.5
ICIA 5504	0.7 oz.	79-	15
ICIA 5504 & PCNB	0.7 oz.	2-	1
ICIA 5504 & Daconil	0.7 oz. 8.0 fl.	0-	0
ICIA 5504 & Daconil F & PCNB	0.7 oz. 8.0 fl. 8.0 oz.	0-	0
Chipco 26019 F & Daconil 2787 F	2.0 fl. 8.0 fl.	0-	1
PCNB	2.0 oz.	80+	10
PCNB & Tersan SP &	2.0 oz. 2.0 oz.	55-	15
PCNB & Daconil 2787 F	2.0 oz. 8.6 fl.	1-	1
PCNB & Daconil 2787 75W	2.0 oz. 6.0 oz.	3-	3
PCNB & Daconil 2787WDG	6.0 oz. 6.0 oz.	3-	2.0
UTC		99+	5

Winter Injury Report '93 - '94

Situation

Winter injury, a serious problem for golf courses, has become even worse for those who have prevented one form of injury-desiccation only to have another problem related to crown hydration become the reason for turf loss. The high expectation for excellent turf quality in the early spring has stimulated the use of covers and the expense-labor and cost has driven the expectations even higher for quality turf.

Objectives

The study was to evaluate the ability of two grass populations, Poa and Bent, to survive freeze/thaw cycles after being removed from covers. Turf survival and green up data were collected to measure differences.

Procedure

Turf plugs were taken last fall from the University of Minnesota Golf Course from a site having Poa and another having Bent. These plugs were placed in metal flats as individual cores, surrounded with sand and then covered with green covers. Samples were taken three times during the winter and the cores were then saturated with water before freezing or left at normal soil water levels and stored in a growth chamber programmed to freeze the soil cores to minus 4 C or 25 degrees F. The cores were removed after one to 5 freeze cycles and placed in the green house for color and growth evaluations.

Results

The first plugs removed and grown out in the greenhouse were nearly identical in response: A 100% survival and 100% regrowth for both Poa and Bent. This was a real change from last year and the pattern continued. All 5 grow outs and all 3 replicates performed the same. Early in the process we identified that all plugs were nearly 100% Bent and no Poa was present. At first we believed it was a mix-up in plug labeling, but this was not the case. All plugs were mostly Bent and the source site was checked in the spring confirming the high Bent level. The only information gathered is that Bent grass survived all treatments. Covers made no difference to Bent grass. At least 90 to 95% survival of Bent was recorded in all plugs taken in 1993 and tested in 1994. The level of Bent in the test plugs prevented any meaningful measurements.

LOST

PING EYE 2 RED DOT 3-IRON

The 3-iron was lost at the MGCSA
Championship at Wayzata C.C.

Contact: Jim Johnson, Rich Springs G.C.

685-4322

Fertigation —

(Continued from Page 34)

we have been able to pay for the system and experiment with some of the new bio/humate products on the market with good results. Last year we spent \$26,000 on fertilizer. This year we anticipate spending around \$8,000 for N, P, K, S & Fe and minors.

There are some drawbacks to this system. All areas of the course are fertilized equally if watered equally. We manage our fertigation to the greens and supplement other areas as needed. Except for tees and a few fairways that were behind on nutrients, this approach has worked very well. A major irrigation leak could be a problem if you are fertigating at a very high rate. However, small leaks are easily detected due to the presence of fertilizer in the irrigation water. If you have water, hazards which receive irrigation water this could become a problem. Some sprinkler heads may need to be moved or converted to part circles. In most cases the cost for this should be easily defrayed by fertilizer savings as would any system upgrades to provide uniform coverage. With a double row irrigation system we have found no detectable variation in color or growth due to coverage. If your irrigation system can maintain reasonably healthy turf in semi-drought conditions, a fertigation system could work for you. A fertigation system can save time and money, promotes healthier turf and is environmentally friendly.

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