## PATHOLOGICAL POINTERS

By WARD C. STIENSTRA, Extension Plant Pathologist University of Minnesota

Most of you are pleased with how the winter ended and the appearance of your turf. The snow mold plots were basically clean - very little disease in southern and central Minnesota. At Duluth, the plots were also nearly free of snow mold while International Falls again produced 100% disease in the untreated check and in the fertilize portion. Last fall all northern plots fertilized in the fall received 1 pound of nitrogen as Urea. The fertilizer application did not control disease, but what a difference in growth this spring. At two locations, only 1/2 of the plot received the late fall nitrogen, in both cases the best turf was that receiving the late season nitrogen. In no case was snow mold increased by the late season fertility. At one location the severity of winter injury was also reduced in the fertilized area.

In late April on Bluegrass, we saw significant levels of Septoria Tip Blight. Initially the leaf blade was mottled or had yellow blotches. The fungus usually enters the cut tip and progresses down the leaves, surely in extended cool wet seasons, Septoria can attack and enter other leaf parts also. At the end of April and early May several reports of "cool season" brown patch were heard. This was similar to the symptoms seen at the Minneapolis Golf Club last fall during the cool damp weather. This may be Rhizoctonia, or some other soil fungus, but in either case at some locations a necrotic ring, 4-12" developed. The dying grass was reddish brown and the center usually recovered. The symptom was strongest on cloudy, cool, wet days and was reduced on the few sunny days we had. Applications of systemic - 1 to 2 ounces or 2 ounces of 26019 - check the disease for about two weeks. The damage varied, with most saying the loss was quite superficial. As the temperature warmed, continued on Page 9

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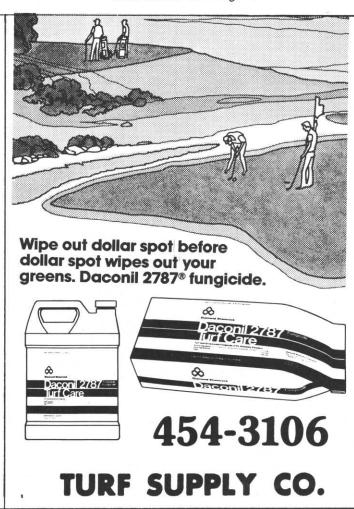


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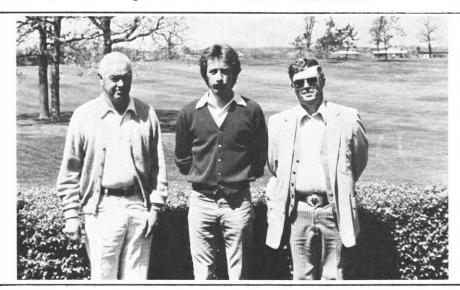
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more reports of Helminthosporium were heard and seen. Susceptible grasses, such as Kentucky Bluegrass, were severely spotted and Penncross had dead tips. Contacts and 26019 reportedly gave good control.

The difference of growth in Bent and Poa was noticed by many and greens with a mixture were quite uneven. The wide spread frost on May 9, 10, 11 did damage many plants and also slowed growth. The cold nights and lack of sun have nearly made up for the early spring. In case you have not noticed, our season is about average and unless we get more warm weather we will be behind average. Growth of turf was very slow especially on heavy soils and areas with reduced root systems. You may want to check your soil temperature at 2 inches deep in the morning. On May 19, temperatures below 50° were common and you should not expect much growth under these conditions.



#### **NEW MEMBERS**

Introduced and accepted as new members at the St. Cloud meeting were, left to right, Orville Larson of Windom, Doug Anderson of Minikahda and Dave Ruppert of Faribault.

WELCOME, GENTLEMEN! We hope you will enjoy the activities of your association.

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Sulfur	1.02
Calcium	0.69
Magnesium	0.32
Iron	C . O
Aluminum	1.20
Chromium	0.60
Lead	
Manganese	0.018
Sodium	0.136
Zinc	0.144
	Parts Per. Million
Cadmium	79.0
Cobalt	5.1
Copper	405.0
Mercury	4.8
Molybdenum	13.0
Worybaeriairi	13.0