

None of the wheatgrass strains were severely affected by the disease (Table 1). Both crested wheatgrass varieties 'Summit 1' and 'Fairway', showed very slight infection, considerably less than the slender wheatgrass varieties 'Primar' and 'Revenue'. Strain 1294 was significantly less resistant than the latter two varieties. 'Revenue', scheduled to be released in 1969-70 by the Canada Department of Agriculture, had been selected for a much higher leaf-to-stem ratio and in vitro digestibility than 'Primar'³. These differences apparently were not reflected in disease resistance.

The 'Revenue' variety was also grown under irrigation at Saskatoon for seed production. Leaves were heavily damaged by *S. oxysporum*. Ratings were made on 110 tillers at random in a 1-acre plot on the same day as those on the replicated dryland test. The average rating was 2.77 (Table 1) on the irrigated plot. Irrigation may prove useful in the evaluation of the new wheatgrass varieties for resistance to this disease by accentuating differences in resistance.

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SNOW MOLD ON LAWNS IN SASKATOON¹

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Snow mold caused by an unidentified low-temperature basidiomycete was common on domestic lawns in Saskatoon following snow melt in the spring of 1969. In some severe cases, killed areas of grass were still visible in fall. A survey was made of the incidence of the disease on domestic front lawns in early May 1969 along streets where the age of lawns could be estimated. Certain environmental factors also were noted. Most of the lawns were composed of bluegrass, *Poa pratensis* L., alone or of a mixture of bluegrass and creeping red fescue, *Festuca rubra* L. subsp. *rubra*.

Nine hundred and thirteen lawns were rated, which was about a 4% sample of front lawns in the city. Of these, only 12% were free from symptoms of the disease (Table 1). On lawns sown in 1968, the disease occurred less frequently and was much less severe than on older lawns. This suggests either that new plants are intrinsically less susceptible to the disease, or that the inoculum of the fungus had not built up to the same extent in

the soil, on natural turfgrass litter, and on clippings in younger lawns. There was little apparent difference in incidence or severity of the disease in lawns in the other two age categories. Heavy tree shading favored the disease. Lawns associated with luxury housing had above-average incidence with a higher proportion in the very severe category. Possibly this was related to higher usage of nitrogenous fertilizer and irrigation water, producing a succulent susceptible growth (2) and to the more common use of a pure sward of the susceptible 'Merion' cultivar of *P. pratensis* (3). This cultivar is used because it forms a very attractive dark green turf under conditions of high fertility; however, it appears more susceptible to snow mold than common Kentucky bluegrass. The disease can be effectively controlled with inorganic or organic mercury fungicides applied before snowfall (1 and unpublished) but these rarely seem to be employed on lawns in the city.

Table 1. Incidence of snow mold on lawns in Saskatoon, 4 May 1969

Age or environment of lawn	Number of lawns in each rating category: ¹					Average rating
	None	Slight	Mod.	Mod.-severe	Very severe	
Sown 1968	46	27	7	1	0	0.5
2nd to 10th year	20	74	89	101	29	2.0
Older than 10 years	47	138	133	164	37	2.0
Heavily tree-shaded	9	62	87	130	28	2.3
Open	38	76	46	34	9	1.5
Luxury landscaping	0	13	41	56	21	2.6

Rating scale: Slight = 0-10% of lawn area affected; Mod. = 11-25%; Mod. - severe = 26-50%; Very severe = 51-100%.

Literature cited

1. Lebeau, J.B. 1966. Diseases and pests of turfgrass in the prairie provinces. Can. Dep. Agr. Pub. 1247. 11 p.
2. Smith, J. Drew. 1969. Overwintering diseases of turfgrasses. Proc. 23rd Annu. Northwest Turfgrass Conf. 65-78.
3. Smith, J. Drew. 1969. Turfgrasses for the north. Proc. 23rd Annu. Northwest Turfgrass Conf. 35-40.

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