

Turfgrass / Gazon

Crop/Culture: Turfgrass

Location/Emplacement: Manitoba

Title/Titre: Diseases diagnosed on turfgrass, submitted to the Manitoba Agriculture Plant Pathology Laboratory in 1990.

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Nom et Organisation:** Platford, R.G.
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METHODS: There were 95 samples of turfgrass submitted for diagnosis to the Manitoba Agriculture Plant Pathology Laboratory in 1990. Samples were examined for disease symptoms and where necessary isolations were made onto Potato Dextrose Agar (PDA) for identification of the causal fungus.

RESULTS: The results of the laboratory diagnoses are presented in Table 1. Leaf diseases caused by anthracnose, ascochyta and melting out were more prominent in Manitoba in 1990 than in 1989 primarily as a result of moist weather in June. Snow mold was not a major problem in 1990. Decline of lawns, attributed to Fusarium patch and late season drought conditions, was a frequent problem in 1990 in lawn samples submitted from Winnipeg.

TABLE 1

Lawn and Turf - 95 samples

DISEASE	SCIENTIFIC NAME	NUMBER OF SAMPLES
Anthracnose	<u>Colletotrichum graminicola</u>	25
Leaf blight	<u>Ascochyta</u> spp.	8
Melting out	<u>Drechslera</u> spp.	27
Fusarium patch	<u>Fusarium</u> spp.	11
Leaf spot	<u>Septoria</u> spp.	3
Pink snow mold	<u>Gerlachia nivalis</u>	2
Slime mold	<u>Physarum</u> spp.	2
Environmental stress	drought	6
Herbicide injury		4
Miscellaneous		6

Crop/Culture: Turf Grasses

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Location/Emplacement: Saskatchewan

Title/Titre: DISEASE SURVEYS OF GOLF COURSES IN 1990

METHODS: Twenty-five golf courses from Waskesiu in the north to Regina in the south were visited between 03 April and 23 April 1990. Identification of the cause of injury was based on symptoms. Occasionally samples were taken and disease identification was confirmed by isolation of the pathogen.

RESULTS AND COMMENTS: Pink snow mold (*Microdochium nivale*) and cottony snow mold (*Coprinus psychromorbidus*) in the LTB and SLTB phases were the winter diseases most frequently seen. Pink snow mold was ubiquitous and sometimes severe (>50% area infected) on *Agrostis stolonifera* and *Poa annua* turf of greens and collars, especially on northern courses, and could also be found on *P. pratensis* fairways. *C. psychromorbidus*, LTB phase, was severe (>50%) on surrounds to greens at Melfort, Saskatoon and Regina and on some lawns in Prince Albert. Generally, cottony snow mold was found in trace (<1%) to moderate (20%) amounts on fairways and in snow drift areas.

Small areas of turf damaged by snow scald (*Sclerotinia borealis*) were noted on two courses and grey snow mold damage (*Typhula ishikariensis*) was found on two northern courses.

Severe pink snow mold (>90%) developed on experimental plots of bentgrass at Saskatoon which had been snow fenced to retain snow cover. Some *P. pratensis* plots inoculated in October 1989 with sclerotia of *Typhula* spp. developed very severe injury (>85%).

In early May, desiccation injury was moderately severe to very severe on bentgrass greens in several locations, especially on a course at Prince Albert. At Meadow Lake, desiccation injury was related to very poor rooting, to strips of uneven fertilizer application in the previous year and, on one green, to black plug layer (the result of anaerobic soil conditions). Ice injury, probably resulting from rain in early December, was apparent on a Saskatoon course. Only two new cases of black plug layer were found. One course in southern Saskatchewan was damaged by a herbicide (atrazine) contaminant of a specialized fertilizer. Severe elk urine and feces scorch was noted on fairways of the Waskesiu golf course.

On a new course in Regina, linear patches of low grade root infection with *Pythium* spp., chytridiaceous fungi, *Phialophora* spp. and *Rhizoctonia* spp. was associated with compaction of backfill over drains and excessive irrigation in very hot weather in August.

Fusarium patch (*M. nivale*) was first noted on 19 September 1990 on plots of *Agrostis* spp. By 2 October, 14 of 60 plots were affected, but the highest level of infection observed was 2%.

Crop/Culture: TURFGRASS

Location/Emplacement: British Columbia

Title/Titre: TURFGRASS DISEASES DIAGNOSED AT THE B.C. MINISTRY OF AGRICULTURE AND FISHERIES PLANT DIAGNOSTIC LABORATORY IN 1990

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METHODS: This summary is based on 95 turfgrass submissions received at the B.C. Ministry of Agriculture and Fisheries Plant Diagnostic Lab at Surrey, B.C. during the first ten months of 1990. Most samples were brought in by golf course greenskeepers, sod growers, or turf maintenance firms. Some were collected during field investigations by the authors. No home lawn submissions from the general public are included as the lab deals only with commercial operations.

RESULTS: The results of the diagnostic investigations are summarized in the following table.

DISEASE	PATHOGEN	MAIN HOST	NUMBER OF SUBMISSIONS	GEOGRAPHIC LOCATION
Take-all patch	<u>Gaeumannomyces</u>	bentgrass	12	South Coast
Necrotic ringspot	<u>Leptosphaeria</u>	Ky. bluegrass	9	Okanagan
Root rot	<u>Pythium</u>	bentgrass	8	South Coast
Pythium blight	<u>Pythium</u>	annual bluegrass, bentgrass	8	South Coast
Melting out	<u>Curvularia</u> , <u>Drechslera</u>	bentgrass, mixed species	7	South Coast
Anthraxnose	<u>Colletotrichum</u>	mixed species	6	South Coast
Leaf blight	<u>Ascochyta</u>	mixed species	6	South Coast
Brown patch	<u>Rhizoctonia</u>	bentgrass, mixed species	5	South Coast
Rust	<u>Puccinia</u>	Ky. bluegrass, ryegrass	5	South Coast Kootenay
Pink snow mould	<u>Microdochium</u>	bentgrass	3	South Coast
Red thread	<u>Laetisaria</u>	fescue, ryegrass	3	South Coast
Grey snow mould	<u>Typhula</u>	Ky. bluegrass	1	Okanagan
Slime mould	-	-	1	South Coast
Algae	-	-	1	South Coast
Sooty mould	-	-	1	South Coast
Physiological	thatch/overwatering/etc.	-	16	South Coast
Insect damage	-	-	2	South Coast

COMMENTS: In the south coastal region, Take-all patch caused by Gaeumannomyces graminis var. avenae was the predominant disease on sand-based golf greens of Penncross bentgrass. Root rot and blight caused by Pythium spp. also commonly occurred at the coast and was favored by unusually high rainfall in June and by daily sprinkler irrigation during warm weather in July and August.

Necrotic ringspot caused by Leptosphaeria korrae was widespread on bluegrass lawns in Kelowna and Vernon and appeared to be encouraged by daily sprinkling with automated irrigation systems.

Red Thread (Laetisaria fuciformis) is much more common than this compilation indicates. Most turf managers recognize it and therefore do not submit samples for identification.