OCCURRENCE OF LAWN DISEASE AT SASKATOON, 1963

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Although the survey was carried out mainly at Saskatoon, several lawn samples were received from different localities in Saskatchewan. Isolations on different artificial media were made throughout the survey. The diseases that were observed in the following chronological sequence were:

SNOW MOLD (low-temperature basidiomycete). At the first spring thaw several lawns were found affected. With a few exceptions damage was moderate and nearly all the affected lawns recovered with good care and warmer weather.

BLIGHT. In late April and early May dead patches of variable size were observed on several lawns. Isolations yielded the following organisms: <u>Pythium sp., Bipolaris sorokiniana, Drechslera poae, Fusarium roseum</u> "culmorum", F. roseum "acuminatum", and F. roseum "equiseti". The blight etiology was rather controversial because more than one of the abovementioned organisms was isolated from the same dead patch and because winter injuries could not be excluded.

HELMINTHOSPORIUM LEAF, CROWN, AND ROOT DISEASES. The most outstanding feature of the lawn disease picture was the widespread occurrence of leaf, crown, and root lesions on <u>Poa</u> pratensis incited by <u>Helminthosporium</u> spp. The diseases became first evident in May and then developed throughout the summer and even into the fall. Damage was sometimes severe and several lawns had to be reseeded or resodded. The Merion variety of bluegrass, generally considered to be resistant, was severely affected by both leaf spot and foot rot.

FAIRY RINGS, caused mainly by <u>Marasmius oreades</u> and <u>Lepiota</u> <u>naucina</u>, was another common but not very serious disease in Saskatoon. The unusually rainy season might explain the light damage.

ANTHRACNOSE (Colletotrichum graminicola) was widespread and sometimes a very serious problem. The disease was first noticed in July and reached a peak late in August. One lawn was so badly damaged that it had to be reseeded. The disease was observed almost exclusively on Festuca rubra.

LEAF RUST (<u>Puccinia poae-nemoralis</u>) was observed on <u>Poa</u> <u>pratensis</u> during August in several lawns, but the disease was rated severe in one lawn only. Generally, damage was very light. Pycnidia of <u>Darluca filum</u> were found consistently in uredia.

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POWDERY MILDEW (Erysiphe graminis). Late-season infection by powdery mildew was encountered on many lawns, particularly in shaded areas. The disease was prevalent on Merion bluegrass, but damage was light.

ASCOCHYTA LEAF SPOT. This disease was observed in August but was without consequence as only a few infected leaves were collected in three lawns.

SEPTORIA LEAF SPOT. A trace infection was recorded on <u>Poa</u> pratensis in one lawn, late in August.