

DISEASES OF RAPESEED IN MANITOBA IN 1972¹R.G. Platford² and C.C. Bernier³

A survey of rapeseed fields in the northern part of the rapeseed growing area of the province was made during the third week of August, 1972. Forty-two fields between Gladstone and Swan River were surveyed, 19 fields of turnip rape (*Brassica campestris* L.) and 23 of rape (*B. napus* L.). The prevalence and severity of disease in the fields surveyed was rated. The disease ratings for the staghead phase of white rust [*Albugo cruciferarum* S. F. Gray], black spot [*Alternaria brassicicola* (Schw.) Wilts.], ringspot [*Mycosphaerella brassicicola* (Duby) Oud.] and stem blight [*Sclerotinia sclerotiorum* (Lib.) De Bary] were as follows:

in the Swan River area.

Ringspot was found in 53% of the turnip rape fields, ranging in severity from trace (32%) to moderate (16%). Ringspot was not found in any of the rape fields surveyed.

Other diseases found occasionally in turnip rape were downy mildew [*Peronospora parasitica* (Pers. ex Fr.) Fr.] 11%, stem blight [*Sclerotinia sclerotiorum*] 11%, and aster yellows 11%. Downy mildew infections were associated with severe staghead in the Dauphin area. Downy mildew was not found in any of the rape fields surveyed. Aster

Table 1. Disease ratings^a in 42 fields of turnip rape and rape surveyed in Manitoba, 1972

severity category	Turnip rape ^b (19 fields)				Rape ^c (23 fields)	
	Staghead	Black spot	Ringspot	Stem blight	Black spot	Stem blight
Trace	26	26	32	0	57	9
slight	47	37	5	11	13	0
Moderate	16	16	16	0	4	0
severe	11	16	0	0	4	0
% of total fields infected	100	95	53	11	78	9

^a Ratings indicate % of fields in each severity category.

^b *Brassica campestris*.

^c *Brassica napus*.

Staghead and pustules of white rust on the leaves were found in varying amounts in all the fields of turnip rape surveyed but were not found in any fields of rape. Staghead was most severe in the Dauphin area. Blackspot was found in all but one field of turnip rape and in 18 out of 23 fields of rape. The disease appeared to be most severe

in the Swan River area. Yellowing and stem blight were encountered in 30% and 9% of the rape fields respectively, but never in more than trace severity. The low incidence of stem blight reported may in part be due to the fact that prevalence and severity of stem blight are much easier to assess in stubble fields. None of the fields surveyed were stubble fields. Stem blight is probably more prevalent than this survey indicates.

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In general, disease was more severe on turnip rape than rape. Staghead is becoming a serious disease problem in turnip rape. Blackspot appears to be quite prevalent in both turnip rape and rape. Ringspot was found in over half the fields of turnip rape surveyed but little is known about the damage caused by this disease. Stem blight must be regarded as a serious disease in view of its wide host range. Crop rotation is presently the only control recommended for diseases attacking rape.