

Diseases of rapeseed in Manitoba, 1973-74

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In northwestern Manitoba in 1973 and 1974, all fields of turnip rape (*Brassica campestris*) examined were affected by the staghead form of white rust [*Albugo cruciferarum*], but damage was much less severe than in the previous 2 years. Black spot [*Alternaria* spp.] was found in trace amounts in most rape (*B. napus*) fields; in *B. campestris* severity ratings were slightly higher, but damage was less severe than in 1971-1972. Stem blight [*Sclerotinia sclerotiorum*] was the most serious disease of *B. napus* in 1973, causing premature ripening and pod infection; damage was less common in turnip rape.

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Tous les champs de navette *Brassica campestris* examinés dans le nord-ouest du Manitoba en 1973 et en 1974 étaient marqués par les déformations de la rouille blanche *Albugo cruciferarum* mais les dégâts étaient beaucoup moins importants que ceux des deux années précédentes. La plupart des champs de colza *B. napus* étaient atteints par la tache noire *Alternaria* sp. à l'état de trace; les champs de *B. campestris* l'étaient davantage mais les dégâts étaient moins importants qu'en 1971-1972. La sclerotiniose *Sclerotinia sclerotiorum* est la maladie qui a le plus gravement atteint *B. napus* en 1973. Cette maladie provoque une maturité trop hâtive et attaque la gousse. On l'a trouvée moins couramment dans les champs de navette.

Surveys of 28 rapeseed fields in the northwestern area of Manitoba between Neepawa and Swan River were made during the latter half of August in 1973 and 1974. In both years, the staghead form of white rust [*Albugo cruciferarum* S. F. Gray], black spot [*Alternaria* spp.], and stem blight [*Sclerotinia sclerotiorum* (Lib.) de Bary] were the only important diseases encountered. In 1974, diseases were less severe than in previous years, probably because of the dry weather that prevailed during most of July and August.

White rust—*Albugo cruciferarum*

In 1973 and 1974, all fields of turnip rape (*Brassica campestris* L.) were affected by the staghead form of white rust (Table 1), but severity was very low. The majority of stagheads were very small and were formed at the tips of branches, indicating that infection occurred late in the season. All stagheads examined showed infection by downy mildew [*Peronospora parasitica* (Pers. ex Fr.) Fr.]. The disease was much more severe in 1971 and 1972, when many of the staghead infections involved the entire head, causing complete loss of seed producing ability (1, 2).

Black spot—*Alternaria* spp.

In both years slightly over 70% of the rape (*Brassica napus* L.) fields examined were affected by trace

amounts of black spot (Table 1). In turnip rape, the percentage of fields affected dropped from 100% in 1973 to 29% in 1974, but in both years severity ratings were slightly higher than in rape. The trace to light infections of black spot in these surveys were in contrast to those in 1971 and 1972, when infections reached the moderate and severe ranges.

Stem blight—*Sclerotinia sclerotiorum*

In 1973, stem blight was much more prevalent than in previous years and was by far the most serious disease of rape in northwestern Manitoba. Many of the plants were infected part way up the stem or even on the pods, indicating that ascospore infections were involved. In previous years (1, 2) stem blight was present in only trace to slight severity and infections were always at the base of the plant. Stem blight has been more common in rape than in turnip rape (Table 1), and in 1973 premature ripening caused by the disease was very evident. Severity was greatest in heavy stands of both rape and turnip rape.

Other diseases

In 1974, root rot was found in a trace level in one field of turnip rape and at a moderate level in a field of rape; trace amounts of aster yellows were present in 24% of the turnip rape and in 9% of the rape fields; trace levels of ringspot [*Mycosphaerella brassicicola* (Duby) Oud.] were found in 35% of the turnip rape fields surveyed.

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Table 1. Disease ratings in fields" of turnip rape (*Brassica campestris*) and rape (*Brassica napus*) surveyed in Manitoba in 1973 and 1974; ratings indicate % of fields in each severity category

Severity category	Turnip rape			Rape		
	Staghead	Black spot	Stem blight	Staghead	Black spot	Stem blight
1973						
Trace	60	80	30	0	71	50
Slight	30	20	0	0	0	11
Moderate	10	0	0	0	0	0
Severe	0	0	0	0	0	6
% fields affected	100	100	30	0	71	67
1974						
Trace	53	23	6	0	73	9
Slight	41	6	18	0	0	9
Moderate	6	0	0	0	0	0
Severe	0	0	0	0	0	0
% fields affected	100	29	24	0	73	18

* No. fields examined in 1973 and 1974, respectively: turnip rape 10, 17; rape 18, 11.

Literature cited

1. Bernier, C. C. 1971. Disease of rapeseed in Manitoba in 1971. Can. Plant Dis. Surv. 52:108.
2. Platford, R. G., and C. C. Bernier. 1972. Diseases of rapeseed in Manitoba in 1972. Can. Plant Dis. Surv. 53:61