

Stem blight (Sclerotinia sclerotiorum) was present in traces only in north-east Saskatchewan in the Aylsham area, where in some years it has been conspicuous. It caused slight damage in some fields at Meadow Lake where it was responsible for some lodging following a heavy mid-season rain. Traces of a late root rot, caused by Fusarium spp., have been found. It causes a premature ripening-off of affected plants with a softening and bleaching of the bark of the stems. It is felt that this disease might increase with continued rape culture. Traces of aster yellows were reported from Shellbrook, Annaheim, Meadow Lake and Regina.

### CEREAL SMUTS IN WESTERN CANADA - 1960

W. Popp.<sup>1</sup>

Loose-smut infection averaged; **0.3** percent in Manitoba wheat fields. Infections ranged from 2 to 12.5 percent in Lee wheat and from a trace to 0.1 percent in Durum varieties. No infection was observed in Selkirk or Thatcher.

Bunt of wheat was not in evidence in field inspections. Carload-inspection records of wheat indicate that bunt contamination ("Smutty" cars) in Western Canada was moderate as compared to the past 10-year average. The disease was unusually scarce in Alberta Red Winter wheat; only 1 car graded "Smutty" in 1959 and none, thus far, in 1960.

Infection in barley fields averaged 1.1 percent. Loose smut was the most widespread, occurring in 73 percent of the fields examined with an overall average of 0.6 percent infection. Covered and false-loose smut were found in 22 and 23 percent of the fields with overall averages of 0.2 and 0.3 percent infection, respectively. False-loose smut was more common than usual. High moisture conditions, prevalent in 1959, probably resulted in better inoculation of the seed.

Loose and covered smut were not encountered in a random survey of oat fields. The smuts, however, may have been present in the relatively few fields that were sown with susceptible varieties,

**Table 1.** Smut in cereal fields of Manitoba - 1960

Cereal	Kind of smut	Per cent smut	
		Range	Mean
Wheat	Loose	<b>0-13</b>	<b>0.3</b>
	Bunt	<b>=</b>	<b>0.0</b>
Barley	Loose	0-8	0.6
	Covered	0-3	0.2
	False-loose	0-5	<b>0.3</b>
Oats	Loose and covered	--	0.0

<sup>1</sup> Plant Pathologist, Canada Agriculture Research Station, Winnipeg, Manitoba.

Table 2. Bunt of Wheat in Western Canada Aug. 1, 1959 to July 31, 1960

Class of wheat	Cars inspected	Cars graded "Smutty"	Percentage graded "Smutty"
Hard Red Spring	181,217	125	0.07
Amber Durum	13,964	6	0.04
White Spring	216	0	0.00
Alta. Red Winter	654	1	0.15
Garnet	142	2	1.41
Mixed wheat	95	0	0.00
All classes	196,288	134	0.07

Table 3. Bunt of Wheat in Western Canada August 1, 1960 to October 31, 1960.

Class of wheat	Cars inspected	Cars graded "Smutty"	Percentage graded "Smutty"
Hard Red Spring	39,262	15	0.04
Amber Durum	11,927	5	0.04
White Spring	68	0	0.00
Alta, Red Winter	81	0	0.00
Garnet	55	0	0.00
Mixed wheat	35	0	0.00
All classes	51,378	20	0.04

CANADA AGRICULTURE RESEARCH STATION, WINNIPEG, MANITOBA.