ERGOT IN CEREALS IN WESTERN CANADA IN 1956

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The incidence of ergot in cereals in Western Canada was estimated by means of surveys made in 1956. Summaries of the results were prepared for each of the Prairie Provinces by W. L. Gordon and W. Popp, Man., H. W. Mead, Sask., and W. P. Campbell, Alta. Their data are presented in Table 5. The results of similar surveys conducted in 1953, 1954, and 1955 appeared in P. D. S. 33:23-28; 34:30-32; and 35:29-31. For ease of comparison the percentage of fields with ergot found in the previous surveys is included at the end of Table 5.

There was a general decrease in the percentage of wheat and barley fields affected by ergot. The largest percentage of affected fields continued to be in Man. followed by Sask. and Alta. Ergot was present on cereals in tr. amounts in Man. In Alta. ergot occurred on wheat in the central part of the province but only in tr. amounts. The sole record from Alta. of ergot on barley was of one field which had a tr. amount at Lloydminster.

Although ergot was more prevalent on wheat and barley in Man. than in Alta. and Sask., it was present in most of the rye fields surveyed in each province. The Man. reports indicated tr. amounts of the disease whereas some Alta. rye fields were severely infected. In s. Alta. six fields examined were rated 2-tr. at Carmangay and Mossleigh, 2-mod. at Carseland and Strathmore, and 1-sev. /2 at Lethbridge (J. S. Horricks). The following ratings were recorded from 7/8 fields in central and n. Alta., 3-tr. 1-3%, 1-30%, 1-40%, 1-50% (W. P. C.) with mod. to heavy infections in experimental plots at Edmonton (A. W. Henry).

Ergot was reported on a number of grasses from Alta. and Sask. The detailed reports are given in the section for cultivated and other grasses. A summary of W. P. Campbell's 43 observations is as follows: Agropyron spp. 8, Bromus inermis 21, Calamagrostis spp. 4, Elymus innovatus 7, Festuca rubra 2, Phleum pratense 1. Ergot occurred in a high proportion (10/15) of fields of Bromus sp. observed in Sask. and on brome grass planted on roadsides (H. W. Mead).

Man. had the highest percentage of wheat and barley fields affected by ergot but in all three provinces the disease occurred only in tr. amounts on these crops. A high percentage of the rye fields in each province was affected by ergot but sev. infections were reported only from Alta., the province with the lowest percentage of ergot in wheat and barley.

Table 5. Fields of Cereals inspected for Ergot by Province and Crop District in 1956

Crop District	Wheat						Barley						Rye					
	Man.		Sask.		Alta.		Man.		Sask.		Alta.		Man.		Sask.		Alta.	
	Total	Ergot	Total	Ergot	Total	Ergot	Total	Ergot	Total	Ergot	Total	Ergot	Total	Ergot	Total	Ergot	Total	Ergot
1	-		13						2	-					1			
2	8		15				9		3						0			
3	12	4	29				11	4	10						0			
4	3	2	13				2		1				1	1	2	2		
5	-		16		26		1		5	1	4				0		1	
6	-		31	5	40	2	1		2		21				1	1		
7	2		31		22	1	2		0		5				0		4	4
8	5	1	18	4	22		5		2	1	38		1	1	0			
9	6	1	28	2	0		7		3		0				1	1		
10	3				26		8				21	1						
11	3				6	1	5				23							
12	2				2		1				12							
13	-				0		-				0							
14	-				2		-				22						2	2
15					10						21							
16					59						91						1	1
17					20						12							
B.C.*					21						19							
Total	44	8	194	11	256	4	52	4	28	2	289	1	2	2	5	4	8	7
% Ergot																		
1956		18.2		5.7		1.6		7.7		7.1		0.3		100		80.0		87.5
1955		28.6		3.9		4.7		16.7		8.9		3.0		95.5		83.3		52.6
1954		11.9		2.1		3.1		26.1		11.1		5.3		100		50.0		17.9
1953		7.0		10.4		13.3		7.1		20.7		7.2		100		66.7		53.4

*Peace River Block of B.C.