LATE BLIGHT (Phytophthora infestans) was seen in only 2/522 fields inspected in B. C. (N.M.). It was not recorded from the 3 Prairie Provinces (R.P.S., A.C., D.J.P.). Sl. infection was recorded at Upsala and Dorion in n.-w. Ont. (D,J.P.) and it was prevalent in Dufferin Co, where Sebago was the variety chiefly affected (H.W.W.). Blight incidence was very low in the Guelph, Ont. district (E,W. A.) and scattered infections on susceptible varieties were seen in e, Ont. (E.H.P.), In Que. it was reported in 22% of the fields inspected compared with 50% in 1958 (B.B.).

Epidemiology of Potato Late Blight in Quebec - 1959

Henri Généreux

A very light infection of potato late blight was first recorded July 28 on Kennebec in Nicolet Co. The disease appeared later than in previous years, due to the unusually dry, warm weather,that prevailed throughout July. During the first week of August, traces of the disease were recorded in Portnewf and Labelle counties and, by the middle of the month, light infections were observed in Napierville, Chicoutimi and Bonaventure counties.

The prolonged summer drought ceased by the second week of August and warm, humid and rainy conditions persisted throughout the Province, except in the Gasp6 Peninsula where precipitation was below normal. Temperatures averaged from two to four degrees above normal although there were small deficiencies along the St. Lawrence valley below Québec. The conditions which prevailed during August were favorable for sporulation and spread of late blight, Incidentally, towards the end of August, most fields in Labelle county were severely infected, The disease had made little progress in Lake St. John and Chicoutimi districts. Unsprayed fields were severely infected in Portneuf and Wolfe counties, Traces of blight were also recorded in Lennoxville, Ste. Anne de la Pocatiere, St-Arsène, Temiscouta Co., and l' Alverne, Bonaventure Co.

The disease progressed rapidly until September 10, favoured by temperature and humidity. It was reported as being widespread and severe in Labelle, Joliette, Eastern Townships, Portneuf, Lake St. John and Chicoutirni, Kamouraska, Témiscouata and Carleton counties, A few scattered fields were found infected from Rimouski to Gasp6 and in the Baie Comeau region.

A very cold spell between September 14 and 18 brought the mercury down to freezing, killing the foliage in many regions and checking the spread of the disease. Many farmers had also applied vine killers to reduce damage to their potato crop.

By September 15, tuber rot had been found in Laval and Kamouraska counties. At harvest time, tuber rot was sometimes severe in wet and heavy soils whereas only traces were found in sandy soils in the most severely affected regions.

Blight wits first reported in N.B. on July 13 in a 2-acre field of Keswick at Plaster Rock, Victoria Co. A few other isolated cases were reported in late July and early Aug. but extremely dry weather checked the development of the disease. It did not gain any headway until late Aug, following a prolonged period of heavy rainfall which hampered spraying. By Sept, 6 late blight could be found in many fields in the St. John River Valley, Most seed fields and commercial table stock fields were top-killed but tuber rot, in some instances, caused serious losses. Blight was very prevalent in the non-commercial potato growing areas of the province (G.C,R., S,F.C.). A mod, infection was reported on July 6 in N.S. This is a week earlier than it has ever been reported previously. However, it did not become general throughout the province until Aug, 10. after which date it reached serious proportions. It was found in 160/263 fields inspected, Despite a vigorous spraying schedule the losses from late blight in the commercial potato gqowing areas would be between 20 and 30% with some fields a complete loss. Some instances of heavy losses from tuber rot in storage have been reported (R.C.L.). Late blight appeared in P.E.I. about July 15 and caused considerable damage in inadequately sprayed fields (G.C.R.).

Distribution by Provinces of Physiologic Races of Phytophthora infestans in Capada in 1959

K.M. Graham

During the fall of 1959, 113 samples of blight-infected potato tubers and tomato fruits were received from commercial fields and National Potato Trial plots located in five provinces, A summary of the races received is given in Table 11.

Table 11 Determinations of Races of P. infestans in 1959

Race	N.S.	N.B.	P.E.I.	Que.	B.C.	Total
1	6	-	7	-	-	13
3	-	-	-	-	2	2
4	12	6	17	21	1	57
1 + 4*	1	1	1	-	5	8
1.4	3	14	1	9	-	27
1.3.4	1	-	1	-	-	2
1.2.3.4	-	-	-	2	-	2
1.2.3.4.5	-	-	-	1	1	2
Total	23	21	27	33	9	113

* Indicates a mixture of races 1 and 4