fruit infection. Scab-free fruit was produced in plots sprayed with organic fungicides. Reports from the apple growing districts of Ont. indicate that scab was generally less important than usual and that spray programs were generally effective (G.C.C.). Specimens were received from widely separated areas in Que. (D. Leblond). Infection was 20% on Wealthy at Riviere - x Chiens, 30% on Wealthy and 50% on Fameuse at St. Pierre Isle Orleans, Que. (L.J. Coulombe). Scab was generally well controlled in N.B. in 1958 but inadequate or poorly timed spray programs resulted in some sev. infections. Pin-point scab was widespread at harvest. Some unsprayed trees were defoliated by July (S.R. Colpitts, J.L. Howatt). Apple scab was very sev. in N.S. in 1958. The first ascospore discharge was recorded 24 April and the first infection period 28-30 April. Primary scab lesions were first observed 20 May. Five infection periods occurred in May and timing of sprays was made difficult. June was fairly dry with only 1 mod. and 1. sev. infection period while in July there were 2 mod. and 2 sev. infection periods. Considerable late season scab developed in many commercial orchards particularly on McIntosh (R.G. Ross).

Ascospore discharge of the Apple Scab Fungus in Prince Edward Island in 1958

Carl Willis

Studies on the discharge of ascospores by the apple scab fungus Venturia inaequalis (Cke.) Wint. in relation to primary spring infection were begun on 6 May, 1958 and continued for a sixty-day period. A farm orchard of about twenty trees, situated near Charlottetown and comprised of several varieties, was chosen for the project. These trees, unsprayed in 1957, had been severely attacked by the scab fungus with the result that the ground was littered with leaves in which the fungus had over-wintered. The smeared slide technique was employed in detecting and determining the relative extent of ascospore discharges.

Ascospore discharge took place over a 20-day period beginning 18 May and ending 6 June. Four periods of appreciable discharge took place, the first extending over a 3-day period, 18 May to 20 May the second and heaviest over the 2-day period 25 May to 26 May the third lasting but one day, 2 June and the fourth lasting but 1 day, 6 June. Trace discharges were found on 6 other days. All periods of discharge were marked by abundant rainfall and near normal temperatures. The first apparent infection showed on leaves of unsprayed trees on 6 June following a 20-day germination period marked by frequent showers and cool nights.

Table 14

Ascospore Discharge[1]

Period of Discharge	Number of Ascospores
May 18 to May 20	305
" 21	Trace
" 23	Trace
" 25 to May 26	742
" 28	Trace
" 29	Trace
June 2	573
" 6	470
" 14	Trace
" 22	Trace

[1]Figures are relative, being the total number of ascospores observed on ten high power microscope fields of the specimen slides.

In general, apple scab was severe in unsprayed and poorly sprayed orchards in the P.E.I. in 1958.

BARK DECAY. At Chatham, N.B. 13/36 trees were girdled by organisms apparently originating in compost piled around the bases of the trees (S.R.C.).

HAIL. An area of about 1 sq. mi. containing 20,000 trees at Rougemont, Que. was affected by a heavy hail storm on 26 July. On most trees about 50% of the fruit was cracked and rendered unsaleable (R. Crête).

RUSSETING. The effects of frosts and spray injuries were widespread in N.B. in 1958 (S.R.C.).

SOGGY BREAKDOWN (non-parasitic). McIntosh and Cortland samples at the retail level at Jonquiere, Que. in March were affected (D. Leblond).

MAGNESIUM DEFICIENCY was seen in 6 Que. nurseries. In 2 of these, on light soils, the condition was sev. at the end of the season (J. Ringuet).