

In the Niagara Peninsula, Ont., heavy fall rains contributed to high winter mortality of young peach and cherry trees. Loss of trees through crown injury was extensive in poorly drained soils. Otherwise the winter of 1945-46 was favourable for orchard fruits. The minimum temperature of +5°F. occurred in December.

Orchard dormant sprays were generally applied during the week of March 18. Excellent conditions prevailed and growers were able to apply these sprays to good effect. Spring development of the trees was slightly in advance of average. The bloom period for sweet cherries, from April 22 to May 4, was fair and moderately cool and no loss from blossom blight occurred; light frosts on April 27-28 caused some browning of the petals, but did not affect the set or development of the fruit.

Sour cherries, peaches, plums and pears were in bloom April 28 to May 11. Frost damage was more extensive on sour than on sweet cherries, affecting the set and causing some pitting and malformation especially on Richmond. Stem rot of sour cherries and plums was negligible, a small percentage developing after rain and high humidity on May 11.

Mature ascospores of *Venturia inaequalis* were found on April 9, and a light discharge occurred on April 15. The first potential infection period was during the prolonged rain of May 4 when apple bloom was at the full pink stage. The foliage was continually wet for 16 hours but low temperatures of 46-48°F. did not favour scab development. Heavy ascospore discharges, of no importance because of unfavourable moisture relations, occurred on several occasions during bloom. On May 15-16, almost continuous rain for 20 hours, with moderate temperatures of 60-62°F., allowed abundant infection, which was apparent ten days later. Secondary infections developed freely in June, foliage scab increasing as much as 62% on unsprayed trees and many leaves being completely overrun. Infection of the fruit was conspicuous at this time especially around the calyx end, which suggested that it occurred during the infection period of May 15-16 before the protective calyx spray was applied. Considerable mid and late season pin-point infection developed on the fruit.

Leaf spot of sour cherries was of very little importance until late in the season when a moderate infection hastened leaf fall.

Late blight of tomatoes developed rapidly and caused severe losses in many plantings during a few days of humid weather in the latter part of August. In some plantings the crop was a total loss. Most severe losses occurred in fields set with southern grown plants. Drier conditions in September checked the spread of the disease.

Generally fair weather during peach harvest kept losses due to brown rot at a minimum (G.C. Chamberlain).

At Ottawa, Ont., there was permanent snow cover from Nov. 15, but the depth of snow was never more than about 15 in. December was bright and cold with little snow; January was close to average in mean temperature, but was otherwise normal. The ground cleared quickly in March, temperatures being high almost every day from Mar. 13 when the ground became largely uncovered; a maximum of 78°F. was recorded on Mar. 28, and the mean temperature for the month was 12° above average. The first and last weeks of April were cool and wet, and the first three weeks of May were cool. Consequently the early gain in growth of vegetation was lost, much as in 1945, as the phenological data show. However, there was little damage from late frosts, the most severe being 27°F. on May 3, and planting was not as seriously delayed as in 1945.

A heavy storm gave 3 in. of rain on June 17, but otherwise June and July were close to the average in all respects. Late June and mid July were warm and dry, but there was no serious drought. August was cool, cloudy and wet, encouraging many foliage diseases, but spells of warm, dry weather in mid September and early October aided harvesting of late crops. From Oct. 10 onward the fall was decidedly wet (D.B.O. Savile).

The main features of the weather in Quebec in 1946 were a rainy and cold spring, a dry and cool summer, and a dry, mild, sunny fall. These conditions resulted in a very low incidence of diseases in most crops. Seeding was considerably delayed, but the crops matured normally on account of the open fall. The first killing frost occurred Oct. 8. Cereal rusts were virtually absent in some districts and developed late in all others.

Late blight of potatoes was absent in the province except in the Lake St. John district and South Gaspé Co. On tomatoes late blight appeared very late and the infection was slight throughout the province.

Apple scab was easily controlled at Ste. Anne de la Pocatière and no ascospore discharge was observed during the whole season in spite of the abundance of perithecia on the leaves (R.O. Lachance).

The summer and early fall were very dry in N.B.; consequently many of the common plant diseases were not observed (S.F. Clarkson).

The spring opened in N.S. with very moist soil, and planting was somewhat delayed on heavy land. April precipitation was above normal; that of May a little below normal. The last ten days of May, and June and July were dry with a total of 4.25 in. in place of a normal of about 7 in. for the period. Crops suffered from drought during July and wilting was apparent even in some apple orchards on light soils. Boron deficient soils caused symptoms to be produced on apples and some root crops. The balance of the season was reasonably favourable for crop production.

Late growth in potato vines created a demand for vine-killing chemicals. No injury or tuber blemish was observed from their use (J.F. Hockey).