

years. Thereafter it appeared throughout the province and an epiphytotic developed. Some inadequately sprayed fields were destroyed while the tubers were still below grade size and were consequently not harvested. Other fields were severely defoliated. The defoliation was reflected in reduced yields and further reductions were caused by late blight tuber rot. On the other hand, a well-planned spray program followed by the application of a top killer resulted in high yields of healthy tubers. The weather that favored the disease was also favorable for potato production (L.C. Callbeck).

The winter of 1957-58 in N.S. was one with little snow cover. Precipitation remained average and temperatures were above average. Soil moisture was favorable in the spring but was in deficit in July. Spring rains were favorable for fungus infections. Apple scab and diseases caused by Botrytis built up heavy infections in untreated crops. Late blight appeared early in July and, favored by weather conditions in Aug. and Sept., did much damage in poorly sprayed fields. Pin-point scab was more prevalent than usual by autumn. It was best controlled by a late Bordeaux spray (J. F. Hockey).

Phenological Data, 1958

First anthesis dates for plants recorded at Ottawa in 1958 were somewhat earlier than average for the first part of the year but from mid-May to the end of the season the majority of plants flowered later than usual. This change in the earlier trend in time of flowering was probably due to the cool and wet weather which persisted during the latter part of the growing season. Table 1 shows the number of years of observation on each plant, the dates of first anthesis in 1958 and the departure in days from the average date of previous years (I.J. Bassett).

On the whole, the 1958 season at Winnipeg, Saskatoon and Edmonton was somewhat early. An exception to this general pattern may have been the latter part of the season at Winnipeg where the wheat matured eleven days later than the average date. This may be attributed to relatively cool conditions during the month of July at Winnipeg (R.C. Russell).

Table 1. Phenological Data at Ottawa, Ontario - 1958

<u>Species</u>	<u>No. of Years of Observation</u>	<u>First Dates of Anthesis 1958</u>	<u>No. of Days Departure from Average</u>
<u>Alnus rugosa</u>	7	29/3	7E
<u>Acer saccharinum</u>	23	2/4	8E
<u>Populus tremuloides</u>	18	11/4	6E
<u>Corylus cornuta</u>	6	12/4	3E
<u>Populus grandidentata</u>	7	16/4	6E
<u>Ulmus americana</u>	23	18/4	7E
<u>Acer rubrum</u>	7	18/4	7E
<u>Poa annua</u>	7	21/4	4E
<u>Acer negundo</u>	18	23/4	12E
<u>Betula papyrifera</u>	7	23/4	8E
<u>Prunus pensylvanica</u>	17	13/5	1E
<u>Fagus grandiflora</u>	6	13/5	3E
<u>Fraxinus americana</u>	6	15/5	2L
<u>Celtis occidentalis</u>	6	17/5	5L
* <u>Acer saccharum</u>	23	No flowering on the marker trees this year	
<u>Alopecurus pratensis</u>	7	18/5	4L
<u>Smilacina stellata</u>	17	21/5	1L
<u>Quercus macrocarpa</u>	7	21/5	2E
<u>Pinus sylvestris</u>	23	22/5	5E

<u>Species</u>	<u>No. of Years of Observation</u>	<u>First Dates of Anthesis 1958</u>	<u>No. of Days Departure from Average</u>
<u>Poa pratensis</u>	7	30/5	5E
<u>Anemone canadensis</u>	17	30/5	2L
<u>Rumex acetosella</u>	7	3/6	N
<u>Juglans nigra</u>	7	12/6	4L
<u>Dactylis glomerata</u>	7	17/6	5L
<u>Carya cordiformis</u>	14	18/6	5L
<u>Sambucus nigra</u>	7	19/6	3L
<u>Bromus inermis</u>	17	24/6	5L
<u>Agropyron repens</u>	5	24/6	1E
<u>Phleum pratense</u>	17	30/6	5L
<u>Rhus typhina</u>	12	1/7	5L
<u>Tilia americana</u>	17	7/7	1L
<u>Catalpa ovata</u>	15	17/7	14L
<u>Ambrosia trifida</u>	7	26/7	14L
<u>Cephalanthus occidentalis</u>	13	27/7	8L
<u>Artemisia vulgaris</u>	5	4/8	7L
<u>Ambrosia artemisiifolia</u>	6	7/8	1L
<u>Cassia hebecarpa</u>	11	12/8	8L
<u>Hamamelis virginiana</u>	15	11/9	9E

* No specimens of Acer saccharum flowered in the Arboretum, Canada Experimental Farm, Ottawa in 1958 or in 1957. (I.J. Bassett)

Table 2. Phenological Data at Winnipeg, Saskatoon and Edmonton - 1958

Species	Winnipeg		Saskatoon		Edmonton	
<u>Pulsatilla ludoviciana</u>	--	--	13/4	6E	17/4	12E
<u>Populus tremuloides</u>	5/4	20E	16/4	9E	20/4	6E
<u>Corvulus rostrata</u>	--	--	--	--	25/4	6E
<u>Shepherdia canadensis</u>	--	--	--	--	25/4	11E
<u>Phlox hoodii</u>	--	--	30/4	1L	--	--
<u>Acer negundo</u>	14/4	7L	6/5	1E	5/5	2L
<u>Salix petiolaris</u>	--	--	5/5	2E	1/5	4E
<u>Betula papyrifera</u>	--	--	8/5	3E	1/5	6E
<u>Thermopsis rhombifolia</u>	--	--	8/5	3E	--	--
<u>Prunus americana</u>	9/5	5E	--	--	--	--
<u>Amelanchier alnifolia</u>	11/5	7E	11/5	3E	12/5	5E
<u>Prunus pensylvanica</u>	--	--	14/5	5E	13/5	5E
<u>Viola rugulosa</u>	--	--	11/5	10E	23/5	1L
<u>Smilacina stellata</u>	20/5	3E	19/5	5E	26/5	N
<u>Crataegus chrysocarpa</u>	21/5	2E	23/5	5E	21/5	9E
<u>Prunus melanocarpa</u>	22/5	3E	19/5	9E	22/5	6E
<u>Cornus stolonifera</u>	31/5	1E	25/5	5E	26/5	7E
<u>Viburnum lentago</u>	31/5	3E	--	--	--	--
<u>Elaeagnus commutata</u>	--	--	26/5	9E	28/5	8E
<u>Lonicera glaucescens</u>	--	--	26/5	11E	28/5	11E
<u>Hedysarum americanum</u>	--	--	29/5	9E	--	--
<u>Thalictrum turneri</u>	--	--	--	--	29/5	6E
<u>Maianthemum canadense</u>	--	--	--	--	7/6	2L
<u>Achillea lanulosa</u>	--	--	5/6	5E	--	--
<u>Anemone canadensis</u>	3/6	3E	9/6	2E	13/6	10E

Species	Winnipeg		Saskatoon		Edmonton		
<u>Viburnum pubescens</u>	8/6	2E	--	--	--	--	
<u>Galium boreale</u>	--	--	5/6	9E	13/6	8E	
<u>Rosa alcea</u>	--	--	18/6	2E	2/6	7E	
<u>Campanula petiolata</u>	--	--	15/6	7E	9/7	1E	
<u>Bromus inermis</u>	21/6	N	12/6	12E	25/6	2E	
<u>Gaillardia aristata</u>	--	--	15/6	9E	--	--	
<u>Zizia aurea</u>	9/6	2E	--	--	--	--	
<u>Spiraea alba</u>	--	--	3/7	2L	--	--	
<u>Chrysopsis hirsutissima</u>	--	--	3/7	2L	--	--	
<u>Symphoricarpos occidentalis</u>	30/6	2L	3/7	N	7/7	2L	
<u>Chamaenerion spicatum</u>	--	--	6/7	3L	10/7	2L	
<u>Lactuca pulchella</u>	--	--	12/7	3L	--	--	
<u>Phleum pratense</u>	--	--	--	--	10/7	3L	
<u>Apocynum androsaemifolium</u>	--	--	--	--	14/7	1L	
<u>Solidago missouriensis</u>	--	--	10/7	5E	--	--	
<u>Solidago canadensis</u>	--	--	--	--	20/7	1E	
<u>Grindelia perennis</u>	--	--	16/7	7E	--	--	
<u>Oligoneuron canescens</u>	--	--	19/7	7E	--	--	
<u>Aster conspicuus</u>	--	--	--	--	25/7	1L	
<u>Aster ericoides</u>	--	--	27/7	2E	--	--	
<u>Aster laevis</u>	--	--	29/7	N	25/7	5E	
Wheat:	sown	25/4	3E	8/5	7L	29/4	2E
	emerged	11/5	1L	20/5	7L	9/5	2E
	headed	28/6	3E	30/6	2E	12/7	10L
	mature	19/8	11L	9/8	1E	18/8	1E