Phenological Data, 1956

In contrast with 1955, the dates of first anthesis for nearly all plants under observation at Ottawa were later than usual. Five years ago phenological observations were extended to several additional plants. To bring the data together and yet provide a basis for comparison, the number of years that observations have been made is shown in Table I as well as the dates of first anthesis in 1956 and the departure in days from the average date of previous years (I. J. Bassett).

From the data presented in Table 2, it appears that the season opened about 2 weeks late at Winnipeg. From mid-June until the end of July the delay in flowering amounted to only a few days. Similarly wheat was sown a week late, but the crop was harvested about the normal date.

At Saskatoon the season was about 2 weeks late in the first half of May, but then on growth was more rapid and plants came into flower at about the normal date during mid-season and several days before the usual date during the latter part of the season. Wheat was sown 10 days late and was harvested only 4 days late.

Around Edmonton the season was somewhat late at the beginning of the season but from mid-season on most of the native plants bloomed before the normal date. However, wheat sown 6 days late was harvested 8 days later than usual (R. J. Russell).

If the data given in these reports are analyzed it is evident that after 1947 the date of seeding for wheat at Saskatoon has been noticeably later than it was up to that year. From 1936 to 1947 (omitting 1944) the seeding date ranged from April 10 (1946) to 4 May (1942) and averaged 23 April. From 1948 to 1956 it ranged from 30 April (1949) to 13 May (1955) and averaged 8 May. Thus seeding has been on the average 15 days later in the last 9 years than formerly. This delay has been occasioned in part by the lateness of the season between 1948 and 1956 when anthesis of the flowers of Populus tremuloides was delayed 10 days and that of Acer negundo by 4 days.

According to Mr. H. Gerrie, Field Husbandry Department of the University of Saskatchewan, experiments conducted at Saskatoon 1929-1949 have shown that the yield of wheat from plots sown on 1 May exceeded that from plots sown on 15 May in 10 out of the 21 years, was less in 10 other years and in 1947 the yield at both dates was the same. From these data Dr. Russell concludes that the average optimum date for seeding is about 8 May (I. L. Conners).

Table I. Phenological Data at Ottawa, Ont. in 1956

Species	Years Observed	Date of First Anthesis	Departure from Average in Days
Alnus rugosa	5	6/4	1L
Acer saccharinum	21	11/4	1L
Corylus cornuta	4	23/4	9L
Populus tremuloides	16	27/4	11L
Poa annua	5	1/5	5L
Populus grandidentata	5	5/5	12L
Ulmus americana	21	6/5	12L
Acer rubrum	5	8/5	12L
Acer negundo	16	12/5	7L
Betula papyrifera	5	14/5	12L
Acer saccharum	19	21/5	13L
Prunus pensylvanica	15	28/5	15L
Fagus grandifolia	4	28/5	12L
Alopecurus pratensis	5	28/5	15L
Fraxinus americana	4	29/5	15L
Smilacina stellata	15	31/5	12L
Quercus macrocarpa	5	4/6	13L
Pinus sylvestris	21	5/6	9L
Poa pratensis	5	12/6	15L
Rumex acetosella	5	12/6	10L
Anemone canadensis	15	12/6	10L
Juglans nigra	5	14/6	8L
Dactylis glomerata	5	17/6	7L
Carya cordiformis	12	23/6	11L
Bromus inermis	15	23/6	5L
Phleum pratense	15	30/6	6L
Agropyron repens	3	1/7	6L
Rhus typhina	10	9/7	15L
Tilia americana	15	10/7	5L
Catalpa ovata	13	17/7	17L
Ambrosia trifida	5	20/7	9L
Cephalanthus occidentalis	11	30/7	13L
Ambrosia artemisiifolia	4	6/8	2E
Artemesia vulgaris	3	6/8	12L
Hamamelis virginiana	13	9/9	11E

(I. J. Bassett)

Table 2. Summary of Phenological Data Taken at Winnipeg, Saskatoon, and Edmonton in 1956

Species	Winnipeg		Saskatoon		Edmonton	
Corylus rostrata	--	--	--	--	10/5	6L
Shepherdia canadensis	--	--	--	--	10/5	N
Pulsatilla ludoviciana	--	--	24/4	5L	--	--
Populus tremuloides	6/5	10L	9/5	14L	2/5	6L
Phlox hoodii	--	--	12/5	13L	--	--
Salix petiolaris	--	--	16/5	9L	4/5	3E
Acer negundo	21/5	14L	16/5	8L	15/5	12L
Betula papyrifera	--	--	17/5	6L	13/5	5L
Thermopsis rhombifolia	--	--	15/5	4L	--	--
Prunus americana	29/5	15L	--	--	--	--
Amelanchier alnifolia	31/5	13L	22/5	7L	22/5	5L
Hierochloe odorata	--	--	25/5	5L	--	--
Prunus pensylvanica	--	--	25/5	5L	20/5	1L
Viola rugulosa	--	--	28/5	6L	22/5	N
Smilacina stellata	--	--	22/5	3E	28/5	1L
Viburnum lentago	10/6	7L	--	--	--	--
Prunus melanocarpa	6/6	12L	29/5	1L	30/5	1L
Crataegus chrysocarpa	4/6	12L	31/5	3L	28/5	3E
Cornus stolonifera	--	--	1/6	2L	3/6	N
Thalictrum turneri	--	--	--	--	4/6	2E
Elaeagnus commutata	--	--	6/6	1L	2/6	3E
Lonicera glaucescens	--	--	8/6	N	26/5	13E
Hedysarum americanum	--	--	14/6	5L	--	--
Achillea lanulosa	--	--	8/6	2E	--	--
Anemone canadensis	--	--	14/6	3L	13/6	11E
Viburnum pubescens	14/6	4L	--	--	--	--
Galium boreale	--	--	16/6	1L	13/6	11E
Maianthemum canadense	--	--	--	--	28/5	7E
Rosa alcea	--	--	18/6	2E	4/6	9E
Bromus inermis	23/6	2L	19/6	5E	18/6	10E
Campanula petiolata	--	--	24/6	1L	2/7	8E
Gaillardia aristata	--	--	2/7	7L	--	--
Spirea alba	--	--	24/6	7E	18/6	15E
Chrysopsis hirsutissima	--	--	8/7	5L	--	--
Symphoricarpos occidentalis	1/7	4L	27/6	6E	10/7	6L
Chamaenerion spicatum	--	--	24/6	9E	3/7	5E
Psoralidium argophyllum	--	--	8/7	3E	--	--
Phleum pratense	--	--	--	--	6/7	1E
Apocynum androsaemifolium	--	--	--	--	5/7	8E
Solidago missouriensis	--	--	9/7	7E	--	--

Species	Winnipeg		Saskatoon		Edmonton	
Solidago canadensis	28/7	6L	--	--	23/7	2L
Grindelia perennis	--	--	15/7	8E	--	--
Oligoneuron canescens	--	--	22/7	4E	--	--
Aster conspicuus	--	--	--	--	23/7	1E
Aster laevis	--	--	24/7	6E	21/7	9E
Wheat -						
Seeding	4/5	7L	10/5	10L	7/5	6L
Emergence	18/5	9L	24/5	12L	15/5	4L
Heading	27/6	4E	8/7	6L	--	--
Maturity	7/8	N	14/8	4L	27/8	8L