## Phenological Data - 1949

The records were taken this year by B. Peturson at Winnipeg, R.C. Russell at Saskatoon, and S.G. Fushtey at Edmonton. They show that the season was from five to ten days early at Winnipeg up to the middle of June. At Saskatoon flowers bloomed at or close to their average dates throughout the season. At Edmonton, the season was somewhat early up to the end of May, lagged slightly in June, and finished about normal. The wheat, of which records were kept, was sown at widely different dates at all three places, so that comparisons relating to it are rather difficult to make. At Winnipeg the wheat was sown nine days earlier than usual and was harvested twelve days earlier than usual. At Saskatoon wet, cool weather held up the harvest, so that the wheat was harvested 16 days late although it developed throughout most of the growing season only five or six days behind the normal. At Edmonton wheat sown 13 days late gained several days and was harvested one week later than usual (R.C. Russell).

Anthesis dates at Ottawa, with number of days departure from average, for 8 plants from the main list were as follows:

Populus tremuloides	13/4	3E	Anemone canadensis	2/6	2E
Acer Negundo	1/5	2L	Bromus inermis	15/6	5 <b>E</b>
Prunus pennsylvanica	9/5	5E	Phleum pratense	20/6	5E
Smilacina stellata	15/5	4E	Solidago canadensis	3/8	3L

Anthesis dates for marker plants at Ottawa, with the number of days departure from average, were as follows:

Acer saccharinum	6/4	5E	Carya cordiformis	10/6	3E
Ulmus americana	22/4	4E	Tilia americana	3/7	4E
Acer saccharum	4/5	4E	Polygonum cuspidatum	3/9	1L
Pinus sylvestris	25/5	4E	Hamamelis virginiana	19/9	9E

At Ottawa the spring season opened, with the flowering of Acer saccharinum, five days ahead of average. Throughout spring and summer the season continued from three to four days earlier than average (W.H. Minshall).

## SUMMARY OF PHENOLOGICAL DATA TAKEN AT WINNIPEG, SASKATOON, and EDMONTON, IN 1949

And the second of the second o	Winn	ipeg	Sask	atoon	Edmo	nton
Pulsatilla Ludoviciana	24		17/4	N	C40 444	W4 500
Populus tremuloides	20/4	5 E	24/4	1 L	19/4	5 E
Phlox Hoodii		***	29/4	4 L	800 mag	data enue
Salix petiolaris		Cred (cod)	4/5	2 L		<b>***</b>
Acer Negundo	29/4	8 E	7/5	1 L	25/4	7 E
Betula papyrifera		400 000	10/5	1 L	28/4	10 E
Thermopsis rhombifolia		ANY 014	10/5	N		
Prunus americana	4/5	9 E		mm <sup>1</sup>		
Amelanchier alnifolia	7/5	9 E	14/5	1 L	10/5	5 E
Hierochloe odorata			17/5	N	-	
Prunus pennsylvanica	12		20/5	1 L	12/5	5 E
Viola rugulosa			22/5	1 L	16/5	4 E
Smilacina stellata	16/5	7 E	24/5		26/5	N
Prunus sp. (Chokecherry)	17/5	10 E	28/5		21/5	5 E
Crataegus sp. (Hawthorn)	16/5	lo E	28/5		<b>191) 440</b>	with state
Viburnum Lentago	29/5	6 E	<b>6</b>	(A)		
Cornus sp. (Dogwood)	20/5	7 E	30/5	1 L	28/5	3 E
Elaeagnus commutata			4/6	1 L	30/5	5 E
Lonicera glaucescens	~	****	8/6	1 L	31/5	8 E
Viburnum trilobum	·					
Viburnum pubescens	3/6	6 E		~~	595 <b>66</b>	100 (40)
Anemone canadensis	2/6	5 E	10/6	1 L	25/6	lE
Achillea lanulosa			10/6	īĪ	29/6	3 L
Diholcos bisulcatus		***	11/6	īī	<u> </u>	
Galium boreale	-		13/6		20/6	?
Rosa alcea		51 A	17/6			1
Gaillardia aristata			23/6	1 L	um cab	
Campanula petiolata			23/6	N -	au 149	-
Bromus inermis	13/6	8 E	24/6	N .	29/6	2 L
Chrysopsis hirsutissima			29/6	N		
Spiraea alba			2/7	î L		
Symphoricarpos occidentalis			4/7	īī	6/7	2 L
Psoralidium argophyllum	-		10/7	N		
Phleum pratense				71	8/7	1 L
Lactuca pulchella			9/7	N	11/7	2 E
Chamaenerion spicatum			7/1		11/7	1 L
Agastache anethiodora			<del></del>		8/7	3 E
Cirsium Flodmanii			15/7	N		
Solidago missouriensis			15/7	l L		
Solidago canadensis		1			19/7	1 L
Grindelia perennis			23/7	1 E	±7/1	لداد بل
Oligoneuron canescens		Om (**)	25/7	N	-	
Aster ericoides			28/7	N		
Aster ericoides Aster laevis			30/7	N	30/7	1 E
	16/4	9 E	30/4	5 L	$\frac{30}{12}$	13 L
_ ·	<b>10/</b> *	, <u>u</u>	16/5	6 L	20/5	10 L
emerged headed	17/6	11 E	6/7	6 L	5/7	3 L
harvested	24/7	12 E	22/8	16 L	22/8	7 L
narvested	24/1	TC D	22/0	TO TI	~~/ 0	( +