from Ayer's Cliff, Que., in meadow sod (larvae only) from St. Vallier, Que., and from soil near a maple tree on the Central Experimental Farm, Ottawa. The basket-headed nematode, Carcharolaimus teres Thorne, 1939, was found in wheat soil from Brandon, Man., and in riverside sod from north of Taber, Alta. Tylencholaimellus magnidens Thorne, 1939, was found in wheat soil from north of Carmel, Sask., and Tylencholaimellus striatus Thorne, 1939, in a clover field at Hazeldean, Ont. Some incidental findings included Amphidelus sp. from apple soil at Kelowna, B.C., Dorylaimellus sp. from soil in apple orchard at Osoyoos, B.C., Diphtherophora sp. in apple soil and from near a maple tree on the Central Experimental Farm, Ottawa, and in apple orchard soil from Point Pelee, Ont. Triplonchium sp. was found near a tamarack tree at Pierce's Corners, Ont., Wilsonema sp. from strawberry soil at Keating, B.C., and Paraphelenchus sp. from apple soil at Oliver, B.C., and from clover soil at Hazeldean, Ont.

Records of predacious nematodes included Mononchus parabrachyuris Thorne, 1924, in clover soil from Merivale, Ont., Mononchus brachyuris (Buetschli, 1873) Cobb, 1917, in wheat soil at Coaldale and Tyrs, Alta., and at East Winnipeg, Man., in soil from Harrow and Blackburn, Ont., and in lawn soil from Agassiz, B.C. Mononchus papillatus (Bastian, 1865) Cobb, 1916, was found in soil from Hornepayne and Blackburn, Ont., from Agassiz, Vancouver and Ladner, B.C. Mononchus sigmaturus Cobb, 1917, was found in greenhouse soil with roses at Moncton, N.B., and in celery soil from Armstrong, B.C. Mononchus longicaudatus (Cobb, 1893) Cobb, 1916, was recorded from apple orchard soil from Kelowna, B.C. Aporcelaimus vorax Thorne & Swanger, 1936, was recorded from orchard soil at Kentville, N.S., lawn sod at Agassiz, B.C., and as probably attacking carrot rust fly larvae at Bradford, Ont.

Records of parasites and associates of insects included Spherularia bombi Dufour, 1837, from abdominal cavity of Bombus ternarius Say at Saskatoon, Sask.; Aphelenchulus reversus Thorne, 1935, from abdominal cavity of Dendroctonus pseudotsugae Hopk., at Vernon, B.C.; Bradynema rigidum (Van Siebold) Zur Strassen, 1892, from abdominal cavity of Pseudohylesinus nebulosus at Vernon, B.C.; Aphelenchoides latus Thorne, in frass of Dendroctonus pseudotsugae Hopk., at Vernon, B.C.; and Rhabditis obtusa Fuchs, 1915, in frass of the same insect at Vernon, B.C.

Records of identifications of nematodes are published periodically from the Ottawa laboratory in The Canadian Insect Pest Review.

Phenological Data - 1955

The data for 1955 disclose one remarkable fact, namely that the flower dates at Winnipeg in the early season were ahead of the mean date whereas at Saskatoon the reverse was true. At Edmonton the flowering dates fluctuated sharply in the same period. The dates are given in the accompanying table.

In the latter part of the season the native plants flowered about the normal time or slightly earlier, particularly at Edmonton.

The data on the early-sown wheat at the three places in the Prairie Provinces indicate that there is a tendency to start sowing later than was the practice 15 years ago. The change has come about for several reasons. With modern power machinery any early start is less essential because the sowing of wheat and the successive crops can be accomplished more rapidly than before. It is also an advantage to let the annual weeds make a start and then to kill them before the grain is sown. This year wheat was sown 20 days later than average at Winnipeg but it developed fairly fast and was only 8 days late at maturity. At Saskatoon it was sown 13 days late and was 8 days late at maturity. At Edmonton it was sown 19 days late but it was correspondingly late in maturing (R.C. Russell).

The first flowering dates for the majority of plants recorded at Ottawa, Ont., were generally earlier than usual particularly as the season advanced. Four years ago phenological observations were begun on quite a number of additional plants. To bring the data together and yet show clearly the base for comparisons, the number of years that observations have been made on each species is shown in curves directly after the name of the species. The data are presented below (I.J. Bassett).

Alnus rugosa	(4)	7/4	N	Poa pratensis	(4)	26/5	N
Acer saccharinum	(20)	11/4	N	Rumex acetosella	(4)	26/5	6E
Corylus cornuta	(3)	13/4	1L	Anemone canadensis	(14)	28/5	6E
Poa annua	(4)	13/4	15E	Juglans nigra	(4)	1/6	4E
Populus tremuloides	(15)	15/4	2E	Carya cordiformis	(11)	6/6	5E
Populus grandidentata	(4)	23/4	2L	Dactylis glomerata	(4)	6/6	3E
Ulmus americana	(20)	25/4	N	Sambucus nigra	(6)	8/6	8E
Acer rubrum	(4)	26/4	2L	Bromus inermis	(14)	10/6	8E
Acer negundo	(15)	29/4	7E	Rhus typhina	(9)	17/6	6E
Betula papyrifera	(4)	29/4	1E	Catalpa speciosa	(12)	17/6	13E
Acer saccharum	(18)	5/5	3E	Phleum pratense	(14)	18/6	6E
Prunus pensylvanica	(14)	8/5	5E	Tilia americana	(14)	24/6	12E
Fraxinus americana	(3)	8/5	1E	Cephalanthus occidentalis	(10)	10/7	7E
Fagus grandiflora	(3)	11/5	2E	Ambrosia trifida	(4)	14/7	7E
Alopecurus pratensis	(4)	12/5	1L	Ambrosia artemisiifolia var. elatior	(3)	9/8	5E
Smilacina stellata	(14)	14/5	6E	Cassia hebecarpa	(9)	9/8	5L
Pinus sylvestris	(20)	18/5	9E	Hamamelis virginiana	(12)	16/9	6E
Quercus macrocarpa	(4)	19/5	1E				

Summary of Phenological Data Taken at Winnipeg, Saskatoon, and Edmonton in 1955

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

Species	Winnipeg		Saskatoon		Edmonton	
Aster conspicuus	--	--	--	--	22/7	2E
Aster ericoides	--	--	2/8	3L	--	--
Aster laevis	--	--	23/7	7E	25/7	6E
Wheat -						
Sown	17/5	20L	13/5	13L	19/5	19L
Emerged	27/5	19L	24/5	12L	--	--
Headed	11/7	10L	6/7	4L	15/7	13L
Ripe	15/8	8L	13/8	3L	7/9	20L