

A STUDY OF

THE FLORA OF WELLINGTON COUNTY, ONTARIO.

John J. Stroud.

Submitted to the Department of Biology in
partial fulfillment of the requirements
for the Master of Arts degree in
McMaster University.

1939.

STUDIES IN THE FLORA OF WELLINGTON COUNTY, ONTARIO.

The present work represents a survey of the plants growing without cultivation in the County of Wellington, Ontario, based on a collection made especially during the years 1937 and 1938, with a few additional specimens collected in 1934 and 1936. In order to make the check list as complete as possible various institutional and private herbaria were examined. In addition, from the review of literature, reports of the occurrence of species which might not have been placed in these herbaria, or were in herbaria not visited, were secured.

In addition to listing the flora of the county, the author has endeavoured to determine how many of the plants found by earlier collectors have persisted in the county. For this purpose he has compared the records of those found growing at an early date with those of more recent collections using the term "recent" to include the period of the last twenty-five years. Some of the reports for this purpose have been verbal and all such cases have been listed separately on pages 16 and 17.

Acknowledgements. The writer wishes to acknowledge the help he has received from many persons in charge of the various herbaria he has visited who were extremely kind and unsparing in their efforts to assist. Especially does he desire to thank Mr. A. E. Porsild of the National Museum, Ottawa; Dr. T. M. C. Taylor of the University of Toronto; Professor J. E. Howitt of the Ontario Agricultural College; Dr. G. Krotkov of Queen's University and Dr. Harold A. Senn of the Division of Science Service, Ottawa, who permitted the use of the herbaria in their care. To Mr. Monroe Landon I am especially indebted for the use of his herbarium which includes the fine collection of W. Herriot made

chiefly in the vicinity of Galt, Waterloo County. Mr. Hubert Brown of Toronto was also exceedingly kind and helpful while allowing the use of his private herbarium consisting of a collection made from numerous counties of the province. Professor J. Eaton Howitt of Guelph and Mr. E. W. Hart of the Division of Science Service, Ottawa, who was previously at the Ontario Agricultural College, Guelph, also gave many verbal reports that assisted materially. From Mr. Gordon McNair of Hamilton, verbal reports of some locally known plant stations were also secured.

The author especially wishes to acknowledge the assistance of Dr. Lulu O. Gaiser under whom this thesis was prepared. She was always ready to give suggestions for the accumulation of the data for this paper and to stimulate discussion of it, and without her help in its preparation this thesis would have been impossible.

Other Collectors of the Vicinity. Due to the location of the Ontario Agricultural College in the county of Wellington, reference will be made to many persons from there who have collected extensively in the county.

Professor A. B. Klugh, later of the Department of Biology at Queen's University while on the staff in Guelph, made a very comprehensive study of several families of the county including the Lycopodiaceae and their allies; Gramineae; Orchidaceae; Cyperaceae and Compositae, publishing on the latter two (1905)^{22*}(1906)²³. Most of his collecting was done from 1903 to 1905 and the majority of those collections are now found at Queen's University, though a few are found at other institutions.

*Reference is made to Literature cited, page 136.

E. J. Colgate (1905)⁸ wrote an article on the Orchidaceae of Wellington County but his collection (if such exists) has not been located. T. J. Moore (1907)²⁵ also wrote an article on the ferns of the county, and his specimens too have not been seen by the author.

Professor J. Eaton Howitt, the present head of the Department of Botany, at Guelph has made many collections in the region since 1906. Many of his staff have also collected in the vicinity, as Dr. R. E. Stone, W. G. Evans, E. W. Hart (now Junior Botanist, Division of Science Service, Ottawa), W. H. Wright (now Chief Seed Analyst, Dept. of Agriculture, Ottawa) and S. A. Simmons. All the collections noted by these men are located in the Ontario Agricultural College herbarium at Guelph.

Many undergraduate students at the same College made collections in the region, the most outstanding of those being that of Harold Corby, who as well as collecting generally in the county made a study of and wrote an undergraduate thesis on the Compositae (1935)¹⁰. Many of his specimens are in the herbarium there. J. M. Hamilton as an undergraduate also, in 1923 made a collection of plants and later while doing graduate work at the university of Toronto, left his collection in that institution's herbarium.

William Herriot, a distinguished botanist, collector and writer (1905-14)¹³⁻²⁰ made a very thorough examination of the flora of the vicinity of Galt during the years 1891 to 1908 chiefly, and prepared thousands of specimens which can be found in the herbaria of National Museum of Canada, and the Division of Science Service, Queen's University, University of Toronto and the Ontario Agricultural College. However the private collection of Mr. Herriot, possessed by Mr. Monroe Landon of Simcoe, is very complete giving a

good idea of the flora of Galt at Mr. Herrict's time and of him, H. Groh (1936)¹², assistant botanist, Division of Science Service, Ottawa has written:

".....he was a born naturalist with whom it was a rare pleasure to tramp the woods. His quick eye detected anything out of the ordinary, and enabled him to add not a few records to the Canadian flora, along with a most creditable volume of regular plant survey."

Geographical location. Wellington County is situated in the northern, central part of the Niagara peninsula (see map page 8). Thus it lies in between the three great lakes with Lake Huron to the west, Lake Ontario to the east, and Lake Erie to the south. It extends roughly from 43°20' to 44° north latitude, and from 80° to 81° west longitude. Waterloc County, in which is found the city of Galt where Herrict made his botanical surveys, borders it on the south-west side and through it extends the Grand River valley. These surveys formed a representative collection for a region that has been found suitable for comparison with this Wellington County survey.

Geology of the Region. According to Williams (1919)³² south-western Ontario belongs to the Palaeozoic sedimentary area which occupies the basin of the Great Lakes, exclusive of Lake Superior, and extends from the Appalachian Mountains on the east to Kansas and Nebraska on the west, and as far south as Oklahoma, northern Tennessee and central Alabama. This sedimentary deposit has a general dip to the south-west of about 20 feet to the mile.

Wellington county is entirely underlain by rocks of Silurian age. On the east these rocks are bounded by the Niagara escarpment, a well-defined feature passing from central New York to Niagara

Falls, through Hamilton and thence northward to the vicinity of Collingwood on Georgian Bay and then through the Bruce Peninsula to Michigan. Although Silurian rocks underlie the whole of the county, the actual exposures of these rocks are very limited and occupy only a very small part of this area.

The Silurian system falls into three subdivisions, (1) a lower one typically marked by an alternation of clastic and calcareous sediments, the result of changing conditions of the land in respect to the sea; (2) a middle one of moderate depth seas; and (3) an upper one showing large quantities of deposit from the erosion of surrounding areas where older regions were being eroded and deposited.

(1) The lowest and oldest division consists of: (a) the Medina-Cataract formation which is separated by lateral gradation at Dundas, the northern part being Cataract, the southern part Medina. (b) The Clinton formation consisting of gray dolomite and shale. This entire division occurs to the east of Wellington county and was not a part of this district.

(2) The middle division consists of: (a) the Niagara group which includes Rochester shale and is confined to the Niagara Peninsula, and Lockport dolomite or "Niagara limestone" as it was formerly called. This dolomite gives rise to the most conspicuous of the Palaeozoic cliffs, and outcropped in almost unbroken extent from Niagara Falls to the head of Lake Huron, and formed the practically continuous white cliffs of the Niagara escarpment. In this belt are found such villages as Rockwood, Eden Mills, Erin and Arkell. (b) Guelph formation, a great dolomite formation of fairly uniform character and, unlike the underlying Lockport,

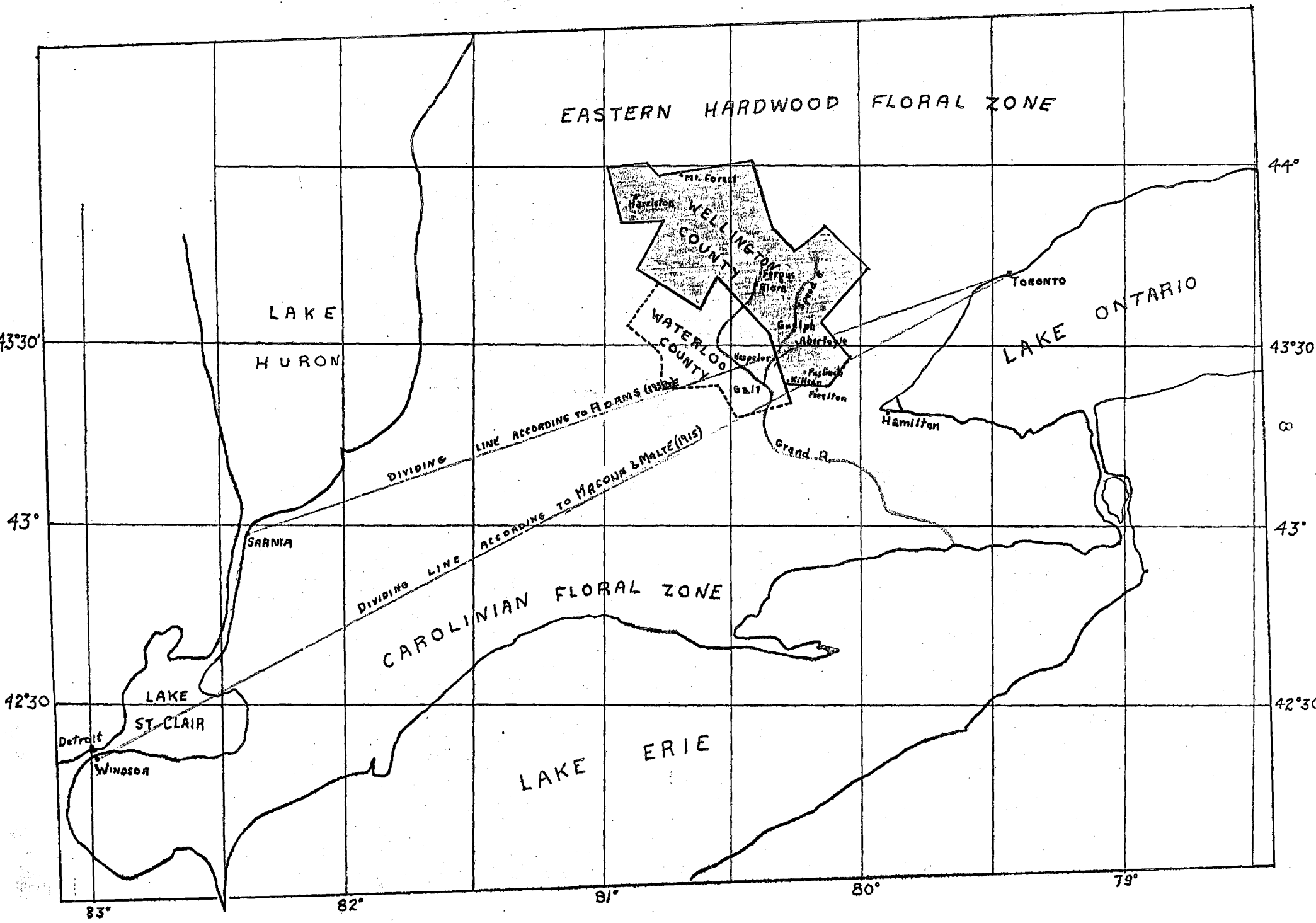
does not occur as prominent cliffs except at the northern part of the Bruce Peninsula. This formation underlies a belt about thirteen miles wide and is exposed in the valleys of streams and rivers, notably the Grand and Speed Rivers, on which are situated Guelph, Galt, Elora, Fergus and Hespeler.

(3) The upper, youngest division consists of the Cayuga group which includes (a) Salina formation which was the salt and gypsum formation of Ontario and New York. The deposits of this age represent special conditions of sedimentation, probably those of an interior basin to which the Atlantic had access until the rise of the land at the close of the Silurian. This formation consists of gray, green and red shales containing gray dolomite, salt and gypsum. Arthur, Mount Forest and Harriston occur in this belt. (b) Bertie Waterlime formation composed of dolomites, waterlimes and dark gray shale and (c) Akron dolomite. From Dunnville west and north the Bertie and Akron beds have not been differentiated, and these are considered together. This belt is very narrow and passes through a small portion of the county in the north-western portion near Palmerston. In the same region, near Palmerston, is a very small portion of underlying Detroit River Series of Devonian rock about half a mile wide and two and a half miles long. Although these deposits constitute the base of the peninsula they show up only as outcrops in the region.

According to Coleman (1936 A)⁶ the Niagara district was crossed three times by ice sheets advancing south-west from central Quebec and these were separated by warm interglacial periods in which the ice retreated only to return again for a last time in the Wisconsin ice age which again disappeared.

Coleman (1936B)⁷ explained the dip of the rock bed by the fact that the ice sheet was thousands of feet thick at its center in Quebec and this depressed the Eastern part of the continent by its weight. With the melting of the ice, this load was lifted and the continent rose, the greatest lift being where the glacier was thickest. Taylor (1913)²⁹ estimated that during the maximum extent of the Wisconsin ice sheet, its greatest depth was approximately 3,000 feet in the Niagara district.

Coleman (1936A)⁶ showed that all the ice invasions left drift deposits on the bed rock in most places, the later deposits replacing the earlier ones, so that the present shaping of the country was largely due to the deposits of the final ice sheet. The great pressure of the tremendously thick ice sheet caused the high spots on the surface to be worn down, and the valleys to be filled with deposits of drift. As a result the thickness of the drift varied from a few inches to hundreds of feet. The size of the particles in this drift also varied from a very fine powder to all sizes of stones. The most fundamental type of deposit in the region was "till", that is ground up rock mixed with pebbles and rocks of various sizes gathered from various widely-separated areas that is called boulder clay. In some places the till has been formed into long, low, gently sloping domes called drumlins. When the retreating ice sheet remained motionless for a long period, the materials it had been carrying were deposited, and these deposits were usually more stoney than ordinary till. These are called moraines. Due to the deposition of glacial debris in such a manner as to obstruct the drainage of valleys, there were formed in the region a large number of bogs and swamps, especially around Puslinch, Aberfoyle, Killeen, Guelph and Freeton.



Climate. The climate of Guelph is typical of most of the county of Wellington. In table I are given the temperature normals of Guelph. The normals of Hamilton, Wentworth County, are also given for comparison as it is located in the Carolinian zone which has a flora of more southerly regions. A comparison of the flora of these two counties had been planned originally but up to the present the survey of Wentworth has not been completed.

Guelph is situated north of Hamilton (Guelph $43^{\circ}32'$ N. latitude, Hamilton $43^{\circ}16'$ N. latitude); has a much greater altitude (Guelph 1050 feet, Hamilton 320 feet); is situated at a much greater distance from the Great Lakes, thus losing much of the ameliorating effects that they produce upon the climate. All these facts tend to explain the lower temperature found in Guelph.

TABLE I*

TEMPERATURE NORMALS AT GUELPH AND HAMILTON, ONTARIO

**Guelph	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Mean Temp.	20	17	29	42	54	63	69	67	59	48	36	24	44
Mean Max.	27	25	37	52	65	74	79	78	70	57	43	31	53
Mean Min.	13	9	21	33	44	52	58	56	48	39	29	18	35
Abso. Max.	6	57	75	84	90	93	99	101	94	84	66	57	101
Abso. Min.	-25	-25	-12	9	24	30	41	36	27	20	-2	-15	-25

*Tables I and II were obtained directly from the yearly files of the Meteorological Office, 315 Bloor St. West, Toronto, Ontario through the courtesy of Mr. A. J. Connor.

**From January 1899 to December 1938.

*Hamilton	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Mean Temp.	23	22	30	43	55	65	71	69	61	50	37	27	46
Mean Max.	31	31	39	53	66	76	82	80	72	60	45	34	56
Mean Min.	15	14	21	34	44	53	59	57	51	40	30	20	37
Abs. Max.	61	57	76	88	97	101	103	99	94	87	71	61	103
Abs. Min.	-17	-16	-10	6	23	36	41	35	25	12	4	-15	-17

From these tables we see that in Guelph the mean monthly minimum is less than 32 degrees for five months of the year and above 45 degrees for four months. The winters are longer than those of Hamilton and much colder, and as a result Spring is, as a rule, about two weeks later than at Hamilton with a consequent shortening of the growing-season.

In table II is shown the precipitation normals for the two cities.

TABLE II.

PRECIPITATION NORMALS AT GUELPH AND HAMILTON, ONTARIO.

<u>Guelph</u>	Jan.	Feb.	Mar.	Apr	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Rain	.82	.50	.99	2.14	2.77	2.80	3.12	2.89	2.39	2.38	1.98	1.03	23.81
**Snow	14.5	12.0	7.8	2.2	.2					.5	4.0	10.9	52.1
Total Precip.	2.27	1.7	1.77	2.36	2.79	2.80	3.12	2.89	2.39	2.43	2.38	2.12	29.02

*From January 1885 to December 1927.

**Ten inches of snow is equal to one inch of rain.

<u>Hamilton</u>	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Rain	1.11	1.09	1.70	2.03	2.32	2.64	3.09	2.32	2.87	2.51	2.13	1.30	25.11
Snow	15.7	13.3	10.4	1.8	T				0.9	4.3	11.8	50.2	
Total Precip.	2.68	2.42	2.74	2.21	2.32	2.64	3.09	2.32	2.87	2.60	2.56	2.48	30.93

Thus it is seen that Guelph has a mean precipitation of about 29 inches, which is about two inches less than that of Hamilton. The rainfall is ample for the vegetation and is well distributed throughout the growing season, and thus decreases the probability of droughts.

In table III the hours of bright sunshine as recorded at Guelph and Vineland are given from Connor (1931)⁹. The data for Hamilton were not available, but Vineland is very close to Hamilton and would have approximately the same conditions of sunshine.

TABLE III.

HOURS OF BRIGHT SUNSHINE AT GUELPH AND VINELAND, ONTARIO.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
<u>Guelph</u>	67	80	137	135	196	223	227	211	163	126	69	51	1685
<u>Vineland</u>	89	100	154	178	242	266	285	257	197	161	89	65	2083

These figures show that consistently throughout the year the flora of Wentworth County enjoys a much longer period of sunshine. Thus plants that prefer a long day would be more likely found in Wentworth than in Wellington County.

Plant Succession. Examples of successive stages in plant succession according to Weaver & Clements (1939)³⁰ that are represented in Wellington County are as follows:

Submerged stage. This exists in many parts of the county in slow moving streams and ponds. Near Puslinch are found ponds which show this stage and show the following species:

Utricularia intermedia U. vulgaris var. americana
Ranunculus delphinifolius R. aquatilis var. capillaceus

Floating stage. Where the water becomes shallower, many floating plants are found which have their upper leaves floating upon the surface of the water, while others are free floating. Such plants as:

Nymphaea advena Potamogeton natans
Lemna minor

Reed-swamp stage. On the borders of ponds and rivers are found plants which exist under shallow water conditions and form dense mats of vegetation. An example of this stage is found at Guelph and species found there include:

Typha angustifolia T. latifolia
Sparganium eurycarpum Acorus calamus
Scirpus atrovirens Alisma Plantago-aquatica
Sagittaria latifolia Cicuta bulbifera
Equisetum fluviatile

Sedge-meadow stage. A sedge-meadow of limited extent exists near Puslinch. This meadow is fairly well developed and rather dry. Here are found:

Eleocharis palustris Luzula saltuensis
Eriophorum callitrix Carex spp.

A less developed stage is found near Guelph where in wet ground are found such species as:

Caltha palustris

Mentha canadensis var. arvensis

Iris versicolor

Radicula palustris

Mentha piperita

Radicula Nasturtium-aquaticum

Woodland stage. This stage is developed on land which is moist in the Spring and early Summer and dries up for the rest of the growing season. Very characteristic examples are found throughout the region and representative species found are:

Cornus stolonifera

Prunus virginiana

Cornus alternifolia

Salix spp.

Populus tremuloides

Clematis virginiana

Populus balsamifera

Sambucus racemosa

Among the trees and shrubs are found various shade-loving species of herbaceous plants as:

Phlox divaricata

Dentaria diphylla

Fragaria virginiana

Dentaria laciniata

Orchis spectabilis

Pteridium latiusculum

Waldesteinia fragarioides

Aster cordifolius

Coptis trifolia

Solidago canadensis

Climax forest. The forest seems to represent the Acer-Fagus climax association, the dominants being Acer saccharum and Fagus grandifolia. Associated with these and interspersed in the woods are found such trees as:

Acer saccharum var. nigrum Betula lutea

Acer rubrum

Betula alba var. papyrifera

Ulmus americana

Celtis occidentalis

Ulmus falva

Thuja occidentalis

Pinus Strobus

Ostrya virginiana

Tilia americanaQuercus rubraFraxinus americanaQuercus macrocarpa

Bog formation. One of the interesting plant formations throughout the county due to the interruption of the drainage systems by the retreating glaciers, is the bog. A characteristic formation of this type occurs near Puslinch. Here is found a dense covering of Sphagnum spp. over the soil which tends to maintain throughout the year more equable conditions of temperature and moisture.

The herbaceous plants represented are:

Menyanthes trifoliataDrosera rotundifoliaGeum rivaleGaultheria procumbensSarracenia purpurea

The shrubs encountered include:

Kalmia polifoliaVaccinium corymbosumAndromeda polifoliaLedum groenlandicumVaccinium canadenseChamaedaphne calyculata

The trees are all small and comprise:

Larix laricinaPyrus melanocarpaPicea mariana

Weed stage. As the county is cultivated extensively it is only natural that many weeds are found in the fields and about abandoned corners. The most persistent of these include:

Convolvulus arvensisAnthemis cotulaPolygonum convolvulusRumex crispusAmaranthus retroflexusRumex obtusifoliusAmaranthus blitoidesLychnis albaAgropyron repensSilene latifoliaBromus secalinusSonchus arvensisPortulaca oleraceaTaraxacum officinale

Survey. From the collections of plants growing in Wellington County made during the years 1934 to 1938 and to the greatest extent during the last two seasons, a total of 719 species has been listed in the check list on pages 30 to 131. As a result of checking for specimens collected at any time from this county in the herbarium of the Ontario Agriculture College, in Toronto, Queen's and McMaster University herbaria, in the herbaria of the National Museum of Canada, as well as that of the Division of Science Service, Ottawa and the private herbaria of Mr. Monroe Landon and Mr. Hubert Brown, an additional 365 species were added. Thus for a total of 1084 species actual specimens can be vouched for. From the review of articles written by collectors and naturalists in the county, mostly of the period from 1905 to 1914, and by Mr. Harold Corby, a student of the Ontario Agricultural College 1935, 24 further species were added so that a grand total of 1108 have made up the catalogue list.

By a comparison of those plants so recently found and the dated specimens and published records of collectors, it has been found that a total of 142 species have been included that have not been collected in "recent" times, meaning by this the period as explained, from 1914 to 1938. These may have been omitted either by the fact that they have been overlooked, or that they have been exterminated.

That the former condition pertains is shown by the fact that Professor J. Eaton Howitt, head of the Department of Botany, Ontario Agricultural College, Guelph, reported verbally that the following species have been seen by him in the county recently (at least within the years 1914-1938):

Therapsis nodulosaScilla hispidaDiplazium pycnocarponHabenaria hyperboreaPotamogeton pectinatusAstragalus canadensisAndropogon furcatusViola palmataPanicum linearifoliumViola blandaPanicum latifoliumMyriophyllum spicatumZizania aquaticaThaspium aureumMilium effusumCornus circinataAlopecurus geniculatus var. aristalatusPyrola chloranthaSphenopholis pallensVaccinium OxycoccusAvena striataGaleopsis TetrahitPoa debilisSolidago caesiaGlyceria fluitansSolidago juncea var. scabrellaAgropyron caninumAster paniculatus var. lanatusJuncus bufoniusChrysanthemum segetumLilium PhiladelphicumSenecio Balsamitea

Mr. Ernest W. Hart, Junior Botanist, Division of Science Service, Ottawa, who for many years was at the Department of Botany, Ontario Agricultural College, also verbally reported the following as having been seen by him in Wellington County within the years 1914 to 1938:

<u>Muhlenbergia racemosa</u>	<u>Rhus canadensis</u>
<u>Andropogon furcatus</u>	<u>Viola cucculata</u>
<u>Alopecurus geniculatus</u>	<u>Heracleum lanatum</u>
var. <u>aristatulus</u>	<u>Chiogenes hispidula</u>
<u>Agropyron caninum</u>	<u>Galeopsis Tetrahit</u>
<u>Smilax hispida</u>	<u>Physalis heterophylla</u>
<u>Habenaria hyperborea</u>	<u>Solidago caesia</u>
<u>Alnus crispa</u>	<u>Senecio Balsamitea</u>
<u>Medicago falcata</u>	<u>Rhamnus frangula</u>

Mr. Hubert H. Brown, a prominent naturalist of Toronto who has collected in most of the counties of the Ontario Peninsula, has kept definite records as to where he has seen the different species of ferns and their allies. He has kindly consented to the use of these records which showed the occurrence of the following in Wellington County within the same period of years:

<u>Phegopteris polypodioides</u>	<u>Dryopteris goldiana</u>
<u>Diplazium pycnocarpon</u>	

Mr. Gordon McNair, a naturalist of Hamilton, has reported verbally having seen near Puslinch recently, the following:

<u>Habenaria hyperborea</u>	<u>Viola cucculata</u>
<u>Habenaria dilatata</u>	<u>Pyrola secunda</u>
<u>Arethusa bulbosa</u>	

Thus a total of 46 have authentic verbal confirmation.

The Cyperaceae, a very difficult family because of the great similarity of species, the difficulty of determining the species, and their general unimportance economically and ornamentally, has largely been overlooked by botanists. The majority of the records for this family for Wellington County have been made by Professor A. B. Klugh while he was connected with the Ontario Agricultural College, the specimens of which have been mostly deposited in the herbarium of Queen's University, Kingston. He made a speciality of the sedges which he reported for Wellington County in the Ontario Natural Science Bulletin, Klugh (1906)²³. Consequently there is an extensive list of this family reported by Klugh and by no one else, most, if not all, of which the author believes still exist there but are not recorded because of their difficulty of identification and of lack of interest. The list comprises:

Cyperus rivularis

Eleocharis acicularis

E. tenuis

E. acuminata

Scirpus fluvialis

S. lineatus

S. cyperinus

S. Eriophorum

Eriophorum gracile

Carex tribuloides

Carex Tribuloides var. reducta

C. Crawfordii

C. cristata

C. Bebbii

C. sychnocephala

Carex stellulata var. excelsior

C. canescens var. disjuncta

C. bromoides

C. tenuiflora

C. trisperma

C. rosea

C. rosea var. radiata

C. sparganioides

C. cephaloidea

C. vulpinoidea

C. stipata

C. Sartwellii

C. crinita

C. aquatilis

C. stricta

<u>Carex pauciflora</u>	<u>C. laxiflora</u> var. <u>latifolia</u>
<u>C. gracillima</u>	<u>C. Hitchcockiana</u>
<u>C. Backii</u>	<u>C. longirostris</u>
<u>C. Jamesii</u>	<u>C. scabrata</u>
<u>C. albicans</u>	<u>C. lanuginosa</u>
<u>C. communis</u>	<u>C. trichocarpa</u> var. <u>aristata</u>
<u>C. varia</u>	<u>C. riparia</u>
<u>C. pubescens</u>	<u>C. Pseudo-cyperus</u>
<u>C. vaginata</u>	<u>C. ccmosa</u>
<u>C. paupercula</u> var. <u>irrigua</u>	<u>C. hystericina</u>
<u>C. ligosa</u>	<u>C. Schweinitzii</u>
<u>C. Careyana</u>	<u>C. lupulina</u>
<u>C. laxiculmis</u>	<u>C. intumescens</u>
<u>C. digitalis</u>	<u>C. vesicaria</u> var. <u>monile</u>
<u>C. laxiflora</u>	<u>C. rostrata</u>
<u>C. laxiflora</u> var. <u>varians</u>	<u>C. Tuckermanni</u>

Thus, finally there remain forty-three species for which I have found no record of their occurrence since 1914. As stated before, these may have merely been overlooked so far as my work and records extended, or some may, perhaps have been exterminated. This list compises:

<u>Cryptogramma stelleri</u>	<u>Lilium Philadelphicum</u> var. <u>andinum</u>
<u>Lycopodium annotinum</u>	<u>Habenaria clavellata</u>
<u>Potamogeton heterophyllus</u>	<u>Habenaria orbiculata</u>
<u>Potamogeton zosterifolius</u>	<u>Habenaria lacera</u>
<u>Spartina cynosuroides</u>	<u>Pogonia ophiglossoides</u>
<u>Juncus alpinus</u> var. <u>insignis</u>	<u>Epipactis repens</u>

Rhynchosia pubescens

Floerkea proserpinacoides

Coralorrhiza maculata

Shepherdia canadensis

Microstylis monophyllos

Epilobium coloratum

Liparis Loeselii

Pyrola asarifolia var. incarnata

Calypso bulbosa

Andromeda glaucophylla

Salix amygdaloides

Halenia deflexa

S. petiolaris

Stachys tenuifolia var. asper

S. humilis

Lonicera caerulea var. villosa

Commandra Richardsiana

Valeriana uliginosa

Polygonum hydropiperoides

Aster Lindleyanus

Chenopodium urbicum

Aster longifolius

Stellaria longifolia

Carduus crispus

Ranunculus Purshii

Cirsium undulatum

Dalibarda repens

Silybum marianum

Centaurea solstitialis

Types of Vegetation. Macoun and Malte (1915)²⁴ divided the flora of Canada into several zones, those represented in Ontario being the Arctic, Sub-Arctic, Eastern Hardwood and the Carolinian or Interlacustrine. They outlined the Carolinian zone as that part of Ontario lying south approximately of a line drawn from the northern shore of Lake Ontario to the city of Windsor. North of this zone was the Eastern Hardwood zone which extended to the Sub-Arctic region. Thus from the map on page 8, it would seem that Wellington County would lie almost entirely in the Eastern Hardwood zone. From their discussion of this zone all the trees are represented in Wellington County with the exception of Pinus resinosa for which neither a record nor a specimen has so far been found. Of the shrubs mentioned by them all have been recorded except Viburnum alnifolium, while of the herbaceous plants Trillium undulatum and Uvularia perfoliata are the only ones not included. Of the Carolinian zone they state:

"The herbaceous vegetation is very rich, at least a hundred species occurring nowhere else in Canada being found in the zone."

Of the trees characteristic of the region listed, no indigenous representatives were found in Wellington County with the exception of Castanea dentata for which I have but the one report of Herriot (1905)¹³

"extending sparingly a few miles north-eastward into Wellington County."

Of the herbaceous vegetation eight species only, namely; Podophyllum peltatum, Lupinus perennis, Asclepias phytolaccoides, Monarda didyma, Campanula americana, Lobelia siphilitica, Cypripedium hirsutum and Panax quinquefolium were encountered in Wellington County.

Adams (1938)² revised the extent of the floral zones slightly so as to include in the Carolinian all of Ontario lying south of a line joining the city of Toronto and Sarnia. Following Adam's division we see that a small southern part of Wellington County is in the Carolinian zone though most of it is included in the Eastern region (see map page 8). The particular Carolinian flora was expressed by Adams as follows:

"There are eleven families found in this region which do not occur elsewhere in Canada. These with the genera contained in them are as follows: Dioscoreaceae-Dioscorea; Saururaceae-Saururus; Moraceae-Morus; Anonaceae-Asimina; Magnoliaceae-Liriodendron, Magnolia; Phytolaccaceae-Phytolacca; Lauraceae-Benzoin, Sassafras; Platanaceae-Platanus; Cassiaceae-Cercis, Gleditsia, Gymnocladus; Melastomaceae-Rhexia; Bignoniaceae-Tecoma."

Not a single representative of these 15 genera was found in my survey of Wellington County. He further stated;

"In addition to the fifteen genera mentioned above, there are thirty-two other peculiar to this region."

But from Adams (1926)¹ page 50, this list of thirty-two genera were allocated to what he termed the "Southern Region" thus described:

"It includes that part of the province of Ontario lying south and west of a line drawn from Kingston to Collingwood on Georgian Bay."

So the thirty-two genera would not have reference to the smaller Carolinian zone of Adams (1938)² as have 262 species stated to be "not indigenous to any other part of Canada." So far I have not had access to this list. Of the actual species listed along with the eleven families as "confined to this area" I have found the following:

Of trees: two species of Oak (Quercus macrocarpa and Q. rubra)

Of shrubs: Smilax hispida

Of herbs: Lupinus perennis

The only one of these not included in Macoun and Malte's list of Carolinian plants is Smilax hispida.

However, as any such division of floral zones could be only approximate and could not be strictly delimited in this manner, we should expect as we have found, a slight overlapping of the Carolinian elements with the Eastern Hardwood zone.

Coastal Plain Affinity. Peattie (1922)²⁷ stated that many plants of the Great Lake region showed a Coastal Plain affinity. He explained that these types have long been known to be in sharp contrast to the neighboring flora of the forests and plains of the Great Lakes and have a striking analogy to the Atlantic Coastal Plain flora and declared that these types probably migrated westward when the ice sheet retreated to the north at the close of the Lake Algonquin stage. Three species he listed are represented in the flora of Wellington County, namely:

Cakile edentula

Lupinus perennis

Euphorbia polygonifolia

Comparison of Galt Flora as given by W. Herriot with Wellington County Flora. For Galt and the vicinity a comprehensive floral record remains in the collected specimens and publications of William Herriot. In his interesting article (1905)¹³ he states:

"During a careful scrutiny of the flora of this region covering fifteen years, the writer has collected 1100 species of plants, including the Ferns and their allies, within a radius of ten miles, extending the range northward of quite a number of south-western Ontario plants, while not a few species new to Ontario have been collected."

As Galt is located in Waterloo County closely adjoining Wellington on the south-west side, the Herriot collection has served as a splendid basis of comparison. As can be seen from the map on page 8, Galt, like a very small southern portion of Wellington County, lies on the northern border of the Carolinian floral zone and many of the plants which are found at Galt, therefore, might also be expected within the borders of Wellington County.

From experienced field observations Herriot in the same article wrote with regard to the flora of Galt and vicinity:

"A striking feature of the plant distribution in this region is the apparent merging of the south-western Ontario flora and a more boreal one within a comparatively small area south of the town, as is shown by the great number of plants that find their northern limit between Galt and Paris. The Chestnut and Sassafras, both common to the south of us, cut off abruptly a mile or two below town, the former extending sparingly a few miles into Wellington County. The Walnut, still found in some quantity along the river at Paris, finds its northern limit a few miles below Galt, accompanied by a few stray trees of the Sycamore."

All these trees can be listed with the many plants in Herriot's herbarium that have not been found recorded as indigenous to Wellington County. The Chestnut Blight would doubtless explain the disappearance of Castanea dentata within the borders of

Wellington. His name was the only record I could give for that species. Likewise he wrote:

"Throughout this Chestnut region many plants that are typically southern find shelter, such as Dioscorea villosa L., Arisaema Draecontium Schott., Desmodium Marilandicum Boott., Jeffersonia diphylla Pers., Frasera Caroliniensis Watt. and Scirpus lineatus Michx., while the Oaks and Hickories, abundant to the south of us, gradually diminish in number and species, a few miles northward. One of the rarest plants in Ontario, Glycyrrhiza lepidota Nutt., only previously reported from Fort Erie, grows in some quantity on an island in the Grand River below town."

Thus, undoubtedly Herriot, too, considered that plants more common to the souther Carolinian region found their northern limit in the valley of the Grand River near Galt so that it would be doubtful if many were ever present in Wellington, County. I have not found any of them with the exception of Scirpus lineatus. From the same paper can be listed thirteen species for which he expressed a limited distribution for Ontario and that:

"because of the difficulty of access to bogs and marshes many collectors pass them by, and it is among the bog species that I am able to record the greatest number of new species."

I have found no records in Wellington County for seven of them, namely:

<u>Eleocharis olivacea</u>	<u>Drosera longifolia</u>
<u>Eleocharis rostellata</u>	<u>Utricularia minor</u>
<u>Juncus Dudleyi</u>	<u>Solidago uniligulata</u>
<u>Rumex persicarioides</u>	

However, five that he listed, as:

<u>Carex lupuliformis</u>	<u>C. canescens</u> var. <u>disjuncta</u>
<u>Carex Jamesii</u>	<u>C. laxiflora</u> var. <u>varians</u>
<u>Hypericum boreale</u>	

have been recorded from Wellington. Included in the article were

several species that he stated were introduced from other regions as:

Poa trivialis

Plantago aristata

Amaranthus lividus

Artemisia caudata

Trifolium dubium

Silphium terebinthinaceum

Sida spinosa

These introduced species may not have been found in the Wellington area as the climate may have been unsuitable, or they may have been quite local in distribution, or they may have been overlooked.

It is more than likely that many of the plants not recorded from Wellington County that Herriot collected near Galt have just been overlooked and thus have not been represented in the herbaria examined, though it is also probable that many have never existed in that area. That some have actually been overlooked is confirmed by the fact that Professor Howitt verbally reported having seen the following in Wellington County:

Lycopodium complanatum

Rumex verticillatus

Andropogon scoparius

R. Britannica

Oryzopsis racemosa

Silene antirrhina

Trisetum spicatum

Barbarea stricta

Poa trivialis

Anemone cylindracea

Luzula campestris

Crataegus Crus-galli

Spiranthes gracilis

Geum triflorum

Salix alba X S. fragilis

Rubus idaeus var. aculeatissimus

Corylus americana

Trifolium agrarium

Boehmeria cylindrica

Polygala Senega

Chenopodium vulvaria

Viola labradorica

<u>V. renifolia</u>	<u>Cuscuta Gronovii</u>
<u>Myriophyllum verticillatum</u>	<u>Lithospermum officinale</u>
<u>Sanicula canadensis</u>	<u>Mentha spicata</u>
<u>Arctostaphylos Uva-ursi</u>	<u>Utricularia cornuta</u>
<u>Vaccinium pennsylvanicum</u>	<u>Galium lanceolatum</u>
var. <u>nigrum</u>	<u>Solidago nemoralis</u>
<u>Hydrophyllum canadense</u>	<u>Anthemis arvensis</u>

Mr. Hart verbally reported having found the following in Wellington County while at the Ontario Agricultural College:

<u>Sorghastrum nutans</u>	<u>Luzula campestris</u>
<u>Andropogon scoparius</u>	<u>Crataegus Crus-galli</u>

Thus I have secured reliable verbal reports of the occurrence of thirty-seven species which Herriot collected around Galt but for which I could find no actual specimens or published reports. The list of the other species, 209 in number, follows the check list as an addendum.

Check List of the Flora of Wellington County. The scientific names of the plants used in this list have been adapted from Gray's Manual of Botany (1908)²⁸, Seventh Edition. In some cases this work did not cover certain species, so that the name used was that of Britton and Brown's Illustrated Flora (1913)⁴. Many emendations to these works have occurred since their publication, but due to the unavailability of all of Rhodora, where most of the name changes are discussed, it was considered better to adopt the later terminology only in the case of the Polypodiaceae where such general revision has occurred and there Brown (1938) has been followed. In such cases the name given in Gray was included as a synonym. The order of the families followed was that of Engler and Gilg (1924)¹¹.

As scientific names change due to the revision and the division of species, and for the sake of Naturalists who probably find it difficult to follow the change of Latin names, the common names, where practical, have been included. In the majority of cases this name was the one of Britton and Brown (1913)⁴, but in some cases Zenkert (1934)³³ has been followed where his name was more applicable to the usage of the region.

If the species has been collected by the author, the situation in which the plant was growing was given to illustrate the conditions under which the plant grew and where it might be expected to be encountered, and the date of collection. In all cases the location of the herbarium specimen was given as the nearest village or town. In the case of specimens from other herbaria, the station for the specimen was cited, the name of the collector (which was always underlined), the year of collection, and the herbarium in which the specimen is now located was indicated by means of an abbreviation, explained as follows:

B - Hubert H. Brown, 9 Halford Ave., Toronto, Ontario.

CAN - National Museum of Canada, Ottawa, Ontario.

DAO - Division of Science Service, Ottawa, Ontario.

H - William Herriot, possessed by M. Landon, Simcoe, Ontario.

OAC - Ontario Agricultural College, Guelph, Ontario.

Q - Queen's University, Kingston, Ontario.

T - University of Toronto, Toronto, Ontario.

Where specimens have not been seen but published records only of them have been found, the name of the author and the abbreviated publication, with date is included. Such abbreviations as have been used for the names of publications are "Ont. Nat." for the Ontario Natural Science Bulletin and "Corby Thesis" for the thesis of Harold Corby (1935)¹⁰.

CHECK LIST OF THE FLORA OF WELLINGTON COUNTY, ONTARIO.PTERIDOPHYTA
(FERNS AND FERN ALLIES)POLYPODIACEAE
(FERN FAMILY)Pteretis nodulosa (Michx) Nieuwl. (Onoclea Struthiopteris (L) Hoffm.)

OSTRICH FERN.

Guelph, Klugh, 1903 (Q); Guelph, Nicol, 1889 (Q); Guelph,
1906 (OAC).Onoclea sensibilis L. SENSITIVE FERN.Guelph, moist meadows, July 27, 1937; Puslinch, 1932 (OAC);
Guelph, Nicol, 1889 (Q); Guelph, Klugh, 1903 (Q); Guelph,
Miller, 1935 (T).Cystopteris bulbifera (L) Bernh. BULBIET FERN.Puslinch, moist ravines, Oct. 4, 1937; Puslinch, 1932 (OAC);
Guelph, Nicol, 1889 (Q); Guelph, Miller, 1935 (T); Rockwood,
Taylor, 1932 (T);C. fragilis (L.) Bernh. BRITTLE FERN.Elora, moist ravines, June 8, 1938; Rockwood, Nicol, 1889 (Q);
Guelph, Klugh, 1903 (Q); Rockwood, Taylor, 1932 (T); Guelph,
Groh, 1907 (DAO).Dryopteris thelypteris (L.) A.Gray. var. pubescens (Lawson) A.R.Prince.(Aspidium Thelypteris (L.) Sw.) MARSH SHIELD FERN.Guelph, swampy ground, Aug. 15, 1936; Guelph, 1933 (OAC);
Guelph, Klugh, 1903 (Q); Guelph, Miller, 1935 (T).D. noveboracensis (L.) A.Gray. (Aspidium noveboracense (L.) Sw.)

NEW YORK FERN.

Puslinch, swampy ground, Aug. 18, 1937; Guelph, 1916 (OAC);
Killean, Klugh, 1904 (Q).

D. marginalis (L.) A. Gray. (Aspidium marginale (L.) Sw. MARGINAL SHIELD FERN.

Guelph, rocky woods, Aug. 15, 1937; Guelph, 1933 (OAC);
Guelph, Klugh, 1903 (Q); Guelph, Miller, 1935 (T).

D. goldiana (Hook.) A. Gray. (Aspidium Goldianum Hook.) GOLDIE'S FERN.
Moore, Ont. Nat. 1907.

D. boottii (Tuckerm.) Underw. (Aspidium Boottii Tuckerm.) BOOTT'S SHIELD FERN.

Mount Forest, Klugh, 1905 (Q); Arkell, Klugh, 1903 (H);
Harriston, Brown, 1926 (B).

D. cristata (L.) A. Gray. (Aspidium cristatum (L.) Sw. CRESTED SHIELD FERN.

Guelph, swampy ground, July 27, 1937; Puslinch, 1932 (OAC);
Everton, Klugh, 1903 (Q).

D. clintoniana (D.C. Eaton) Dowell. (Aspidium cristatum (L.) Sw. var. Clintonianum D.C. Eaton.) CLINTON'S SHIELD FERN.

Guelph, Klugh, 1903 (Q); Guelph, Nicol, 1889 (Q); Harriston,
Brown, 1928 (B).

D. spinulosa (O.F. Muell.) Watt. (Aspidium spinulosum (O.F. Muell.) Sw. SPINULOSE SHIELD FERN.

Guelph, damp woods, July 18, 1937; Guelph, Klugh, 1904 (Q);
Guelph, Nicol, 1889 (Q); Guelph, 1907 (OAC); Guelph, Miller,
1935 (T); Harriston, Brown, 1926 (B).

D. intermedia (Muhl.) A. Gray. (Aspidium spinulosum (O.F. Muell.) Sw. var. intermedium (Muhl.) D.C. Eaton. AMERICAN SHIELD FERN.

Guelph, 1907 (OAC); Guelph, Klugh, 1903 (Q); Guelph, Nicol,
1888 (Q); Guelph, Miller, 1935 (T); Rockwood, Taylor, 1932 (T);

D. dilatata (Hoffm.) A. Gray. (Aspidium spinulosum (O.F. Muell.) Sw.

var. dilatatum (Hoffm.) Hook. SPREADING SHIELD FERN.

Guelph, dry woods, Oct. 6, 1937; Guelph, 1932 (OAC); Guelph,
Nicol, 1887 (Q).

Phegopteris polypodioides Fee. LONG BEECH FERN.

Guelph, Workman, 1904 (Q).

P. dryopteris (L.) Fee. OAK FERN.

Guelph, moist woods, July 18, 1937; Rockwood, Taylor, 1932 (T);
Aberfoyle, 1932 (OAC); Killean, Klugh, 1904 (Q).

Polystichum acrostichoides (Michx.) Schott. CHRISTMAS FERN.

Guelph, rocky woods, Sept. 12, 1937; Aberfoyle, 1932 (OAC);
Guelph, Miller, 1935 (T); Guelph, Groh, 1907 (DAO); Harriston,
Brown, 1926 (B).

Athyrium angustum (Willd.) Presl. (Asplenium Filix-femina (L.)

Bernh. LADY FERN.

Guelph, moist woods, July 17, 1937; Guelph, Nicol, 1889 (Q);
Guelph, Klugh, 1903 (Q); Killean, Klugh, 1904 (Q); Guelph,
Miller, 1935 (T); Puslinch, 1932 (OAC).

Diplazium pycnocarpon (Spreng.) Broun. (Asplenium angustifolium

Michx. NARROW LEAVED SPLEENWORT.

Guelph, Nicol, 1889 (Q).

D. thelypteroides (Michx.) Presl. (Asplenium acrostichoides Sw.)

Guelph, rich woods, July 17, 1937; Puslinch (OAC); Rockwood,
Klugh, 1903 (Q).

Camptosurus rhizophyllus (L.) Link. WALKING LEAF FERN.

Puslinch, shaded rocks, Aug. 3, 1937; Guelph, 1937 (OAC).

Asplenium viride Huds. GREEN SPLEENWORT.

Rockwood, Klugh, 1903 (H); Rockwood, Klugh, 1904 (Q); Rockwood,
1916 (OAC); Rockwood, Taylor, 1932 (T); Rockwood, Brown, 1934
(B); Elora, Dempsey, 1905 (CAN).

A. trichomanes L. MAIDENHAIR SPLEENWORT.

Rockwood, rocky woods, July 24, 1937; Rockwood, Taylor, 1932 (T); Elora, Klugh, 1903 (Q); Elora, 1932 (OAC).

Pellaea atropurpurea (L.) Link. PURPLE STEMMED CLIFF BRAKE.

Elora, limestone cliffs, July 18, 1937; Elora, 1932 (OAC); Wellington Co., Taylor, 1932 (T); Elora, Stallwood, 1936 (T); Elora, 1932 (OAC); Elora, Klugh, 1903 (Q); Elora, Dempsey, 1905 (CAN).

Cryptogramma stelleri (Gmel.) Prantl. SLENDER CLIFF BRAKE.

Elora, Klugh, 1903 (H).

Adiantum pedatum L. MAIDENHAIR FERN.

Puslinch, rich moist woods, June 6, 1937; Guelph, Miller, 1935 (T); Guelph, 1934 (OAC); Guelph, Klugh, 1903 (Q); Guelph, Nicol, 1889 (Q).

Pteridium latiusculum (Desv.) Hieron. (Pteris aquilina L.) BRACKEN.

Guelph, open woods, June 27, 1937; Guelph, Klugh, 1903 (Q); Killeen, Klugh, 1904 (Q); Aberfoyle, 1935 (OAC); Guelph, Miller, 1935 (T).

Polypodium virginianum L. (P. vulgare L.) GOLDEN POLYPODY.

Puslinch, growing on rocks, July 18, 1937; Guelph, Klugh, 1904 (Q)

OSMUNDACEAE
(CINNAMON FERN FAMILY)

Osmunda regalis L. var. spectabilis (Willd.) Gray. (O. regalis L.)

ROYAL OR FLOWERING FERN.

Puslinch Lake, swampy land, June 28, 1937; Puslinch Lake, 1933, (OAC); Puslinch Lake, Klugh, 1903 (Q); Guelph, Nicol, 1889 (Q);

O. Claytoniana L. INTERRUPTED FERN.

Puslinch Lake, wet woods, June 13, 1937; Guelph, Nicol, 1888 (Q); Puslinch Lake, Klugh, 1903 (Q); Puslinch, 1934 (OAC).

O. cinnamomea L. CINNAMON FERN.

Guelph, wet woods, June 16, 1937; Aberfoyle, Klugh, 1903 (Q);
Guelph, Klugh, 1904 (Q); Puslinch, 1915 (OAC).

O. cinnamomea L. forma frondosa Torr. & A. Gray. (O. cinnamomea L. Var. frondosa Gray.)

Puslinch, Klugh, 1903 (Q); Harriston, Brown, 1926 (B).

OPHIOGLOSSACEAE

(ADDER'S TONGUE FAMILY)

Botrychium virginianum (L.) Sw. RATTLESNAKE FERN.

Guelph, rich woods, July 17, 1937; Rockwood, Taylor, 1932 (T);
Guelph, Klugh, 1903 (Q); Guelph, Nicol, 1888 (Q); Guelph, Rowley,
1915 (OAC); Harriston, Brown, 1926 (B).

EQUISETACEAE

(HORSETAIL FAMILY)

Equisetum arvense L. FIELD HORSETAIL.

Guelph, sandy banks, May 19, 1938 & June 2, 1938; Killean,
Klugh, 1904 (Q); Guelph, 1930 (OAC).

E. sylvaticum L. WOOD HORSETAIL.

Rockwood, moist ditches, May 24, 1937; Killean, Klugh, 1904
(Q); Hespeler, Groh, 1907 (DAO).

E. fluviatile L. SWAMP HORSETAIL.

Puslinch Lake, shallow water, June 8, 1937; Guelph, 1929 (OAC);
Killean, Klugh, 1904 (Q).

E. hyemale L. COMMON SCOURING RUSH.

Guelph, moist sandy soil, May 10, 1938; Guelph (OAC); Killean,
Klugh, 1904 (Q); Guelph, Hamilton, 1923 (T).

E. scirpoides Michx. SEDGE-LIKE HORSETAIL.

Puslinch, moist woods, Aug. 15, 1937; Killean, Klugh, 1904 (Q);
Hespeler, 1932 (OAC).

LYCOPODIACEAE
(CLUBMOSS FAMILY)

Lycopodium lucidulum Michx. SHINING CLUBMOSS.

Guelph, moist woods, Aug. 30, 1937; Guelph, (OAC); Guelph, Klugh, 1904 (Q); Harriston, Brown, 1926 (B).

L. annotinum L. STIFF CLUBMOSS.

Guelph, Klugh, 1904 (Q); Guelph, Klugh, 1904 (H).

L. clavatum L. RUNNING PINE.

Puslinch Lake, dry woods, Aug. 21, 1937; Puslinch, Simmons, 1934 (OAC); Guelph, Klugh, 1904 (Q).

L. obscurum L. GROUND PINE.

Puslinch, moist woods, July 29, 1937; Guelph, Simmons, 1934 (OAC); Killean, Klugh, 1904 (Q); Harriston, Brown, 1926 (B).

SPERMATOPHYTES

(SEED PLANTS)

GYMNOSPERMAE

(CONIFERS)

TAXACEAE

(YEW FAMILY)

Taxus canadensis Marsh. AMERICAN YEW, GROUND HEMLOCK.

Puslinch Lake, 1919 (OAC).

PINACEAE

(PINE FAMILY)

Pinus Strobus L. WHITE PINE.

Guelph, rich woods, July 4, 1937; Guelph (OAC).

P. sylvestris L. SCOTCH PINE.

Guelph, escape from cultivation, July 5, 1937; Guelph (OAC).

Larix laricina (Du Roi) Koch. AMERICAN LARCH, TAMARACK.

Puslinch, sphagnum bog, July 9, 1937; Puslinch Lake (OAC).

Picea mariana (Mill.) BSP. BLACK SPRUCE.

Puslinch, sphagnum bog, July 12, 1937.

P. Abies (L.) Karst. NORWAY SPRUCE.

Guelph, escape from cultivation, July 9, 1937.

Abies balsamea (L.) Mill. CANADA BALSAM, BALSAM FIR.

Guelph, swampy ground, July 12, 1937; Guelph, 1918 (OAC).

Tsuga canadensis (L.) Carr. HEMLOCK.

Guelph, swampy ground, July 9, 1937.

Thuja occidentalis L. WHITE CEDAR, ARBOR VITAE.

Guelph, rocky banks, July 5, 1937; Guelph (OAC).

Juniperus communis L. COMMON JUNIPER.

Guelph, hillsides, July 5, 1937; Guelph (OAC).

J. horizontalis Moench. CREEPING JUNIPER.

Guelph, 1918 (OAC).

J. virginiana L. RED CEDAR.

Guelph, Barber (OAC).

ANGIOSPERMAE
(FLOWERING PLANTS)

TYPHACEAE
(CAT-TAIL FAMILY)

Typha latifolia L. BROAD-LEAVED CAT-TAIL.

Guelph, marshes, July 4, 1937; Guelph, 1931 (OAC).

T. angustifolia L. NARROW-LEAVED CAT-TAIL.

Guelph, marshes, July 17, 1937.

SPARGANIACEAE
(BUR-REED FAMILY)

Sparganium eurycarpum Engelm. BROAD-FRUITED BUR-REED.

Guelph, borders of rivers July 9, 1938; Guelph, 1911 (OAC).

NAJADACEAE
(PONDWEED FAMILY)

Potamogeton natans L. COMMON FLOATING PONDWEED.

Guelph, shallow water, July 8, 1937; Guelph, Simmons, 1933 (OAC).

P. heterophyllus Schreb. VARIOUS-LEAVED PONDWEED.

Puslinch Lake, Klugh, 1904 (Q).

P. zosterifolius Schumacher. EEL-GRASS PONDWEED.

Puslinch Lake, Klugh, 1904 (Q).

P. pectinatus L. FENNEL-LEAVED PONDWEED.

Guelph, Howitt, 1906 (OAC).

JUNCAGINACEAE
(ARROW GRASS FAMILY)

Triglochin maritima L. SPIKE GRASS.

Aberfoyle, boggy land, June 8, 1937; Aberfoyle, Stallwood,
1936 (T).

T. palustris L. MARSH ARROW GRASS.

Aberfoyle, Simmons, 1932 (OAC).

ALISMACEAE
(WATER-PLANTAIN FAMILY)

Sagittaria latifolia Willd. BROAD-LEAVED ARROW HEAD.

Guelph, river margins, June 30, 1937; Rockwood, 1921 (OAC).

S. latifolia Willd. forma gracilis (Pursh) Robinson.

Guelph, river margins, Aug. 14, 1937.

S. latifolia Willd. forma obtusa (Muhl.) Robinson.

Guelph, river margins, Aug. 14, 1937.

S. heterophylla Pursh. SESSILE-FRUITED ARROW HEAD.

Guelph, Hamilton, 1923 (T).

Alisma Plantago-aquatica L. WATER PLANTAIN.

Guelph, shallow water, July 4, 1937; Guelph, Simmons, 1933 (OAC).

HYDROCHARITACEAE
(FROG'S BIT FAMILY)

Elodea canadensis Michx. WATER WEED.

Puslinch Lake, Klugh, 1904 (Q).

Vallisneria spiralis L. TAPE-GRASS, EEL-GRASS.

Guelph, shallow water, Sept. 8, 1938.

GRAMINEAE
(GRASS FAMILY)

Andropogon furcatus Muhl. FORKED BEARD GRASS.

Killean, Klugh, 1904 (Q).

Digitaria humifusa Pers. SMALL CRAB GRASS.

Guelph, waste ground, Sept. 30, 1937; Killean, Klugh, 1904 (Q).

D. sanguinalis (L.) Scop. LARGE CRAB GRASS, FINGER GRASS.

Guelph, waste ground, Aug. 22, 1937; Guelph, Corby, 1934 (OAC);

Guelph, Warner (DAO).

Panicum capillare L. OLD WITCH GRASS, TUMBLE GRASS.

Guelph, fields, July 31, 1937; Guelph (OAC); Killean, Klugh,

1904 (Q); Guelph, Hamilton, 1923 (T).

P. miliaceum L. MILLET.

Guelph, Stone, 1926 (OAC); Guelph, Hamilton, 1923 (T).

P. virgatum L. SWITCH GRASS.

Guelph, 1932 (OAC).

P. agrostoides Spreng. RED TOP PANIC GRASS.

Guelph, 1937 (OAC); Guelph, McDougall, 1937 (DAO).

P. depauperatum Muhl. STARVED PANIC GRASS.

Guelph, Jarvis, Ont. Nat. 1905.

P. linearifolium Scribn. NARROW-LEAVED PANIC GRASS.

Killean, Klugh, 1904 (Q).

P. implicatum Scribn. SLENDER-STEMMED PANIC GRASS.

Puslinch, moist meadows, July 27, 1938; Guelph, 1932 (OAC).

P. latifolium L. BROAD-LEAVED PANIC GRASS.

Killean, Klugh, 1904 (Q).

Echinochloa crus-galli (L.) Beauv. BARNYARD GRASS.

Guelph, cultivated land, July 29, 1937; Guelph, 1933 (OAC);

Killean, Klugh, 1904 (Q); Guelph, MacMillan, (DAO); Guelph,

Hamilton, 1923 (T).

E. frumentacea (Roxb.) Link. JAPANESE MILLET.

Guelph, 1926 (OAC); Guelph, Hamilton, 1923 (T).

Setaria glauca (L.) Beauv. YELLOW FOXTAIL.

Guelph, waste places, Aug. 6, 1937; Guelph (OAC); Guelph,

Hamilton, 1923 (T).

S. verticillata (L.) Beauv. BRISTLY FOXTAIL GRASS.

Guelph, waste ground, July 29, 1938.

S. viridis (L.) Beauv. GREEN FOXTAIL.

Guelph, waste places, July 14, 1937; Guelph, 1926 (OAC); Guelph,

Hamilton, 1923 (T); Guelph, MacMillan (DAO); Guelph, Groh,

1907 (DAO).

S. italica (L.) Beauv. ITALIAN MILLET.

Guelph, Warner, (DAO).

Zizania aquatica L. WILD RICE, INDIAN RICE.

Killean, Klugh, 1904 (Q).

Leersia virginica Willd. WHITE GRASS.

Puslinch, wet ground, Sept. 27, 1938.

L. oryzoides (L.) Sw. RICE CUT GRASS.

Near Freelton, swampy ground, July 17, 1937; Puslinch, 1932 (OAC); Killean, Klugh, 1904 (Q).

Phalaris canariensis L. CANARY GRASS.

Guelph, waste places, July 24, 1937; Guelph, 1917 (OAC).

P. arundinacea L. REED CANARY GRASS.

Guelph, ditches, July 27, 1937; Guelph, Evans, 1925 (OAC); Killean, Klugh, 1904 (Q).

P. arundinacea L. var. picta L. RIBBON GRASS.

Guelph, ditches, escape from gardens, July 27, 1937.

Anthoxanthum odoratum L. SWEET VERNAL GRASS.

Guelph, Evans, 1926 (OAC).

Hierochloe odorata (L.) Wahlenb. SENECA GRASS.

Guelph, moist meadows, July 12, 1937.

Milium effusum L. TALL MILLET GRASS.

Guelph, 1906 (OAC); Killean, Klugh, 1904 (Q).

Oryzopsis asperifolia Michx. WHITE GRAINED MOUNTAIN RICE.

Guelph, 1917 (OAC); Killean, Klugh, 1904 (Q); Guelph, Hamilton, 1923 (T); Guelph, Groh, 1907 (DAO).

Muhlenbergia sylvatica Torr. WOODLAND DROPSEED GRASS.

Guelph, moist woods, July 24, 1937; Guelph, 1915 (OAC).

M. mexicana (L.) Trin. WOOD GRASS.

Near Freelton, swampy ground, July 24, 1937; Killean, Klugh,

1901 (Q).

M. racemosa (Michx.) BSP. SATIN GRASS.

Killean, Klugh, 1904 (Q).

Phleum pratense L. TIMOTHY.

Guelph, meadows and roadsides, June 22, 1937; Guelph, 1926 (OAC); Killean, Klugh, 1904 (Q).

Alopecurus pratensis L. MEADOW FOXTAIL.

Guelph, fields and roadsides, May 27, 1937; Guelph, 1915 (OAC); Guelph, Klugh, 1905 (Q); Guelph, Hamilton, 1923 (T).

A. geniculatus L. MARSH FOXTAIL.

Aberfoyle, wet meadows, June 11, 1938; Puslinch, 1932 (OAC).

A. geniculatus L. var. aristulatus Torr. SHORT-AWNED FOXTAIL.

Killean, Klugh, 1904 (Q).

Sporobolus vaginiflorus (Torr.) Wood. SHEATHED RUSH GRASS.

Morrison, McConkey, 1934 (OAC); Killean, Klugh, 1904 (Q).

S. cryptandrus (Torr.) Gray. SAND DROPSEED.

Guelph, sandy river shores, Aug. 7, 1938; Guelph, 1930 (OAC).

Agrostis alba L. RED TOP.

Guelph, Simmons, 1934 (OAC); Guelph, Klugh, 1904 (Q).

A. alba L. var. vulgaris (With.) Thurb.

Guelph, fields and roadsides, July 24, 1938; Guelph (OAC); Guelph, Hamilton, 1923 (T).

A. hyemalis (Walt.) BSP. ROUGH HAIR GRASS.

Aberfoyle, 1933 (OAC); Guelph, Klugh, 1904 (Q).

Calamagrostis canadensis (Michx.) Beauv. BLUE-JOINT GRASS

Guelph, swampy ground, July 24, 1937; Guelph, Stone, 1932 (OAC); Killean, Klugh, 1904 (Q).

Cinna arundinacea L. SWEET REED GRASS.

Guelph, 1930 (OAC).

C. latifolia (Trev.) Griseb. SLENDER REED GRASS.

Guelph, moist woods, July 27, 1937; Puslinch, (OAC);
Killean, Klugh, 1904 (Q).

Holcus lanatus L. VELVET GRASS.

Guelph, 1916 (OAC).

Sphenopholis pallens (Spreng.) Scribn. TALL EATON'S GRASS.

Killean, Klugh, 1904 (Q); Puslinch Lake, 1904 (OAC).

Koeleria cristata (L.) Pers. CRESTED HAIR GRASS.

Guelph, Stone, 1926 (OAC).

Deschampsia caespitosa (L.) Beauv. TUFTED HAIR GRASS.

Elora, 1916 (OAC).

Avena fatua L. WILD OATS.

Guelph, waste ground, June 16, 1937; Guelph, 1927 (OAC).

A. striata Michx. PURPLE OATS.

Guelph, Klugh, 1905 (Q).

Arrhenatherum elatius (L.) Beauv. OAT GRASS.

Guelph, roadsides, June 23, 1937; Guelph, 1924 (OAC);

Guelph, Hamilton, 1923 (T).

Danthonia spicata (L.) Beauv. POVERTY OAT GRASS.

Fergus, sterile soil, June 8, 1938; Puslinch Lake, 1904
(OAC); Killean, Klugh, 1904 (Q).

Spartina cynosuroides (L.) Roth. SALT REED GRASS.

Guelph, 1897 (OAC).

Eragrostis megastachya (Koeler) Link. STINK OR SNAKE GRASS.

Guelph, roadsides, Aug. 23, 1937; Guelph (OAC).

Melica mutica Walt. NARROW MELIC GRASS.

Guelph, Hart, 1920 (OAC); Guelph, Howitt, 1920 (DAO).

M. striata (Michx.) Hitchc. FALSE MELIC GRASS.

Guelph, open woods, June 9, 1937; Guelph, 1920 (OAC).

Dactylis glomerata (L.) Beauv. ORCHARD GRASS.

Guelph, waste places, June 23, 1937; Guelph, 1903 (OAC);
Killean, Klugh, 1904 (Q); Guelph, Hamilton, 1923 (T).

Cynosurus cristatus L. DOG'S TAIL GRASS.

Guelph, Stone, 1926 (OAC).

Poa annua L. LOW SPEAR GRASS.

Guelph, waste ground, July 5, 1937; Killean, Klugh, 1904 (Q);
Guelph, Hamilton, 1923 (T).

P. compressa L. CANADA BLUE GRASS.

Guelph, waste ground, July 2, 1937; Guelph, 1922 (OAC);
Killean, Klugh, 1904 (Q); Guelph, Hamilton, 1923 (T); Guelph,
MacMillan (DAO); Guelph, Warren (DAO).

P. nemoralis L. WOOD BLUE GRASS.

Guelph, Stone, 1926 (OAC).

P. triflora Gilib. FOWL MEADOW GRASS.

Guelph, moist ditches, July 12, 1937; Guelph, Klugh, 1904 (Q);
Guelph, 1912 (OAC).

P. pratensis L. KENTUCKY BLUE GRASS, JUNE GRASS.

Guelph, fields and roadsides, July 17, 1937; Guelph, Simmons,
1934 (OAC); Killean, Klugh, 1904 (Q); Guelph, Hamilton,
1923 (T).

P. debilis Torr. WEAK SPEAR GRASS.

Killean, Klugh, 1904 (Q); Guelph, Klugh, 1904 (T).

P. alsodes Gray. GROVE MEADOW GRASS.

Guelph, 1926 (OAC); Killean, Klugh, 1905 (Q); Puslinch Lake,
Klugh, 1905 (Q).

Glyceria canadensis (Michx.) Trin. RATTLESNAKE GRASS.

Puslinch, wet ditches, July 29, 1937; Killean, Klugh, 1905 (Q).

G. nervata (Willd.) Trin. NERVED MANNA GRASS.

Guelph, wet ditches, July 10, 1937; Guelph, 1933 (OAC);
Killean, Klugh, 1904 (Q); Guelph, Hamilton, 1923 (T).

G. grandis Wats. REED MANNA GRASS.

Guelph, wet ground, June 24, 1937; Guelph, 1933 (OAC);
Arkell, Klugh, 1904 (Q).

G. fluitans (L.) R.Br. FLOATING MANNA GRASS.

Guelph, 1901 (OAC); Killean, Klugh, 1904 (Q).

G. septentrionalis Hitchc. FLOATING MANNA GRASS.

Puslinch, Simmons, 1932 (OAC); Guelph (OAC).

G. borealis (Nash) Batchelder. NORTHERN MANNA GRASS.

Aberfoyle, 1933 (OAC); Puslinch, Hamilton, 1923 (T).

Puccinellia distans (L.) Parl. SPREADING MEADOW GRASS.

Guelph, roadsides, June 22, 1937; Guelph, Klugh, 1904 (Q);
Hespeler, Herriot, 1901 (H); Guelph, 1906 (OAC); Guelph,
Simmons, 1933 (DAO).

Festuca rubra L. RED FESCUE.

Guelph, Simmons, 1933 (OAC).

F. ovina L. SHEEP FESCUE.

Guelph, moist meadows, July 5, 1937; Guelph, (OAC).

F. ovina L. var. duriuscula (L.) Koch.

Guelph, Stone, 1926 (OAC); Guelph, Macoun (OAC).

F. elatior L. MEADOW FESCUE.

Guelph, open meadows, June 24, 1937; Guelph, 1926 (OAC);
Guelph, Hamilton, 1923 (T).

F. elatior L. var. arundinacea L. REED FESCUE.

Guelph, moist ground, July 15, 1937; Guelph, 1923 (OAC).

F. nutans Spreng. NODDING FESCUE.

Guelph, 1914 (OAC); Killean, Klugh, 1904 (Q).

Bromus secalinus L. CHESS, CHEAT.

Guelph, fields, June 20, 1937; Guelph, 1915 (OAC); Killean, Klugh, 1904 (Q); Guelph, Hamilton, 1923 (T).

Bromus racemosus L. UPRIGHT CHESS.

Guelph, 1922 (OAC); Guelph, Hamilton, 1923 (T).

B. commutatus Schrad. HAIRY BROME GRASS.

Guelph, waste ground, July 19, 1937; Guelph, 1933 (OAC);

Guelph, MacMillan (DAO).

B. arvensis L. FIELD BROME GRASS.

Guelph (OAC).

B. tectorum L. DOWNY BROME GRASS.

Guelph, 1923 (OAC); Guelph, Hamilton, 1923 (T).

B. ciliatus L. FRINGED BROME GRASS.

Guelph, roadsides, Aug. 4, 1937; Guelph, 1929 (OAC); Killean, Klugh, 1904 (Q).

B. pumpillianus Scribn.

Guelph, Stone, 1936 (OAC).

B. inermis Leyss. AWNLESS BROME GRASS.

Guelph, roadsides and wet ditches, June 22, 1938; Guelph, Simmons, 1932 (OAC); Guelph, Hamilton, 1923 (T).

Lolium perenne L. PERENNIAL RYE GRASS.

Guelph, meadows, July 26, 1937; Guelph, 1926 (OAC); Killean, Klugh, 1904 (Q); Guelph, Hamilton, 1923 (T); Guelph, Warner (DAO).

L. multiflorum Lam. ITALIAN RYE GRASS.

Guelph, meadows, June 27, 1937; Guelph, 1916 (OAC); Guelph, Lennox (DAO); Guelph, MacMillan (DAO).

L. temulentum L. DARNEL.

Guelph, MacMillan, 1920 (DAO).

Agropyron Smithii Rydb. WESTERN WHEAT GRASS.

Guelph, Simmons, 1933 (OAC); Hespeler, Groh, 1924 (DAO).

A. repens (L.) Beauv. TWITCH, QUACK OR COUCH GRASS.

Guelph, roadsides and waste places, July 10, 1938; Guelph, (OAC); Guelph, Hamilton, 1923 (T).

A. tenerum Vasey. SLENDER OR WESTERN WHEAT GRASS.

Guelph, roadsides, June 23, 1938; Guelph, Stone, 1926 (OAC).

A. caninum (L.) Beauv. AWNED WHEAT GRASS.

Killean, Klugh, 1904 (Q).

A. Richardsonii Schrad. BEARDED WHEAT GRASS.

Guelph, Stone, 1926 (OAC).

A. cristatum (L.) Beauv. CRESTED WHEAT GRASS.

Near Freerton, roadsides, Oct. 15, 1938; Guelph, 1926 (OAC).

Hordeum jubatum L. WILD BARLEY.

Puslinch, waste ground, June 24, 1937; Guelph, 1927 (OAC);

Guelph, Klugh, 1905 (Q); Hespeler, Herriot, 1902 (H).

Elymus virginicus L. VIRGINIA WILD RYE.

Guelph, wet ground, July 20, 1937; Guelph, 1928 (OAC);

Killean, Klugh, 1904 (Q).

E. canadensis L. NODDING WILD RYE.

Guelph, moist woods, July 21, 1937; Wellington Co., Klugh,

1911 (Q); Guelph, Hamilton, 1923 (T).

Hystrix patula Moench. BOTTLE BRUSH GRASS.

Guelph, rich woods, July 17, 1937; Guelph, 1916 (OAC); Guelph,

Hamilton, 1923 (T); Killean, Klugh, 1904 (Q).

Secale cereale L. RYE.

Guelph, MacMillan (DAO); escapes from cultivation.

CYPERACEAE
(SEDGE FAMILY)

Cyperus rivularis Kunth. LOW CYPERUS.

Killean, Klugh, 1904 (Q).

C. strigosus L. STRAW COLOURED CYPERUS.

Puslinch, swampy ground, Aug. 24, 1937.

Dulichium arundinaceum L. DULICHIMUM.

Guelph, borders of ponds, June 15, 1938; Guelph, 1919

(OAC); Guelph, Klugh, 1905 (Q).

Eleocharis capitata (L.) R.Br. CAPITATE SPIKE RUSH.

Aberfoyle, 1933 (OAC).

E. ovata (Roth.) R.&S. OVOID SPIKE RUSH.

Elora, wet ground, June 8, 1938; Guelph, Klugh, 1905 (Q).

E. palustris (L.) R.&S. CREEPING SPIKE RUSH.

Elora, wet ground, June 8, 1938; Guelph, Klugh, 1905 (Q).

E. acicularis (L.) R.&S. LEAST SPIKE RUSH.

Guelph, Klugh, Ont. Nat. 1905.

E. tenuis (Willd.) Schultes. SLENDER SPIKE RUSH.

Guelph, Klugh, Ont. Nat. 1905.

E. acuminata (Muhl.) Nees. FLAT-STEMMED SPIKE RUSH.

Wellington Co., Klugh, 1911 (Q).

Scirpus validus Vahl. AMERICAN GREAT BULRUSH.

Puslinch, swampy ground, Oct. 4, 1938.

S. fluviatilis (Torr.) Gray. RIVER BULRUSH.

Guelph, Klugh, Ont. Nat. 1905.

S. atrovirens Muhl. DARK GREEN BULRUSH.

Puslinch, swampy ground, June 20, 1938; Guelph, Hamilton,
1923 (T).

S. lineatus Michx. REDDISH BULRUSH.

Guelph, Klugh, 1905 (Q).

S. cyperinus (L.) Kunth. WOOL GRASS.

Killean, Klugh, 1905 (Q).

S. Eriophorum Michx. SHEATHED WOOL GRASS.

Guelph, Klugh, 1905 (CAN).

Eriophorum callitrix Cham. SHEATHED COTTON GRASS.

Puslinch, bogs, May 9, 1938; Mount Forest, Klugh, 1905 (Q).

E. gracile Roth. SLENDER COTTON GRASS.

Guelph, Klugh, 1905 (Q).

E. angustifolium Roth. TALL COTTON GRASS.

Puslinch, Stone, 1926 (OAC).

E. viridi-carinatum (Engelm.) Fernald. THIN LEAVED COTTON GRASS.

Puslinch, swampy ground, June 1, 1938; Puslinch, Corby, 1934 (OAC); Guelph, Klugh, 1905 (Q).

E. viridi-carinatum (Engelm.) Fernald var. Fellowsii Fernald.

Puslinch, swampy ground, June 1, 1938.

E. virginicum L. VIRGINIA COTTON GRASS.

Puslinch, Heming, 1927 (OAC); Guelph, Klugh, 1904 (Q).

Rhynchospora alba L. WHITE BEAKED RUSH.

Puslinch, bogs, Aug. 15, 1938.

Carex tribuloides Wahlenb. BLUNT BROOM SEDGE.

Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (CAN).

C. tribuloides Wahlenb. var. reducta Bailey. NECKLACE SEDGE.

Guelph, Klugh, 1905 (Q).

C. Crawfordii Fernald. CRAWFORD'S SEDGE.

Guelph, Klugh, 1905. Ont. Nat.

C. cristata Schwein. CRESTED SEDGE.

Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (CAN).

Carex Bebbii Olney BEBB'S SEDGE.

Guelph, Klugh, 1905 (Q); Ospringe, Klugh, 1905 (CAN).

C. sychnocephala Carey DENSE LONG-BEAKED SEDGE.

Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (CAN).

C. stellulata Good LITTLE PRICKLY SEDGE.

Puslinch, wet meadows, May 31, 1938; Mount Forest, Klugh,
1905 (Q); Guelph, Klugh, 1905 (CAN).

C. stellulata Good var. excelsior (Bailey) Fernald

Mount Forest, Klugh, 1905 (H); Mount Forest, Klugh, 1905 (CAN).

C. scirpoides Schkuhr. STERILE SEDGE.

Guelph, Klugh, 1905 (Q); Puslinch, Simmons, 1933 (OAC);

Guelph, Klugh, 1905 (CAN); Puslinch, Howitt, 1933 (DAO).

C. canescens L. SILVERY OR HOARY SEDGE.

Guelph, Simmons, 1933 (OAC).

C. canescens L. var. disjuncta Fernald.

Puslinch Lake, Herriot, 1904 (H); Guelph, Klugh, 1905 (CAN);

Mount Forest, Colgate (Q).

C. brunnescens Poir. BROWNISH SEDGE.

Puslinch, Simmons, 1933 (OAC); Puslinch, Howitt, 1933 (DAO).

C. bromoides Schkuhr. BROME LIKE SEDGE.

Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (H); Mount
Forest, Klugh, 1905 (CAN).

C. Deweyana Schwein DEWEY'S SEDGE.

Near Freelon, rich woods, May 24, 1938; Guelph, Klugh,
1905 (CAN); Guelph, Klugh, 1905 (Q); Hespeler, Klugh,
1905 (Q).

C. tenuiflora Wahlenb. SPARSE FRUITED SEDGE.

Mount Forest, Klugh, 1905 (Q); Mount Forest, Klugh, 1905 (H).

C. trisperma Dewey. THREE FRUITED SEDGE.

Mount Forest, Klugh, 1905 (Q); Mount Forest, Klugh, 1905 (CAN).

C. tenella Schkuhr. SOFT LEAVED SEDGE.

Puslinch Lake, 1934 (OAC); Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (CAN).

C. rosea Schkuhr. STELLATE SEDGE.

Guelph, Klugh, 1905 (CAN).

C. rosea Schkuhr. var. radiata Dewey.

Guelph, Klugh, 1905 (Q).

C. sparganioides Muhl. BUR-REED SEDGE.

Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (CAN).

C. cephaloidea Dewey. THIN LEAVED SEDGE.

Guelph, Klugh, 1905 (Q).

C. vulpinoidea Michx. FOX SEDGE.

Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (CAN).

C. diandra Schrank. var. ramosa (Boott) Fernald. PRAIRIE SEDGE.

Puslinch, bogs, June 1, 1938; Guelph, Klugh, 1905 (Q);

Puslinch, Simmons, 1933 (OAC); Puslinch, Howitt, 1933 (DAO).

C. stipata Muhl. AWL FRUITED SEDGE.

Guelph, Klugh, 1905 (CAN).

C. Sartwellii Dewey. SARTWELL'S SEDGE.

Mount Forest, Klugh, 1905 (Q); Wellington Co., Klugh, 1905 (H).

C. crinita Lam. FRINGED SEDGE.

Guelph, Klugh, 1905 (Q); Guelph, Macoun, 1905 (CAN).

C. aquatilis Wahlenb. WATER SEDGE.

Wellington Co., Klugh, 1910 (Q).

C. stricta Lam. TUSsock SEDGE.

Puslinch Lake, Klugh, 1905 (Q).

C. stricta Lam. var. angustata (Boott) Bailey.

Puslinch Lake, 1934 (OAC); Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (CAN).

C. aurea Nutt. GOLDEN FRUITED SEDGE.

Puslinch, wet meadows, May 24, 1938; Guelph, 1899 (OAC); Killean, Klugh, 1905 (Q); Guelph, Klugh, 1905 (CAN).

C. pauciflora Lightf. FEW FLOWERED SEDGE.

Killean, Klugh, 1905 (Q).

C. leptalea Wahlenb. BRISTLE-STALKED SEDGE.

Puslinch, wet meadows, June 21, 1938; Mount Forest, Klugh, 1903 (Q).

C. gracillima Schwein. GRACEFUL SEDGE.

Guelph, Painter (OAC); Guelph, Klugh, 1905 (Q).

C. Backii Boott. BACK'S SEDGE.

Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (H); Guelph, Klugh, 1905 (CAN).

C. Jamesii Schwein. JAMES' SEDGE.

Guelph, Klugh, 1905 (Q).

C. albicans Willd. WHITE-TINGED SEDGE.

Guelph, Klugh, 1905 (Q).

C. communis Bailey. FIBROUS-ROOTED SEDGE.

Guelph, Klugh, 1905 (Q); Killean, Herriot, 1904 (H).

C. varia Muhl. var. colorata Bailey. EMMONS' SEDGE

Puslinch, rich woods, May 8, 1938; Guelph, Howitt, 1933 (DAO).

C. pennsylvanica Lam. PENNSYLVANIA SEDGE.

Guelph, fields, May 5, 1938; Arkell, Stroud, 1938 (OAC); Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (CAN); Guelph, Doherty, 1902 (OAC).

C. eburnea Boott. BRISTLE-LEAVED SEDGE.

Killeen, Klugh, 1905 (Q); Puslinch Lake, 1924 (OAC); Puslinch Lake, Herriot, 1902 (H).

C. pedunculata Muhl. LONG-STALKED SEDGE.

Arkell, rich woods, May 14, 1938; Guelph, Klugh, 1906 (Q); Rockwood, Carter, 1905 (Q); Guelph, Klugh, 1905 (CAN); Guelph, Groh, 1907 (DAO).

C. plantaginea Lam. PLANTAIN-LEAVED SEDGE.

Guelph, rich woods, April 29, 1938; Guelph, Klugh, 1906, (Q); Hespeler, Klugh, 1905 (CAN).

C. Careyana Torr. CAREY'S SEDGE.

Guelph, Klugh, 1906 (Q); Guelph, Klugh, 1905 (H); Guelph, Klugh, 1905 (CAN).

C. platyphylla Carey. BROAD-LEAVED SEDGE.

Puslinch, rich woods, June 1, 1938; Harriston, Brown, 1925 (B).

C. laxiculmis Schwein. SPREADING SEDGE.

Guelph, Klugh, 1904 (CAN); Guelph, Klugh, 1905 (Q).

C. digitalis Willd. SLENDER WOOD SEDGE.

Guelph, Klugh (H); Guelph, Klugh, 1905 (Q).

C. laxiflora Lam. LOOSE FLOWERED SEDGE.

Guelph, Klugh, 1905 (CAN).

C. laxiflora Lam. var. patulifolia (Dewey) Carey.

Aberfoyle, rich woods, May 24, 1938; Guelph, Klugh, 1905 (G); Guelph, Klugh, 1905 (H).

C. laxiflora Lam. var. varians Bailey.

Guelph, Klugh, 1905 (Q).

C. laxiflora Lam. var. latifolia Boott.

Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (CAN).

C. Hitchcockiana Dewey HITCHCOCK'S SEDGE.

Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (CAN).

C. granularis Muhl. MEADOW SEDGE.

Elora, meadows, June 8, 1938; Guelph, Klugh, 1905 (Q); Elora, Howitt & Stroud, 1938 (OAC); Guelph, Klugh, 1905 (CAN).

C. flava L. YELLOW SEDGE.

Near Freelon, damp woods, May 24, 1938; Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (CAN).

C. flava L. var. rectirostrata Gaudin.

Elora, river banks, June 8, 1938; Elora, Howitt & Stroud, 1938 (OAC).

C. flava L. var. elaticior Schlecht. SMALL YELLOW SEDGE.

Guelph, wet meadows, June 4, 1938.

C. longirostris Torr. LONG-BEAKED SEDGE.

Guelph, Klugh, 1905 (H); Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (CAN).

C. castanea Wahlenb. CHESTNUT SEDGE.

Puslinch, bogs, June 6, 1938.

C. arctata Boott. DROOPING WOOD SEDGE.

Puslinch, moist woods, June 1, 1938; Puslinch, Howitt & Stroud, 1938 (OAC); Aberfoyle, Stroud, 1938 (OAC); Hespeler, Klugh, 1905 (Q); Hespeler, Klugh, 1905 (CAN).

C. scabrata Schwein. ROUGH SEDGE.

Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (CAN).

C. filiformis L. SLENDER SEDGE.

Puslinch, bogs, May 31, 1938; Mount Forest, Klugh (Q); Mount Forest, Klugh, 1905 (H); Guelph, Klugh, 1905 (CAN).

C. lanuginosa Michx. WOOLLY SEDGE.

Wellington Co., Klugh, 1910 (Q).

C. vestita Willd. VELVET SEDGE.

Guelph, woods, June 14, 1938.

C. trichocarpa Muhl. HAIRY FRUITED SEDGE.

Puslinch, Howitt, 1914 (OAC).

C. trichocarpa Muhl. var. aristata (R.Br.) Bailey. AWNED SEDGE.

Mount Forest, Klugh, 1905 (Q).

C. riparia W.Curtis. LAKE-BANK SEDGE.

Guelph, Klugh, 1905 (Q).

C. acutiformis Ehrh. SWAMP or MARSH SEDGE.

Aberfoyle, bog, May 22, 1938.

C. Pseudo-Cyperus L. CYPRESS-LIKE SEDGE.

Puslinch (OAC).

C. comosa Boott. BRISTLY SEDGE.

Guelph, Klugh, 1905 (Q).

C. hystericina Muhl. PORCUPINE SEDGE.

Killean, Klugh (Q); Ospringe, Klugh, 1905 (CAN).

C. lurida Wahlenb. SALLOW SEDGE.

Guelph, wet woods, June 24, 1938.

C. Schweinitzii Dewey SCHWEINITZ'S SEDGE

Guelph, Klugh, 1905 (Q).

C. retrorsa Schwein. RETRORSE SEDGE.

Aberfoyle, wet meadows, June 25, 1938; Guelph, Klugh, 1905 (CAN);

Guelph, Klugh, 1905 (Q).

C. lupuliformis Sartwell. HOP-LIKE SEDGE.

Puslinch Lake, swamps, September 25, 1938.

C. lupulina Muhl. HOP SEDGE.

Killean, Klugh (Q); Puslinch Lake, Herriot, 1902 (H).

C. intumescens Rudge. BLADDER SEDGE

Killean, Klugh (Q).

C. rostrata Stokes. BEAKED SEDGE.

Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (CAN).

C. rostrata Stokes. var. utriculata (Booth) Bailey.

Puslinch, marshy land, June 29, 1938; Puslinch, Howitt & Stroud, 1938 (OAC); Ospringe, Klugh, 1905 (Q).

C. Tuckermani Dewey. TUCKERMAN'S SEDGE.

Guelph, Klugh, 1905 (Q); Guelph, Klugh, 1905 (CAN).

ARACEAE

(ARUM FAMILY)

Arisaema triphyllum (L.) Schott. JACK-IN-THE-PULPIT, INDIAN TURNIP.

Guelph, rich woods, May 26, 1937; Harriston, Brown, 1925 (B);

Guelph, Hamilton, 1923 (T); Guelph, Minshall, 1932 (OAC);

Guelph, MacMillan (DAO).

Calla palustris L. WILD CALLA.

Puslinch Lake, shallow water, June 20, 1937; Puslinch, Hamilton,

1923 (T); Puslinch Lake, 1923 (OAC); Aberfoyle, MacMillan (DAO).

Symplocarpus foetidus (L.) Nutt. SKUNK CABBAGE.

Puslinch Lake, bogs, May 23, 1937; Puslinch Lake, 1934 (OAC).

Acorus Calamus L. SWEET FLAG.

Guelph, swamps, June 30, 1937; Puslinch, Hamilton, 1923 (T);

Puslinch, Moore, 1919 (OAC); Guelph, Wright, 1919 (OAC);

Puslinch, Howitt (OAC).

LEMNACEAE

(DUCKWEED FAMILY)

Lemna minor L. LESSER DUCKWEED.

Guelph, common floating in water, 1938.*

* No specimen collected.

COMMELINACEAE
(SPIDERWORT FAMILY)

Tradescantia virginiana L. SPIDERWORT.

Guelph, rich woods, July 14, 1937; Guelph, Howitt, 1926 (OAC).

PONTEDERIACEAE
(PICKEREL-WEED FAMILY)

Pontederia cordata L. PICKEREL-WEED.

Puslinch Lake, shallow water, August 10, 1937; Puslinch,
Howitt, 1906 (OAC).

JUNCACEAE
(RUSH FAMILY)

Juncus bufonius L. TOAD RUSH.

Killean, Klugh, 1904 (Q).

J. tenuis Willd. SLENDER RUSH.

Elora, meadows, June 8, 1938; Guelph, Hart (OAC); Guelph,
Hamilton, 1923 (T); Guelph, Klugh, 1905 (Q).

J. balticus Willd. var. littoralis Engelm. BALTIC RUSH.

Near Freelton, sandy shores, June 20, 1937; Wellington Co.,
Klugh, 1910 (Q).

J. effusus L. BOG or SOFT RUSH.

Near Freelton, swampy ground, October 22, 1938; Guelph, Klugh,
1905 (Q); Guelph, Treherne (OAC).

J. nodosus L. KNOTTED RUSH.

Near Freelton, swamps, October 4, 1938.

J. acuminatus Michx. SHARP-FRUITED RUSH.

Puslinch, Minshall, 1932 (OAC).

J. alpinus Vill. var. insignis Fries. RICHARDSON'S RUSH.

Guelph, Klugh, 1905 (Q).

Luzula saltuensis Fernald. HAIRY WOOD RUSH.

Guelph, moist woods, May 19, 1937; Puslinch, Minshall, 1932
(OAC); Guelph, Klugh, 1905 (Q).

LILIACEAE
(LILY FAMILY)

Tofieldia glutinosa (Michx.) Pers. FALSE ASPHODEL.

Puslinch, wet ground, June 27, 1937; Aberfoyle, 1932 (OAC).

Zygadenus chloranthus Richards. GLAUCOUS ZYGADERIUS.

Elora, wet ground, July 14, 1937; Elora, Corby, 1934 (OAC).

Uvularia grandiflora Sm. LARGE BELLWORT.

Guelph, rich woods, May 20, 1937; Puslinch, Hart, 1932 (OAC);
Arkell, Simmons, 1933 (OAC).

Allium tricoccum Ait. WILD LEEK.

Guelph, rich woods, June 30, 1937.

A. Schoenoprasum L. var. sibiricum (L.) Hartm. CHIVES, RUSH GARLIC.

Guelph, meadows, September 14, 1937.

A. cernuum Roth. NODDING WILD ONION.

Guelph, meadows, September 4, 1938.

Hemerocallis fulva L. DAY LILY.

Guelph, fields, July 13, 1937.

Lilium philadelphicum L. WOOD LILY.

Mount Forest, Colgate, Ont. Nat. 1906.

L. philadelphicum L. var. andinum Fern.

Fergus, Malcolm, 1905 (CAN)

L. canadense L. CANADA LILY.

Guelph, moist meadows, July 6, 1937; Guelph, Evans, 1931 (OAC).

Erythronium americanum Ker. YELLOW ADDER'S TONGUE, DOG TOOTH VIOLET.

Guelph, Hart, 1929 (OAC); Guelph, Hamilton (T); Guelph, Minshall, 1932 (OAC).

Ornithogalum umbellatum L. STAR OF BETHLEHEM.

Guelph, Stone, 1926 (OAC).

Muscari botryoides (L) Mill. GRAPE HYACINTH.

Guelph, 1932 (OAC); escape from cultivation.

Asparagus officinalis L. GARDEN ASPARAGUS.

Guelph, meadows, June 9, 1937; Guelph, MacMillan (DAO).

Clintonia borealis (Ait.) Ref. YELLOW CLINTONIA.

Puslinch, moist woods, June 1, 1938; Aberfoyle, Stallwood (T);

Aberfoyle, Simmons, 1935 (OAC); Puslinch, Stone, 1926 (OAC).

Smilacina racemosa (L) Desf. FALSE SOLOMAN'S SEAL.

Guelph, moist woods, May 20, 1937; Guelph, Hamilton (T);

Guelph, Weaver, 1933 (OAC).

S. stellata (L) Desf. STAR FLOWERED FALSE SOLOMAN'S SEAL.

Guelph, rich woods, June 1, 1937; Guelph, Mathews, 1918 (OAC).

S. trifolia (L) Desf. THREE LEAVED FALSE SOLOMAN'S SEAL.

Puslinch, rich woods, June 15, 1937; Guelph, Simmons, 1933 (OAC).

Maianthemum canadense Desf. FALSE LILY OF THE VALLEY.

Guelph, moist woods, May 30, 1937; Aberfoyle, Simmons, 1933

(OAC); Guelph (T); Guelph, Hamilton, 1923 (T).

Streptopus roseus Michx. PURPLE TWISTED STALK.

Guelph, Wright, 1919 (OAC); Guelph, Aiton (OAC); Guelph (T);

Aberfoyle, Stallwood, 1935 (T).

Polygonatum biflorum (Walt.) Ell. SMALL SOLOMAN'S SEAL.

Guelph, woods, May 30, 1937; Guelph, 1924 (OAC); Guelph,

Hamilton, 1923 (T); Guelph (T).

Medeola virginiana L. INDIAN CUCUMBER ROOT.

Puslinch, rich woods, June 14, 1937; Puslinch, Minshall, 1932 (OAC)

Trillium erectum L. RED TRILLIUM, BIRTHWORT.

Guelph, rich woods, May 17, 1937; Puslinch, Doherty, 1902 (OAC).

T. grandiflorum (Michx.) Salisb. WHITE TRILLIUM, WAKE ROBIN.

Guelph, rich woods, May 21, 1937; Guelph, Hamilton, 1923 (T);

Guelph, Hart, 1929 (OAC).

Smilax herbacea L. CARRION FLOWER.

Puslinch, moist woods, June 10, 1937; Puslinch, Hamilton,

1923 (T); Guelph, 1934 (OAC).

S. hispida Muhl. HISPID GREEN BRIER.

Guelph, Groh, 1910 (DAO).

IRIDACEAE
(IRIS FAMILY)

Iris versicolor L. BLUE FLAG.

Guelph, swampy ground, June 11, 1937; Hespeler, McVittie (T);

Guelph, Hamilton, 1923 (T); Guelph, Rowley, 1915 (OAC);

Guelph, Hart, 1929 (OAC).

I. pumila L. SMALL BLUE FLAG.

Puslinch Lake, Herriot, 1904 (H); escape from cultivation.

Sisyrinchium angustifolium Mill. NARROW LEAVED BLUE-EYED GRASS.

Guelph, swamps, May 30, 1937; Guelph, Simmons, 1933 (OAC);

Guelph, Hamilton, 1923 (T); Guelph, Hart, 1929 (OAC).

ORCHIDACEAE
(ORCHID FAMILY)

Cypripedium parviflorum Salisb. SMALLER YELLOW LADY'S SLIPPER.

Rockwood, swamps, June 4, 1937; Guelph, Hart, 1929 (OAC);

Killean, Klugh, 1904 (Q).

C. parviflorum Salisb. var. pubescens (Willd.) Knight. LARGER
YELLOW LADY'S SLIPPER.

Puslinch, swamps, June 13, 1937.

C. hirsutum Mill. SHOWY LADY'S SLIPPER.

Puslinch (T); Hespeler, Simmons, 1931 (OAC); Killean, Klugh, 1904 (Q).

C. acaule Ait. STEMLESS LADY'S SLIPPER.

Puslinch Lake, Howitt, 1914 (OAC).

Orchis rotundifolia Banks. ROUND LEAF ORCHIS.

Guelph, Klugh, 1904 (Q); Guelph, Wright, 1915 (OAC); Guelph, Klugh, 1904 (H).

O. spectabilis L. SHOWY ORCHID.

Guelph, rich woods, May 28, 1938; Guelph, Hart, 1929 (OAC); Guelph, Howitt, 1908 (OAC).

Habenaria bracteata (Willd.) R.Br. LONG BRACTED ORCHID.

Guelph, Howitt, 1914 (OAC).

H. hyperborea (L.) R.Br. TALL LEAFY GREEN ORCHID.

Guelph, Howitt, 1909 (OAC); Guelph, Wright, 1919 (OAC).

H. dilatata (Pursh) Gray. TALL LEAFY WHITE ORCHID.

Wellington Co., Colgate, 1905 Ont. Nat.

H. clavellata (Michx.) Spreng. SMALL GREEN WOOD ORCHID.

Guelph, Klugh, 1904 (Q); Puslinch Lake, Klugh, 1904 (H).

H. orbiculata (Pursh) Torr. ROUND LEAVED ORCHID.

Killean, Klugh, 1904 (Q);

H. lacera (Michx.) R.Br. RAGGED FRINGED ORCHID.

Guelph, Klugh, 1904 (Q); Puslinch Lake, Klugh, 1904 (H).

H. psycodes (L.) Sw. SMALLER PURPLE FRINGED ORCHID.

Aberfoyle, swamps, July 7, 1937; Guelph, 1904 (OAC).

Pogonia ophioglossoides (L.) Ker. ROSE POGONIA, SNAKEMOUTH.

Killean, Klugh, 1904 (Q).

Calopogon pulchellus (Sw.) R.Br. CALOPOGON, GRASS PINK.

Puslinch (T); Puslinch Lake, Rowley, 1915 (OAC).

Arethusa bulbosa L. DRAGON'S MOUTH.

Killeen, Klugh, 1904 (Q).

Spiranthes cernua (L.) Richard. NODDING LADY'S TRESSES.

Hespeler, bogs, Sept. 9, 1937; Hespeler, Howitt, 1930 (OAC);

Hespeler, Hart (OAC).

S. Romanzoffiana Cham. HOODED LADY'S TRESSES.

Hespeler, swamps, July 31, 1937; Aberfoyle, 1932 (OAC).

Epipactis repens (L) Grantz. RATTLESNAKE PLANTAIN.

Wellington Co., Howitt, 1906 (OAC).

E. pubescens (Willd.) A.A.Eaton. DOWNY RATTLESNAKE PLANTAIN.

Guelph, Klugh, 1904 (Q).

Corallorhiza trifida Chatelain. EARLY CORAL ROOT.

Guelph, Stone, 1918 (OAC).

C. striata Lindl. STRIPED CORAL ROOT.

Rockwood, Jarvis, 1920 (OAC); Guelph, Carter, 1905 (Q).

C. maculata Raf. LARGE or SPOTTED CORAL ROOT.

Wellington Co., Colgate, Ont. Nat. 1905.

Microstyllos monophyllos (L.) Lindl. WHITE ADDER'S MOUTH.

Puslinch, Eastham, 1908 (OAC).

Liparis Loeselii (L.) Richard. FEN ORCHIS, TWAYBLADE.

Wellington Co., Colgate, Ont. Nat. 1905.

Calypso bulbosa (L.) Oakes. CALYPSO.

Elora, McPherson (T).

SALICACEAE
(WILLOW FAMILY)

Salix amygdaloides Anders. PEACH LEAVED WILLOW.

Puslinch Lake, Klugh, 1904 (Q).

S. lucida Muhl. SHINING WILLOW.

Guelph, wet ground, June 6, 1937; Guelph (OAC).

S. fragilis L. BRITTLE or CRACK WILLOW.

Guelph, moist meadows, May 11, 1937.

S. cordata Muhl. HEART LEAVED WILLOW.

Puslinch, 1927 (OAC).

S. discolor Muhl. GLAUCOUS or PUSSY WILLOW.

Guelph, low meadows, May 16, 1937; Guelph, 1934 (OAC);

Killean, Klugh, 1905 (Q).

S. petiolaris Sm. SLENDER WILLOW.

Guelph, Klugh, 1905 (Q).

S. humilis Marsh. PRAIRIE WILLOW.

Wellington Co., Klugh, 1910 (Q).

Populus alba L. WHITE or SILVER LEAVED WILLOW.

Guelph, roadsides, July 18, 1937:

P. tremuloides Michx. AMERICAN or TREMBLING ASPEN.

Guelph, rich woods, May 3, 1937 & June 19, 1937; Guelph,
Evans, 1925 (OAC).

P. grandidentata Michx. LARGE-TOOTHED ASPEN.

Guelph, rich woods, May 3, 1937 & July 16, 1937; Guelph,
1934 (OAC).

P. balsamifera L. BALSAM POPLAR.

Guelph, swampy land, May 30, 1937 & April 25, 1937.

P. candicans Ait. BALM OF GILEAD.

Guelph, roadsides, April 18, 1937 & June 8, 1937; Guelph, 1925 (OAC).

P. deltoides Marsh. COTTONWOOD, NECKLACE POPLAR.

Guelph, swampy ground, June 8, 1937; Guelph, Klugh, 1910 (Q).

P. nigra L. BLACK POPLAR.

Guelph, Wright, 1920 (OAC).

P. nigra L. var. italica Du Roi. LOMBARDY POPLAR.

Guelph, roadsides, June 8, 1937; Guelph, Simmons, 1933 (OAC).

MYRICACEAE

(SWEET GALE FAMILY)

Myrica Gale L. SWEET GALE.

Mount Forest, swamp, June 19, 1934.

JUGLANDACEAE

(WALNUT FAMILY)

Juglans cinerea L. BUTTERNUT.

Guelph, rich woods, May 27, 1937.

*J. nigra L. BLACK WALNUT.

Guelph, rich woods, May 31, 1937; Guelph, 1932 (OAC).

Carya ovata (Mill.) K.Koch. SHAG-BARK HICKORY.

Guelph, rich woods, June 3, 1937.

C. cordiformis (Wang.) K.Koch. BITTERNUT HICKORY.

Guelph, rich woods, June 13, 1937; Guelph, Minshall,
1932 (OAC).

*Introduced plant to this region. According to J.M. Buchan, Notes on the Flora of Hamilton, in the Canadian Journal, August 1874: 281-304 "this tree does not seem to appear north of the Hamilton Valley."

BETULACEAE
(BIRCH FAMILY)

Corylus rostrata Ait. HAZELNUT, FILBERT.

Puslinch, rich woods, May 3, 1937 & June 28, 1937; Guelph,
Minshall, 1932 (OAC).

Ostrya virginiana (Mill.) K.Koch. IRONWOOD, HOP HORNBEAM.

Guelph, rich woods, June 27, 1937; Guelph, Minshall, 1932 (OAC).

Carpinus caroliniana Walt. BLUE BEECH, AMERICAN HORNBEAM.

Guelph, rich woods, May 7, 1937 & Aug. 21, 1937; Puslinch Lake,
1924 (OAC); Arkell, Jarvis (OAC).

Betula lutea Michx. f. YELLOW BIRCH.

Guelph, rich woods, July 3, 1937; Elora, Howitt & Wright,
1919 (OAC); Guelph, Jarvis (OAC).

B. populifolia Marsh. AMERICAN WHITE BIRCH.

Arkell, McCallum (OAC); Guelph, Kalham (OAC).

B. pendula Roth. WEEPING WILLOW.

Guelph, Howitt, 1915 (OAC).

B. alba L. WHITE BIRCH.

Guelph, rich woods, May 7, 1937 & May 29, 1937; Guelph,
Evans, 1927 (OAC).

B. alba L. var. papyrifera (Marsh.) Spach. PAPER or CANOE BIRCH.

Guelph, rich woods, May 7, 1937 & May 29, 1937.

Alnus crispa (Ait.) Pursh. GREEN or MOUNTAIN ALDER.

Puslinch Lake, Howitt, 1909 (OAC).

A. incana (L.) Moench. SPECKLED ALDER.

Guelph, rich woods, April 22, 1937 & May 22, 1937; Guelph,
Minshall, 1932 (OAC).

FAGACEAE
(BEECH FAMILY)

Fagus grandifolia Ehrh. BEECH.

Guelph, rich woods, July 24, 1937; Guelph, Minshall, 1932 (OAC).

Castanea dentata (Marsh.) Borkh. CHESTNUT.

Wellington Co., Herriot, Ont. Nat. 1905.

Quercus macrocarpa Michx. BUR or MOSSY-CUP OAK.

Guelph, rich woods, May 28, 1938.

Q. rubra L. RED OAK.

Guelph, rich woods, June 2, 1937.

URTICACEAE
(NETTLE FAMILY)

Ulmus fulva Michx. SLIPPERY ELM.

Guelph, rich soil, April 11, 1937 & June 6, 1937.

U. campestris L. ENGLISH ELM.

Guelph, roadsides, May 4, 1937 & June 6, 1937.

U. americana L. AMERICAN ELM.

Guelph, moist woods, April 21, 1937 & June 6, 1937; Guelph,

Howitt, 1918 (OAC); Guelph, Hamilton, 1923 (T).

U. racemosa Thomas. CORK or ROCK ELM.

Guelph, calcareous ridge, Aug. 12, 1937.

Celtis occidentalis L. HACKBERRY, SUGARBERRY.

Guelph, rich woods, May 19, 1937 & July 6, 1937; Guelph,

Wright, 1915 (OAC).

Cannabis sativa L. HEMP.

Guelph, waste ground, June 30, 1937.

Humulus Lupulus L. HOP.

Guelph, Evans, 1920 (OAC).

Urtica gracilis Ait. SLENDER NETTLE.

Guelph, rich woods, July 20, 1937; Hespeler, Moore (OAC).

Laportea canadensis (L.) Gaud. WOOD NETTLE.

Guelph, rich woods, July 29, 1937; Guelph, Cumming (OAC);

Harriston, Brown, 1925 (B).

Pilea pumila (L.) Gray. CLEARWEED, RICHWEED.

Guelph, wet ditches, Sept. 27, 1938; Guelph, Cumming (OAC).

SANTALACEAE

(SANDALWOOD FAMILY)

Commandra umbellata (L.) Nutt. BASTARD TOAD FLAX.

Puslinch, dry ground, May 23, 1937; Puslinch Lake, Stone,

1934 (OAC); Puslinch, Hamilton, 1923 (T).

C. Richardsiana Fernald.

Puslinch Lake, Eastham & Howitt, 1909 (OAC).

LORANTHACEAE

(MISTLETOE FAMILY)

Arceuthobium pusillum Peck. DWARF MISTLETOE.

Puslinch Lake, Stone, 1920 (OAC).

ARISTOLOCHIACEAE

(BIRTHWORT FAMILY)

Asarum canadense L. WILD GINGER.

Guelph, rich woods, May 11, 1937; Guelph, Hart, 1929 (OAC).

Aristolochia macrophylla Lam. DUTCHMAN'S PIPE.

Guelph, rich woods, June 17, 1937: garden escape.

A. Clematitis L.

Guelph, rich woods, June 19, 1937; Guelph, 1933 (OAC):

escape from cultivation.

POLYGONACEAE
(KNOTWEED FAMILY)

Rumex crispus L. YELLOW or CURLED DOCK.

Guelph, waste ground, June 28, 1937; Guelph (OAC).

R. conglomeratus Murr.

Guelph, Wright, 1918 (OAC).

R. obtusifolius L. BROAD LEAVED DOCK.

Guelph, roadsides, July 13, 1937; Guelph, Corby, 1934 (OAC).

R. acetosella L. SHEEP SORREL.

Guelph, meadows, June 25, 1937; Guelph, Wright, 1920 (OAC);

Guelph, Hamilton, 1923 (T).

Polygonum aviculare L. KNOTWEED, DOORWEED.

Guelph, Corby, 1934 (OAC); Guelph, Tytler (T); Guelph,

Hamilton, 1923 (T).

P. erectum L. UPRIGHT KNOTWEED.

Guelph, waste places, July 20, 1937.

P. lapathifolium L. DOCK LEAVED or PALE SMARTWEED.

Guelph, damp meadows, July 13, 1937.

P. amphibium L. FLOATING WATER SMARTWEED.

Aberfoyle, shallow water, Aug. 15, 1937; Puslinch, Minshall,

1932 (OAC); Puslinch Lake, Racicot, 1921 (OAC).

P. amphibium L. var. Hartwrightii (Gray) Bissell.

Puslinch, shallow water, Sept. 23, 1937; Puslinch Lake,

Howitt, 1909 (OAC).

P. pennsylvanicum L. PENNSYLVANIA SMARTWEED.

Guelph, Howitt, 1914 (OAC).

P. Hydropiper L. COMMON SMARTWEED, WATER PEPPER.

Guelph, Hart, 1930 (OAC); Arthur, Scott, 1897 (CAN).

P. acre HBK. WATER SMARTWEED.

Guelph, wet ground, July 21, 1937.

P. Persicaria L. LADY'S THUMB.

Guelph, moist ditches, July 7, 1937; Guelph, Hamilton, 1923 (T);

Guelph, Wright, 1920 (OAC).

P. hydropiperoides Michx. MILD WATER SMARTWEED.

Arthur, Scott (T).

P. Convolvulus L. BLACK BINDWEED.

Guelph, cultivated ground, June 20, 1938; Guelph, Weaver,

1933 (OAC); Guelph, Hamilton, 1923 (T).

P. scandens L. CLIMBING FALSE BUCKWHEAT.

Guelph, Simmons, 1932 (OAC).

P. cuspidatum Sieb. & Zucc. JAPANESE KNOTWEED.

Guelph, fields, Sept. 23, 1937.

Fagopyron esculentum Moench. BUCKWHEAT.

Guelph, Eastham, 1908 (OAC): escape from cultivation.

CHENOPODIACEAE

(GOOSEFOOT FAMILY)

Cycloloma atriplicifolium (Spreng.) Coult. WINGED PIGWEED.

Guelph, Simmons, 1932 (OAC).

Kochia Scoparia (L.) Schrad. FIRE BUSH.

Guelph, waste ground, 1938*.

Chenopodium Botrys L. JERUSALEM OAK.

Guelph, waste land, July 18, 1938; Guelph, Cumming (OAC).

C. capitatum (L.) Asch. STRAWBERRY BLITE.

Guelph, cultivated ground, June 30, 1937; Guelph, 1932 (OAC);

Guelph, Hamilton, 1923 (T).

*No specimen collected.

C. Bonus-Henricus L. GOOD KING HENRY.

Rockwood, meadows, Oct. 13, 1937; Rockwood, 1932 (OAC).

C. glaucum L. OAK LEAVED GOOSEFOOT.

Guelph, cultivated land, June 22, 1937; Guelph, Hamilton, 1923 (T); Wellington Co., Clark (T); Guelph, Weaver, 1933 (OAC).

C. hybridum L. MAPLE LEAVED GOOSEFOOT.

Guelph, cultivated land, July 24, 1937; Guelph, Evans, 1895 (OAC).

C. album L. LAMB'S QUARTERS.

Guelph, cultivated land, July 13, 1937.

C. urbicum L. CITY GOOSEFOOT.

Guelph, Howitt, 1906 (OAC); Guelph, Cumming (OAC).

Atriplex patula L. SPREADING ORACH.

Guelph, cultivated land, July 19, 1937; Guelph, Weaver, 1933 (OAC)

A. patula L. var. hastata (L.) Gray.

Guelph, cultivated land, July 19, 1937; Guelph, Evans, 1924 (OAC).

Monolepis Nuttalliana (R. & S.) Wats. MONOLEPIS.

Guelph, Evans, 1924 (OAC).

Salsola Kali L. var. tenuifolia G.F.W.Mey. RUSSIAN THISTLE.

Guelph, roadsides, July 3, 1937; Guelph, Stone & Simmons, 1933.

Axyris amaranthoides L. UPRIGHT AXYRIS

Guelph, Mathews, 1918 (OAC); Guelph, Lory (OAC); Guelph, Kennedy (OAC).

AMARANTHACEAE
(PIGWEEED FAMILY)

Amaranthus retroflexus L. RED ROOT PIGWEED.

Guelph, cultivated land, July 15, 1937; Guelph, Doherty, 1896 (OAC); Guelph, Hamilton, 1923 (T).

A. hybridus L. GREEN AMARANTH.

Guelph, MacLean (OAC).

A. paniculatus L. PURPLE AMARANTH.

Hespeler, old meadows, Aug. 15, 1937.

A. graecizans L. TUMBLE WEED.

Guelph, cultivated fields, Aug. 29, 1937; Guelph, Corby
1934 (OAC).

A. blitoides Wats. PROSTRATE PIGWEED.

Guelph, cultivated land, July 16, 1937; Guelph, Hamilton,
1923 (T); Guelph, Weaver, 1933 (OAC).

AIZOACEAE

(CARPET WEED FAMILY)

Mollugo verticillata L. CARPET WEED.

Guelph, sandy river banks, Sept. 25, 1938.

PORTULACACEAE

(PURSLANE FAMILY)

Claytonia virginica L. NARROW LEAVED SPRING BEAUTY.

Guelph, rich woods, May 15, 1937; Puslinch, Stone, 1926 (OAC);
Puslinch, Wright, 1919 (OAC).

C. caroliniana Michx. BROAD LEAVED SPRING BEAUTY.

Guelph, rich woods, May 5, 1937; Guelph, Wright, 1919 (OAC).

Portulaca oleracea L. COMMON PURSLANE.

Guelph, cultivated land, July 14, 1937; Guelph, Ozburn, 1921 (OAC)

CARYOPHYLLACEAE

(PINK FAMILY)

Spergula arvensis L. CORN SPURREY.

Guelph, Evans, 1926 (OAC).

Arenaria serpyllifolia L. THYME-LEAVED SANDWORT.

Guelph, Minshall, 1932 (OAC).

Stellaria longifolia Muhl. LONG LEAVED STITCHWORT.

Puslinch Lake, Eastham & Howitt, 1909 (OAC).

S. graminea L. LESSER STITCHWORT.

Puslinch, rich woods, July 7, 1937; Puslinch Lake, Howitt,
1919 (OAC).

S. media (L.) Cyrill. COMMON CHICKWEED.

Guelph, cultivated land, July 17, 1937; Guelph, Hamilton,
1923 (T).

Cerastium arvense L. FIELD or MEADOW CHICKWEED.

Guelph, hillsides, May 29, 1937; Guelph, Simmons, 1933 (OAC);
Guelph, Hamilton, 1923 (T).

C. vulgatum L. COMMON MOUSE-EAR CHICKWEED.

Guelph, cultivated land, June 9, 1937; Guelph, Minshall, 1932
(OAC); Guelph, Hamilton, 1923 (T).

Agrostemma Githago L. PURPLE or CORN COCKLE.

Guelph, grain fields, July 7, 1937; Guelph, Wright, 1915 (OAC).

Lychnis coronaria (L.) Desv. MULLEIN PINK.

Guelph, Weaver, 1933 (OAC).

L. chalcedonica L. SCARLET LYCHNIS.

Guelph, cultivated land, July 5, 1937; Guelph, Corby, 1934 (OAC).

L. dioica L. PINK COCKLE.

Guelph, roadsides, July 19, 1937; Guelph, Wilkes, 1933 (OAC).

L. alba Mill. WHITE COCKLE.

Guelph, Simmons, 1933 (OAC); Guelph, Hamilton, 1923 (T).

Silene noctiflora L. NIGHT-FLOWERING CATCHFLY.

Guelph, cultivated ground, June 21, 1937; Guelph, 1915 (OAC);

Guelph, Hamilton, 1923 (T).

S. latifolia (Mill.) Britton & Rendle. BLADDER CAMPION.

Guelph, roadsides, June 24, 1937; Puslinch, Wright, 1919 (OAC);

Guelph, Hamilton, 1923 (T).

Saponaria officinalis L. BOUNCING BET.

Guelph, roadsides, July 7, 1937; Guelph, Corby, 1934 (OAC);

Guelph, 1931 (OAC); Guelph, Hamilton, 1923 (T).

S. Vaccaria L. COW COCKLE.

Guelph, roadsides, April 27, 1937; Guelph (OAC).

Dianthus deltoides L. MAIDEN PINK.

Guelph, fields, June 23, 1937; Guelph, Weaver, 1933 (OAC).

D. Armeria L. DEPTFORD PINK.

Guelph, lawns, June 30, 1937; Guelph, Simmons, 1932 (OAC);

Guelph, Hamilton, 1923 (T).

NYMPHAEACEAE

(WATER LILY FAMILY)

Nymphaea advena Ait. YELLOW POND LILY.

Aberfoyle, stagnant water, June 8, 1937; Wellington Co.,

Minshall, 1932 (OAC); Aberfoyle, 1934 (OAC); Harriston, Brown,
1928 (B).

Castalia odorata (Ait.) Woodville & Wood. SWEET SCENTED WATER LILY.

Puslinch, Racicot, 1921 (OAC).

Cabomba caroliniana Gray. CAROLINA WATER-SHIELD.

Guelph, Simmons, 1935 (OAC).

RANUNCULACEAE

(BUTTERCUP FAMILY)

Ranunculus Ficaria L. LESSER CELANDINE.

Guelph, 1919 (OAC).

R. aquatilis L. var. capillaceus DC. WHITE WATER CROWFOOT.

Guelph, shallow water, June 26, 1937; Puslinch, Howitt, 1936 (OAC)

R. delphinifolius Torr. YELLOW WATER CROWFOOT.

Puslinch Lake, shallow water, May 15, 1937; Puslinch, Howitt, 1915 (OAC).

R. Purshii Richards. PURSH'S CROWFOOT.

Mount Forest, Colgate, Ont. Nat. 1906.

R. sceleratus L. CURSED CROWFOOT.

Guelph, ditches, July 27, 1937; Guelph, Doherty, 1901 (OAC);
Guelph, Hamilton, 1923 (T).

R. abortivus L. SMALL-FLOWERED CROWFOOT.

Puslinch, rich woods, May 26, 1937; Guelph, Rowley, 1915 (OAC);
Guelph, Hamilton, 1923 (T).

R. recurvatus Poir. HOOKED CROWFOOT.

Guelph, woods, June 4, 1937; Aberfoyle, Simmons, 1935 (OAC).

R. fascicularis Muhl. EARLY CROWFOOT.

Guelph, moist meadows, April 21, 1938.

R. septentrionalis Poir. SWAMP BUTTERCUP.

Elora, swampy ground, June 8, 1938.

R. hispidus Michx. HISPID BUTTERCUP.

Guelph, rich woods, June 4, 1937.

R. repens L. CREEPING BUTTERCUP.

Puslinch, sandy ground, July 15, 1938; Guelph, Howitt, 1915
(OAC); Guelph, Rowley, 1915 (OAC).

R. pennsylvanicus L. f. BRISTLY CROWFOOT.

Guelph, swampy ground, July 1, 1937; Aberfoyle, Simmons, 1933 (OAC).

R. bulbosus L. BULBOUS BUTTERCUP.

Guelph, Howitt, 1915 (OAC).

R. acris L. MEADOW BUTTERCUP.

Guelph, fields, June 19, 1937; Guelph, 1934 (OAC).

Thalictrum dioicum L. EARLY MEADOW RUE.

Guelph, moist woods, May 11, 1937; Guelph, 1908 (OAC);

Guelph, Hamilton, 1923 (T).

T. revolutum DC. WAXY MEADOW RUE.

Puslinch, woods, July 9, 1938.

T. polygamum Muhl. FALL or LATE MEADOW RUE.

Guelph, moist meadows, June 29, 1938; Guelph, 1915 (OAC).

Anemonella thalictroides (L.) Spach. RUE ANEMONE.

Puslinch, rich woods, May 27, 1937.

Hepatica triloba Chaix. BLUNT LEAVED HEPATICA.

Puslinch, woods, May 13, 1937; Puslinch Lake, Simmons, 1934 (OAC).

H. acutiloba DC. OVATE LEAVED HEPATICA.

Puslinch, rich woods, May 6, 1937; Arkell, Simmons, 1934 (OAC);

Guelph, Hamilton, 1923 (T).

Anemone virginiana L. TALL ANEMONE, THIMBLE WEED.

Guelph, Stone, 1925 (OAC); Harriston, Brown, 1925 (B).

A. canadensis L. CANADA ANEMONE.

Guelph, swampy ground, June 12, 1938; Guelph, Howitt, 1919

(OAC); Guelph, Hamilton, 1923 (T).

A. quinquefolia L. WOOD ANEMONE, WIND FLOWER.

Guelph, meadows, May 15, 1937; Puslinch, Stone, 1926 (OAC).

Clematis virginiana L. VIRGIN'S BOWER.

Guelph, river banks, Aug. 3, 1937 & Sept. 9, 1937; Guelph,

1932 (OAC); Guelph, Hamilton, 1923 (T).

Caltha palustris L. MARSH MARIGOLD, COWSLIP.

Guelph, swamps, May 10, 1937; Puslinch, Minshall, 1932 (OAC).

Coptis trifolia (L.) Salisb. GOLDTHREAD.

Aberfoyle, swamps, May 12, 1937; Puslinch, Doherty, 1902 (OAC); Puslinch, Anderson, 1931 (OAC); Puslinch, Simmons, 1933 (OAC).

Aquilegia canadensis L. WILD COLUMBINE.

Guelph, rocky ground, May 26, 1937; Guelph, Wright, 1913 (OAC).

Actaea rubra (Ait.) Willd. RED BANE BERRY.

Puslinch, rich woods, May 20, 1937; Puslinch, Doherty, 1902 (OAC).

A. alba (L.) Mill. WHITE BANE BERRY.

Guelph, rich woods, June 3, 1938; Guelph, 1931 (OAC).

BERBERIDACEAE
(BARBERRY FAMILY)

Podophyllum peltatum L. MANDRAKE, MAY APPLE.

Guelph, rich woods, May 27, 1937; Guelph, 1932 (OAC).

Caulophyllum thalictroides (L.) Michx. BLUE COHOSH.

Guelph, rich woods, May 5, 1937; Guelph, 1934 (OAC).

Berberis vulgaris L. COMMON BARBERRY.

Guelph, roadsides, June 4, 1937; Guelph, 1921 (OAC).

B. aquifolium L. AMERICAN HOLLY.

Guelph, roadsides, May 13, 1938; Guelph, 1927 (OAC).

MENISPERMACEAE
(MOONSEED FAMILY)

Menispermum canadense L. MOONSEED.

Guelph, moist soil, June 21, 1937; Guelph, Simmons, 1933 (OAC).

MAGNOLIACEAE
(MAGNOLIA FAMILY)

Magnolia acuminata L. CUCUMBER TREE.

Guelph campus, May 28, 1937; Guelph, Stone, 1919 (OAC):
introduced tree.

Liriodendron Tulipifera L. TULIP TREE.

Guelph campus, June 19, 1937; Guelph, Stone, 1929 (OAC):
introduced tree.

PAPAVERACEAE
(POPPY FAMILY)

Sanguinaria canadensis L. BLOODROOT.

Puslinch, woods, May 6, 1937; Arkell, 1934 (OAC); Guelph,
Hamilton, 1923 (T).

Chelidonium majus L. CELANDINE.

Puslinch, rich woods, June 7, 1937; Guelph, Hamilton, 1923 (T).

Papaver Rhoeas L. CORN POPPY.

Guelph, meadows, July 18, 1937.

Argemone mexicana L. MEXICAN POPPY.

Guelph (OAC).

FUMARIACEAE
(FUMITORY FAMILY)

Adlumia fungosa (Ait.) Greene. CLIMBING FUMITORY.

Guelph, rich woods, July 31, 1937; Rockwood, Howitt, 1915 (OAC).

Dicentra Cuccularia (L.) Bernh. DUTCHMAN'S BREECHES.

Guelph, rich woods, May 8, 1937; Guelph, 1908 (OAC).

D. canadensis (Goldie) Walp. SQUIRREL CORN.

Guelph, rich moist woods, May 17, 1937; Guelph, 1902 (OAC).

Corydalis aurea Willd. GOLDEN CORYDALIS.

Rockwood, Wright, 1920 (OAC).

Fumaria officinalis L. COMMON FUMITORY.

Guelph, roadsides, July 15, 1937.

CAPPARIDACEAE
(CABER FAMILY)

Cleome serrulata Pursh. PINK CLEOME.

Guelph, Evans, 1930 (OAC).

C. spinosa L. SPIDER FLOWER.

Guelph, garden escape, April 27, 1937; Guelph, Stroud, 1938 (OAC).

CRUCIFERAE
(MUSTARD FAMILY)

Berteroa incana (L.) DC. HOARY ALYSSUM.

Guelph, meadows, July 16, 1937; Guelph, 1934 (OAC).

Lobularia maritima (L.) Desv. SWEET ALYSSUM.

Guelph, meadows, Sept. 16, 1937; garden escape.

Alyssum alyssoides L. ALYSSUM.

Guelph, dry banks, June 9, 1937; Puslinch Lake, 1927 (OAC).

Thlaspi arvense L. PENNYCRESS, STINK WEED, FRENCH WEED.

Guelph, cultivated land, June 19, 1937; Guelph, 1932 (OAC).

Lepidium virginicum L. COMMON PEPPERGRASS.

Guelph, roadsides, July 12, 1937; Guelph, 1932 (OAC); Hespeler,
Herriot, 1902 (H).

L. apetalum Willd. PEPPERGRASS.

Guelph, roadsides, July 10, 1937; Guelph, Corby, 1934 (OAC).

L. sativum L. GARDEN CRESS.

Guelph, Evans, 1933 (OAC).

L. campestre (L.) R.Br. FIELD PEPPERGRASS.

Guelph, fields and meadows, July 7, 1937; Guelph, 1928 (OAC).

L. Draba L. HOARY CRESS.

Guelph, 1935 (OAC).

Capsella Bursa-pastoris (L.) Medic. SHEPHERD'S PURSE.

Guelph, cultivated land, July 29, 1937; Guelph, Simmons, 1933 (OAC).

Camelina sativa (L.) Crantz. FALSE FLAX.

Guelph, cultivated fields, June 14, 1937; Guelph, Hart, 1930 (OAC).

C. microcarpa Andrz. SMALL-SEEDED FALSE FLAX.

Guelph, cultivated fields, Aug. 1, 1937; Puslinch, Evans, 1934 (OAC); Guelph, Hamilton, 1923 (T).

Neslia paniculata (L.) Desv. BALL MUSTARD.

Guelph, railroad tracks, July 5, 1937; Guelph, Wright, 1919 (OAC).

Cakile edentula (Bigel) Hook. AMERICAN SEA ROCKET.

Puslinch Lake, sandy shores, July 22, 1937.

Raphanus Raphanistrum L. WILD RADISH.

Guelph, cultivated land, June 25, 1937; Guelph, Evans, 1933 (OAC).

R. sativus L. GARDEN RADISH.

Guelph, garden escape, July 19, 1937.

Brassica alba (L.) Boiss. WHITE MUSTARD.

Guelph, Hart, 1930 (OAC).

B. arvensis (L.) Ktze. FIELD MUSTARD, CHARLOCK.

Guelph, cultivated land, June 19, 1937; Guelph, 1934 (OAC).

B. juncea (L.) Cosson. INDIAN MUSTARD.

Guelph, roadsides, Aug. 29, 1937; Guelph, Corby, 1934 (OAC).

B. nigra (L.) Koch. BLACK MUSTARD.

Guelph, cultivated land, June 24, 1938.

Diplotaxis tenuifolia (L.) DC. WALL ROCKET.

Guelph, cultivated fields, July 23, 1938.

Conringia orientalis (L.) Dumort. HARE'S EAR MUSTARD.

Guelph, railroad tracks, June 24, 1937; Guelph, 1915 (OAC).

Sisymbrium officinale (L.) Scop. HEDGE MUSTARD.

Guelph, roadsides, July 6, 1937; Guelph, 1925 (OAC); Guelph,
Tytler (T).

S. altissimum L. TUMBLE MUSTARD.

Guelph, waste places, June 29, 1937; Guelph, 1933 (OAC).

S. canescens Nutt. var. brachycarpon (Richards) Wats. NORTHERN
TANSY MUSTARD.

Guelph, fields, July 18, 1937.

S. incisum Engelm. CUT LEAF HEDGE MUSTARD.

Fergus, Corby, 1934 (OAC).

S. Sophia L. HERB SOPHIA.

Fergus, waste ground, July 31, 1938.

Hesperis matronalis L. DAME'S ROCKET.

Guelph, meadows, June 29, 1937; Guelph, Simmons, 1933 (OAC);

Guelph, Hamilton, 1923 (T).

Erysimum cheiranthoides L. WORMSEED MUSTARD.

Guelph, cultivated land, July 24, 1937; Puslinch, 1932 (OAC);

Guelph, Bryce (T); Guelph, Clark (T); Harriston, Brown, 1928 (B).

E. parviflorum Nutt. SMALL FLOWERED PRARIE ROCKET.

Rockwood, 1915 (OAC).

Radicula Nasturtium-aquaticum (L.) B. & R. WATER CRESS.

Hespeler, pond borders, June 28, 1937; Hespeler, 1934 (OAC);

Guelph, Hamilton, 1923 (T).

R. sylvestris (L.) Druce. YELLOW CRESS.

Guelph, 1934 (OAC); Guelph, Howitt, 1931 (DAO).

R. palustris (L.) Moench. MARSH CRESS.

Guelph, pond borders, July 21, 1937; Guelph, 1933 (OAC);

Wellington Co., Clark (T).

R. palustris (L.) Moench var. hispida (Desv.) Robs. HISPID YELLOW-CRESS

Guelph, Hart, 1929 (OAC); Guelph, Hamilton, 1923 (T).

R. Armoracia (L.) Robinson. HORSE RADISH.

Guelph, damp fields, June 5, 1937; Guelph, 1934 (OAC).

Barbarea vulgaris R.Br. YELLOW ROCKET.

Guelph, moist ground, July 16, 1937; Guelph, Howitt, 1919 (OAC).

Dentaria diphylla Michx. TWO LEAVED TOOTHWORT, CRINKLEROOT.

Guelph, rich woods, May 19, 1937; Guelph, 1933 (OAC).

D. laciniata Muhl. CUT LEAVED TOOTHWORT, PEPPERWORT.

Guelph, rich woods, May 7, 1937; Guelph, 1929 (OAC).

Cardamine bulbosa (Schreb.) BSP. BULBOUS SPRING CRESS.

Guelph, wet meadows, May 22, 1937; Guelph, 1932 (OAC).

C. Douglassii (Torr.) Britton. PURPLE SPRING CRESS.

Guelph, wet meadows, April 30, 1938.

C. pratensis L. CUCKOO FLOWER.

Puslinch, 1920 (OAC).

C. pennsylvanica Muhl. PENNSYLVANIA BITTER CRESS.

Guelph, wet ground, May 26, 1937; Guelph, Corby, 1934 (OAC).

Arabis glabra (L.) Bernh. TOWER CRESS.

Rockwood, Wright, 1932 (OAC).

A. hirsuta (L.) Scop. HAIRY ROCK CRESS.

Elora, river margins, June 8, 1938; Guelph, Howitt, 1921 (OAC).

A. canadensis L. SICKLE POD.

Guelph, rocky woods, Oct. 4, 1937.

Erucastrum gallicum (Willd.) O.E.Sch. DOG MUSTARD.

Guelph, roadsides, July 12, 1937; Guelph, Howitt, 1932 (OAC);

Guelph, Stallwood, 1936 (T); Guelph, Howitt & Hart, 1930 (DAO).

SARRACENIACEAE

(PITCHER-PLANT FAMILY)

Sarracenia purpurea L. PITCHER PLANT, SIDE-SADDLE FLOWER.

Puslinch, sphagnum bog, June 17, 1937; Puslinch, 1915 (OAC);

Puslinch, Hamilton, 1923 (T); Arkell, 1904 (T).

DROSERACEAE

(SUNDEW FAMILY)

Drosera rotundifolia L. ROUND LEAVED SUNDEW.

Puslinch, sphagnum bog, June 30, 1937; Aberfoyle, Simmons,

1932 (OAC); Puslinch, 1904 (T).

CRASSULACEAE

(ORPINE FAMILY)

Penthorum sedoides L. DITCH STONECROP.

Puslinch, moist ditches, July 17, 1938; Puslinch (OAC).

Sedum acre L. MOSSY STONECROP.

Mount Forest, dry fields, June 19, 1934; Guelph, 1928 (OAC).

Sempervivum tectorum L. HOUSELEEK.

Guelph, garden escape, June 16, 1937.

SAXIFRAGACEAE

(SAXIFRAGE FAMILY)

Saxifraga virginensis Michx. EARLY SAXIFRAGE.

Guelph, dry hillsides, May 6, 1937.

Tiarella cordifolia L. FALSE MITREWORT.

Puslinch, rich woods, May 27, 1937; Guelph, Hamilton, 1923 (T);
Guelph, 1904 (T).

Mitella diphylla L. TWO LEAVED MITREWORT.

Puslinch, rich woods, May 16, 1937; Guelph, Stone, 1926 (OAC);
Guelph, Hamilton, 1923 (T); Guelph, 1904 (T).

M. nuda L. NAKED MITREWORT.

Puslinch, rich woods, May 25, 1937; Guelph, Stone, 1926 (OAC).

Chrysoplenium americanum Schwein. GOLDEN SAXIFRAGE.

Guelph, Howitt, 1915 (OAC).

Parnassia caroliniana Michx. CAROLINA GRASS-OF-PARNASSUS.

Puslinch, swampy ground, July 31, 1937; Guelph, Howitt,
1907 (OAC).

Philadelphus grandiflorus Willd. LARGE FLOWERED SYRINGA.

Guelph, escape from cultivation, June 12, 1937; Guelph,
Hart, 1914 (OAC).

Ribes Cynobasti L. WILD GOOSEBERRY.

Puslinch, rich woods, May 10, 1937; Puslinch, Simmons, 1933
(OAC); Guelph, Hamilton, 1923 (T).

R. oxyacanthoides L. NORTHERN GOOSEBERRY.

Puslinch Lake, Stone, 1918 (OAC).

R. floridum L'Her. WILD BLACK CURRANT.

Puslinch, swampy ground, May 28, 1937; Puslinch, Simmons,
1933 (OAC); Guelph, Hamilton, 1923 (T).

R. nigrum L. BLACK CURRANT.

Guelph, 1919 (OAC).

R. prostratum L'Her. FETID CURRANT.

Guelph, Corby, 1934 (OAC); Puslinch, Herriot, 1904 (H).

R. vulgare Lam. RED CURRANT.

Guelph, 1933 (OAC).

R. triste Pall. AMERICAN RED CURRANT.

Guelph, Dewar (OAC).

R. triste Pall. var. albinervum (Michx.) Fernald.

Guelph, swamps, May 19, 1937; Hespeler, Howitt, 1914 (OAC).

HAMAMELIDACEAE

(WITCH-HAZEL FAMILY)

Hamamelis virginiana L. WITCH-HAZEL.

Guelph, rich woods, June 10, 1937; Guelph, 1929 (OAC).

PLATANACEAE

(PLANE TREE FAMILY)

Platanus occidentalis L. PLANE TREE.

Guelph campus, May 28, 1937; Guelph, Stone, 1925 (OAC).

ROSACEAE

(ROSE FAMILY)

Physocarpus opulifolius (L.) Maxim. NINE BARK.

Guelph, rich soil, June 11, 1937; Guelph, 1934 (OAC); Guelph,
Hamilton, 1923 (T).

Spiraea salicifolia L. NARROW LEAVED MEADOW SWEET.

Puslinch, moist ground, July 16, 1937; Puslinch, Simmons,
1933 (OAC); Guelph, Hamilton, 1923 (T).

Pyrus Malus L. APPLE.

Guelph, escape from cultivation, June 7, 1937.

P. arbutifolia (L.) L.f. RED CHOKE BERRY.

Puslinch, Stone, 1926 (OAC).

P. melanocarpa (Michx.) Willd. BLACK CHOKEBERRY.

Puslinch, swampy ground, June 8, 1937; Puslinch, Hart, 1931 (OAC)

P. americana (Marsh) DC. AMERICAN MOUNTAIN ASH.

Guelph, Stone, 1925 (OAC).

P. Aucuparia (L.) Ehrh. EUROPEAN MOUNTAIN ASH.

Guelph, rich woods, June 2, 1937; Guelph, 1934 (OAC);

Guelph, Hamilton, 1923 (T).

Amelanchier canadensis (L.) Medic. SHAD BUSH, SERVICE BERRY.

Guelph, open land, May 17, 1938; Guelph, 1933 (OAC);

Puslinch Lake, Herriot, 1904 (H).

A. oblongifolia (T. & G.) Roem. SWAMP SHAD BUSH.

Guelph, rich woods, May 29, 1937; Guelph, Stroud, 1937 (OAC).

A. spicata (Lam.) C. Koch. LOW JUNE BERRY.

Guelph, river bank, May 25, 1937.

Crataegus Oxyacantha L. ENGLISH HAWTHORN.

Guelph, field, June 3, 1937.

C. punctata Jacq. LARGE FRUITED or WHITE THORN.

Guelph, meadows, June 10, 1937; Puslinch Lake, Doherty, 1902 (OAC).

C. coccinea L. SCARLET THORN.

Guelph, rocky woods, May 28, 1938.

Fragaria virginiana Duchesne. SCARLET STRAWBERRY.

Arkell, rich woods, May 19, 1937; Guelph, Corby, 1934 (OAC).

F. vesca L. var. americana Porter. AMERICAN WOOD STRAWBERRY.

Guelph, rich woods, May 16, 1937.

Waldesteinia fragarioides (Michx.) Tratt. BARREN STRAWBERRY.

Guelph, rocky woods, June 1, 1937; Arkell, Simmons, 1933 (OAC).

Potentilla monospeliensis L. ROUGH CINQUEFOIL.

Guelph, roadsides, July 23, 1938; Guelph, Simmons, 1935 (OAC).

P. argentea L. SILVERY CINQUEFOIL.

Guelph, railway tracks, June 11, 1937; Guelph, Weaver,
1933 (OAC).

P. recta L. UPRIGHT CINQUEFOIL.

Guelph, roadsides, July 11, 1938; Guelph, 1932 (OAC).

P. palustris (L.) Scop. MARSH CINQUEFOIL.

Puslinch Lake, Gammon & Weaver, 1933 (OAC).

P. Anserina L. SILVER WEED.

Guelph, fields, July 9, 1938.

P. canadensis L. CANADA CINQUEFOIL.

Puslinch, dry fields, June 7, 1938; Puslinch Lake, Eastham & Howitt, 1909 (OAC).

Geum canadense Jacq. WHITE AVENS.

Puslinch, rich woods, Aug. 19, 1937; Guelph, Howitt, 1914 (OAC);

Guelph, Rowley, 1915 (OAC); Guelph, Hamilton, 1923 (T).

G. virginianum L. ROUGH AVENS.

Puslinch, 1914 (OAC).

G. strictum Ait. YELLOW AVENS.

Guelph, moist ditches, July 25, 1937; Guelph, 1932 (OAC);

Guelph, Hamilton, 1923 (T).

G. rivale L. PURPLE or WHITE AVENS.

Aberfoyle, swamps, June 4, 1938; Guelph, 1931 (OAC); Guelph,
Stallwood, 1936 (T).

Rubus idaeus L. RED RASPBERRY.

Guelph, Wright, 1920 (OAC).

R. occidentalis L. BLACK RASPBERRY, THIMBLE BERRY.

Arkell, rich woods, June 14, 1937.

R. odoratus L. PURPLE FLOWERING RASPBERRY.

Puslinch, moist meadows, June 29, 1937; Puslinch, 1934 (OAC).

R. triflorus Richards. DWARF RED RASPBERRY.

Guelph, rich woods, May 21, 1937; Puslinch, 1933 (OAC).

R. allegheniensis Porter. MOUNTAIN BLACKBERRY.

Puslinch, dry meadows, June 13, 1937; Guelph, Stone, 1926 (OAC).

R. frondosus Bigel. LEAFY FLOWERED BLACKBERRY.

Puslinch, 1919 (OAC).

Alchemilla vulgaris L. LADY'S MANTLE.

Guelph, Hamilton, 1923 (T).

Agrimonia gryposepala Wallr. TALL HAIRY AGRIMONY.

Guelph, rich woods, June 3, 1937; Guelph, 1932 (OAC);

Harriston, Brown, 1925 (B).

Sanguisorba minor Scop. GARDEN BURNET.

Guelph, garden escape, June 11, 1937; Guelph, 1934 (OAC);

Guelph, Hamilton, 1923 (T); Guelph, Dore, 1935 (DAO).

Rosa blanda Ait. SMOOTH or MEADOW ROSE.

Guelph, rocky land, June 19, 1934.

R. rubiginosa L. SWEET BRIER.

Mount Forest, June 19, 1934.

Dalibarda repens L. DEWDROP.

Puslinch, 1907 (OAC).

Prunus serotina Ehrh. WILD BLACK CHERRY.

Guelph, rich woods, June 5, 1937; Guelph, 1932 (OAC).

P. virginiana L. CHOKE CHERRY.

Guelph, roadsides, May 26, 1937; Guelph (OAC); Guelph,

Hamilton, 1923 (T).

P. pennsylvanica L.f. WILD RED CHERRY.

Guelph, Hart, 1930 (OAC); Guelph, Simmons & Van Loon, 1936 (OAC).

P. pumila L. SAND or DWARF CHERRY.

Guelph, hillsides, May 27, 1937; Guelph, 1931 (OAC).

P. cerasus L. SOUR CHERRY.

Guelph, 1919 (OAC).

P. nigra Ait. CANADA PLUM.

Guelph, roadside thickets, May 11, 1937; Guelph, 1931 (OAC).

P. americana Marsh. WILD RED PLUM.

Guelph, rich woods, June 1, 1937.

LEGUMINOSAE
(PEA FAMILY)

Gymnocladus dioica (L.) Koch. KENTUCKY COFFEE TREE.

Guelph campus, introduced, June 24, 1938.

Gleditsia triacanthos L. HONEY LOCUST.

Guelph campus, introduced, June 24, 1938.

Lupinus perennis L. WILD LUPINE.

Puslinch, sandy soil, June 11, 1937.

Trifolium arvense L. RABBIT FOOT or STONE CLOVER.

Puslinch, roadsides, July 3, 1937.

T. incarnatum L. CRIMSON or ITALIAN CLOVER.

Guelph, Eastham, 1908 (OAC).

T. pratense L. RED CLOVER.

Guelph, fields, July 5, 1937.

T. repens L. WHITE CLOVER.

Guelph, fields and meadows, June 12, 1937; Guelph, Collins
(OAC); Guelph, Hamilton, 1923 (T).

T. hybridum L. ALSIKE CLOVER.

Guelph, fields and meadows, July 5, 1937; Guelph (OAC).

T. procumbens L. LOW HOP CLOVER.

Guelph, roadsides, July 15, 1937; Guelph, Corby, 1934 (OAC).

Melilotus officinalis (L.) Lam. YELLOW SWEET CLOVER.

Guelph, roadsides, July 15, 1937; Guelph, Hart, 1932 (OAC).

M. alba Desr. WHITE or SWEET CLOVER.

Guelph, roadsides, July 10, 1937; Guelph, Hart, 1932 (OAC);

Guelph, Hamilton, 1923 (T).

Medicago sativa L. LUCERNE, ALFALFA.

Guelph, roadsides, June 7, 1937; Guelph, Hart, 1933 (OAC);

Guelph, Hamilton, 1923 (T).

M. falcata L. YELLOW MEDICK.

Guelph, Kirk (OAC).

M. lupulina L. BLACK MEDICK.

Guelph, waste ground, June 19, 1937; Guelph, Hart (OAC);

Guelph, Hamilton, 1923 (T).

Anthyllis vulneraria L. KIDNEY VETCH,

Fergus, clover field, June 8, 1938.

Lotus corniculatus L. BIRD'S FOOT TREFOIL.

Guelph, roadsides, June 8, 1937; Guelph, Simmons, 1933 (OAC);

Guelph, Hamilton, 1923 (T).

Robinia Pseudo-Acacia L. COMMON LOCUST.

Guelph, moist ground, June 17, 1937.

R. viscosa Vent. CLAMMY LOCUST.

Guelph, moist ground, June 10, 1937; Guelph, 1932 (OAC).

Astragalus canadensis L. CANADIAN MILK VETCH.

Puslinch, Howitt, 1913 (OAC).

Desmodium pauciflorum (Nutt.) DC. FEW FLOWERED TICK TREFOIL.

Puslinch Lake, Simmons, 1935 (OAC).

D. canadense (L.) DC. SHOWY TICK TREFOIL.

Guelph, dry woods, July 29, 1937.

Lespedeza hirta (L.) Hornem. HAIRY BUSH CLOVER.

Puslinch Lake, fields, Aug. 27, 1937.

Vicia angustifolia (L.) Reichard. SMALLER COMMON VETCH.

Guelph, waste ground, June 30, 1937; Guelph, Howitt, 1920 (OAC); Guelph, Hamilton, 1923 (T).

V. Cracca L. TUFTED VETCH.

Guelph, moist ditches, June 9, 1937; Guelph, Hamilton, 1923 (T); Guelph (OAC).

V. americana Muhl. PURPLE VETCH.

Guelph, moist places, June 7, 1938.

V. villosa Roth. HAIRY VETCH.

Guelph, roadsides, July 9, 1937; Guelph, 1931 (OAC); Wellington Co., Clark (T).

Lathyrus ochroleucus Hook. PALE VETCHLING.

Puslinch, fields, May 25, 1937.

L. latifolius L. EVERLASTING PEA.

Guelph, 1936 (OAC).

Apios tuberosa Moench. GROUND NUT, WILD BEAN.

Puslinch Lake, rich woods, Aug. 15, 1937.

Amphicarpa monoica (L.) Ell. WILD or HOG PEANUT.

Puslinch, moist woods, Sept. 3, 1937.

Pisum sativum L. GARDEN PEA.

Guelph, Hamilton, 1923 (T): garden escape.

GERANIACEAE
(GERANIUM FAMILY)

Geranium maculatum L. WILD CRANESBILL.

Guelph, dry woods, June 13, 1937; Puslinch, 1933 (OAC).

G. pratense L. MEADOW GERANIUM.

Guelph, Weaver, 1931 (OAC).

G. Robertianum L. HERB ROBERT.

Guelph, rich woods, July 27, 1937; Guelph, Weaver, 1933 (OAC);

Guelph, 1904 (T).

G. pusillum Burm f. SMALL FLOWERED CRANESBILL.

Guelph, waste places, 1938*

OXALIDACEAE
(WOOD SORREL FAMILY)

Oxalis Acetosella L. WHITE WOOD SORREL.

Guelph, rich woods, July 17, 1937; Puslinch, 1935 (OAC).

O. stricta L. UPRIGHT YELLOW WOOD SORREL.

Guelph, dry woods, June 14, 1937; Guelph (OAC); Guelph,

Hamilton, 1923 (T).

O. corniculata L. YELLOW PROCUMBENT WOOD SORREL.

Guelph, woods, July 15, 1937; Guelph (OAC); Guelph, Hamilton,

1923 (T).

O. repens Thunb. CREEPING WOOD SORREL.

Guelph, 1933 (OAC).

LINACEAE
(FLAX FAMILY)

Linum usitatissimum L. COMMON FLAX.

Guelph, roadsides, Sept. 5, 1937; Guelph, Evans, 1934 (OAC);

Guelph, Hamilton, 1923 (T).

*No specimen collected.

RUTACEAE
(RUE FAMILY)

Zanthoxylum americanum Mill. PRICKLY ASH, TOOTHACHE TREE.

Guelph, rocky woods, May 16, 1937 & July 20, 1937; Guelph, 1934 (OAC).

Ptelea trifoliata L. THREE LEAVED HOP TREE.

Guelph, Simmons, 1933 (OAC): introduced tree.

POLYGALACEAE
(MILKWORT FAMILY)

Polygala pauciflora Willd. FRINGED MILKWORT, FLOWERING WINTERGREEN.

Puslinch, wet woods, June 1, 1938; Puslinch, Howitt, 1921 (OAC).

EUPHORBIACEAE
(SPURGE FAMILY)

Acalypha virginica L. THREE SEEDED MERCURY.

Guelph, wet ditches, Aug. 9, 1938.

Euphorbia polygonifolia L. KNOTTED SPURGE.

Guelph (OAC).

E. Preslii Guss. UPRIGHT SPOTTED SPURGE.

Guelph, roadsides, Aug. 18, 1937; Guelph, Corby, 1934 (OAC).

E. hirsuta (Torr.) Wiegand. HAIRY SPURGE.

Guelph, roadsides, Aug. 15, 1937; Guelph (OAC).

E. maculata L. MILK PURSLANE.

Guelph, roadsides, July 26, 1937.

E. Helioscopia L. SUN SPURGE, WARTWEED.

Guelph, Hamilton, 1923 (T).

E. Esula L. LEAFY SPURGE.

Guelph, sandy fields, July 17, 1938; Guelph, Simmons, 1933 (OAC); Guelph, Groh, 1937 (DAO).

E. Cyparissias L. CYPRESS SPURGE.

Guelph, roadsides, June 9, 1938; Guelph, 1931 (OAC).

E. Peplus L. PETTY SPURGE.

Guelph, waste places, July 17, 1937; Guelph, Howitt (OAC);

Guelph, Hamilton, 1923 (F).

LIMNANTHACEAE

(FALSE MERMAID FAMILY)

Floerkea proserpinacoides Willd. FALSE MERMAID.

Guelph, Hume, 1898 (DAO).

ANACARDIACEAE

(SUMAC FAMILY)

Rhus typhina L. STAGHORN SUMAC.

Guelph, sandy fields, June 28, 1937; Guelph, Weaver, 1933 (OAC).

R. Toxicodendron L. POISON IVY.

Puslinch Lake, moist woods, June 6, 1937.

R. canadensis Marsh. FRAGRANT SUMAC.

Guelph, Dewar (OAC).

AQUIFOLIACEAE

(HOLLY FAMILY)

Ilex verticillata (L.) Gray. BLACK ALDER, WINTERBERRY.

Guelph, moist woods, June 29, 1937; Puslinch Lake, Howitt,
1915 (OAC).

Nemopanthus mucronata (L.) Trel. MOUNTAIN HOLLY.

Puslinch, 1914 (OAC); Guelph, Hart, 1921 (OAC).

CELASTRACEAE

(STAFF TREE FAMILY)

Evonymus europaeus L. SPINDLE TREE.

Guelph, rich woods, July 7, 1938.

E. obovatus Nutt. RUNNING STRAWBERRY BUSH.

Guelph, rich woods, June 11, 1938; Guelph, Howitt, 1915 (OAC).

Celastrus scandens L. CLIMBING BITTER SWEET.

Guelph, fence rows, June 16, 1937; Guelph, Simmons, 1932 (OAC).

STAPHYLEACEAE

(BLADDER NUT FAMILY)

Staphylea trifolia L. AMERICAN BLADDER NUT.

Guelph, rich soil, May 29, 1937; Guelph, Simmons, 1933 (OAC).

ACERACEAE

(MAPLE FAMILY)

Acer spicatum Lam. MOUNTAIN MAPLE.

Puslinch, rich woods, Sept. 23, 1937; Guelph, Minshall, 1932
(OAC); Guelph, Hamilton, 1923, (T).

A. saccharum Marsh. SUGAR or ROCK MAPLE.

Guelph, rich woods, April 4, 1937 & June 4, 1937.

A. saccharum Marsh. var. nigrum (Michx.f.) Britton. BLACK SUGAR MAPLE.

Guelph, rich woods, June 4, 1937.

A. saccharinum L. SILVER MAPLE.

Guelph, roadsides, April 21, 1937 & June 4, 1937; Guelph,
Simmons, 1934 (OAC).

A. rubrum L. RED MAPLE.

Guelph, wet woods, April 19, 1938 & June 1, 1938; Puslinch,
Stone, 1918 (OAC).

A. Negundo L. MANITOBA MAPLE, BOX ELDER.

Guelph, moist ground, April 24, 1937 & June 4, 1937; Guelph,
Hamilton, 1923 (T).

SAPINDACEAE
(SOAPBERRY FAMILY)

Aesculus Hippocastanum L. HORSE CHESTNUT.

Guelph, roadsides, June 5, 1938; Guelph, Simmons, 1933 (OAC);

Guelph, Hamilton, 1923 (T).

A. glabra Willd. FETID or OHIO BUCKEYE.

Guelph, roadsides, May 29, 1937; Guelph, Stone, 1926 (OAC).

BALSAMINACEAE
(TOUCH-ME-NOT FAMILY)

Impatiens pallida Nutt. PALE-TOUCH-ME NOT.

Puslinch, wet ground, Aug. 26, 1937; Guelph, 1896 (OAC).

I. biflora Walt. SPOTTED TOUCH-ME-NOT.

Guelph, wet ground, Sept. 15, 1938; Guelph, 1896 (OAC);

Guelph (T); Guelph, Hamilton, 1923 (T).

RHAMNACEAE
(BUCKTHORN FAMILY)

Rhamnus alnifolium L'Her. ALDER LEAVED BUCKTHORN.

Guelph, swamps, June 7, 1938; Puslinch, Howitt, 1918 (OAC).

R. cathartica L. BUCKTHORN.

Guelph, rich land, June 5, 1937.

R. Frangula L. ALDER BUCKTHORN, BLACK DOGWOOD.

Guelph, Moore, 1906 (T); Guelph, Scott, 1906 (T).

Ceanothus americanus L. NEW JERSEY TEA.

Puslinch, dry woods, June 28, 1937; Puslinch, Wright, 1919 (OAC).

VITACEAE
(GRAPE FAMILY)

Psedera quinquefolia (L.) Greene. VIRGINIA CREEPER.

Guelph, Weaver, 1933 (OAC).

Vitis vulpina L. RIVER BANK or FROST GRAPE.

Puslinch, moist woods, June 20, 1937; Puslinch, Howitt,
1919 (OAC).

TILIACEAE

(LINDEN FAMILY)

Tilia americana L. AMERICAN BASSWOOD.

Guelph, rich woods, July 7, 1937; Guelph, Moore, 1921 (OAC);
Guelph, Hamilton, 1923 (T).

MALVACEAE

(MALLOW FAMILY)

Abutilon Theophrasti Medic. VELVET LEAF.

Guelph, waste places, Sept. 23, 1937; Guelph, Simmons, 1931 (OAC).

Malva rotundifolia L. ROUND-LEAVED MALLOW.

Guelph, waste places, June 24, 1937; Guelph, Weaver, 1933 (OAC);
Guelph, Hamilton, 1923 (T).

M. moschata L. MUSK MALLOW.

Guelph, moist ditches, June 19, 1937; Guelph, 1934 (OAC);
Arkell, 1904 (T).

Hibiscus Moscheutos L. SWAMP ROSE MALLOW.

Guelph, 1924 (OAC).

H. Trionum L. FLOWER OF AN HOUR.

Guelph, waste ground, July 10, 1937.

HYPERICACEAE

(ST. JOHN'S WORT FAMILY)

Hypericum Ascyron L. GREAT ST. JOHN'S WORT.

Elora, river banks, July 14, 1938; Elora, Corby, 1934 (OAC).

H. perforatum L. COMMON ST. JOHN'S WORT.

Guelph, roadsides, July 16, 1937; Guelph, 1932 (OAC); Guelph,

Hamilton, 1923 (T).

H. punctatum Lam. SPOTTED ST. JOHN'S WORT.

Puslinch, moist woods, July 17, 1937; Guelph, Cumming (OAC);

Puslinch, 1904 (T).

H. boreale (Britton) Bicknell. NORTHERN ST. JOHN'S WORT.

Puslinch, Howitt, 1926 (OAC).

H. majus (Gray) Britton. LARGER ST. JOHN'S WORT.

Puslinch Lake, Howitt, 1926 (OAC).

H. virginicum L. MARSH ST. JOHN'S WORT.

Puslinch, swampy land, Aug. 10, 1937; Puslinch Lake, Howitt,

1909 (OAC).

VIOLACEAE*

(VIOLET FAMILY)

Viola cucullata Ait. MARSH BLUE VIOLET.

Guelph, moist woods, Doherty, 1896 (OAC).

V. nephrophylla Greene. NORTHERN BOG VIOLET.

Guelph, swampy ground, May 20, 1937; Guelph, Mighton, 1929 (OAC).

V. papilionacea Pursh. MEADOW or HOODED BLUE VIOLET.

Guelph, moist meadows, May 25, 1937.

V. palmata L. EARLY BLUE VIOLET.

Rockwood, Scott, 1892 (T).

V. sororia Willd. WOOLLY BLUE VIOLET.

Guelph, moist meadows, May 22, 1937; Wellington Co., Corby,

1934 (OAC).

V. septentrionalis Greene. NORTHERN BLUE VIOLET.

Guelph, 1933 (OAC).

*For the determination of this family, Brainerd (1921)³

was used.

V. Selkirkii Pursh. GREAT SPURRED VIOLET.

Guelph, rich woods, May 25, 1937; Guelph (OAC).

V. blanda Willd. SWEET WHITE VIOLET.

Guelph (OAC).

V. odorata L. ENGLISH SWEET VIOLET.

Guelph, Hart, 1931 (OAC): escape from cultivation.

V. pubescens Ait. DOWNY YELLOW VIOLET.

Guelph, 1934 (OAC).

V. scabriuscula Schwein. SMOOTHISH YELLOW VIOLET.

Guelph, rich woods, May 12, 1937; Guelph, Corby, 1934 (OAC).

V. canadensis L. CANADA VIOLET.

Guelph, rich woods, May 28, 1937; Puslinch Lake, Doherty,

1902 (OAC); Puslinch, Simmons, 1933 (OAC).

V. conspersa Reichenb. AMERICAN DOG VIOLET.

Guelph, moist meadows, May 26, 1937; Guelph, Jarvis, 1934 (OAC).

V. rostrata Pursh. LONG SPURRED VIOLET.

Puslinch, rich woods, May 31, 1937; Puslinch Lake, Bartlett,

1929 (OAC).

V. arvensis Murr. EUROPEAN FIELD PANSY.

Puslinch, fields, May 25, 1937.

THYMELAEACEAE
(MEZEREUM FAMILY)

Dirca palustris L. LEATHERWOOD, MOOSEWOOD.

Guelph, damp woods, May 5, 1937 & May 14, 1937; Guelph,

Stallwood, 1936 (OAC); Hespeler, Herriot, 1893 (H).

Daphne Mezereum L. MEZEREUM.

Guelph, Evans, 1934 (OAC).

EILAEAGNACEAE

(OLEASTER FAMILY)

Shepherdia canadensis Nutt. CANADIAN BUFFALO BERRY.Puslinch Lake, Howitt & Eastham, 1909 (OAC).LYTHRACEAE

(LOOSESTRIFE FAMILY)

Decodon verticillata (L.) Ell. SWAMP LOOSESTRIFE.Puslinch, swamps, July 12, 1937; Puslinch, Eastham, 1907 (OAC);Puslinch Lake, Herriot, 1894 (H).Lythrum Salicaria L. PURPLE LOOSESTRIFE.Guelph, moist meadows, July 24, 1937; Guelph, Hart, 1929 (OAC);Guelph, Hamilton, 1923 (T).ONAGRACEAE

(EVENING PRIMROSE FAMILY)

Epilobium angustifolium L. GREAT WILLOW HERB.Guelph, wet ground, July 17, 1938; Guelph, Corby, 1934 (OAC);Guelph, Hamilton, 1923 (T); Guelph (T).E. hirsutum L. HAIRY WILLOW HERB.Aberfoyle, ditches, July 4, 1937; Guelph, Simmons, 1932 (OAC).E. densum Raf. LINEAR LEAVED WILLOW HERB.Guelph, Cumming (OAC)E. coloratum Muhl. PURPLE LEAVED WILLOW HERB.Guelph, Cumming (OAC); Guelph, 1904 (T).E. adenocaulon Haussk. NORTHERN WILLOW HERB.Guelph, rich woods, Aug. 26, 1938; Aberfoyle, Hart, 1932 (OAC);Guelph, Hamilton, 1923 (T).Oenothera muricata L. NORTHERN EVENING PRIMROSE.

Puslinch Lake, open fields, Sept. 26, 1937.

O. biennis L. EVENING PRIMROSE.

Guelph, open fields, Aug. 15, 1937; Guelph, 1918 (OAC);
Hespeler, McVittie, 1926 (T); Guelph, Hamilton, 1923 (T);
Guelph, Simmons, 1932 (OAC).

O. pumila L. SMALL SUNDROPS.

Puslinch, open fields, June 28, 1937; Guelph, Hart, 1930 (OAC).

Circaea lutetiana L. ENCHANTER'S NIGHTSHADE.

Guelph, dry woods, Sept. 2, 1937; Aberfoyle, 1933 (OAC);
Guelph (T).

C. alpina L. SMALLER ENCHANTER'S NIGHTSHADE.

Puslinch, moist woods, June 20, 1937; Guelph, 1932 (OAC);
Guelph (T).

HALORAGIDACEAE

(WATER MILFOIL FAMILY)

Myriophyllum spicatum L. SPIKED WATER MILFOIL.

Puslinch; Eastham & Howitt, 1909 (OAC).

ARALIACEAE

(GINSENG FAMILY)

Aralia spinosa L. HERCULES' CLUB.

Guelph, Evans, 1925 (OAC).

A. racemosa L. AMERICAN SPIKENARD.

Guelph, Whiteside, 1932 (OAC).

A. nudicaulis L. WILD SARSAPARILLA.

Guelph, rich woods, June 9, 1938; Puslinch, Evans, 1932 (OAC).

Panax quinquefolium L. GINSENG.

Hespeler, Simmons, 1935 (OAC).

P. trifolium L. DWARF GINSENG.

Puslinch, rich woods, June 24, 1938; Puslinch, Stone, 1921 (OAC).

UMBELLIFERAE
(CARROT FAMILY)

Sanicula marilandica L. BLACK SNAKEROOT.

Guelph, wet meadows, June 7, 1937; Puslinch Lake, Simmons,
1933 (OAC).

Erigenia bulbosa (Michx.) Nutt. HARBINGER-OF-SPRING.

Hespeler, rich woods, May 24, 1936.

Osmorhiza Claytoni (Michx.) Clarke. HAIRY SWEET CICELY.

Guelph, rich woods, June 9, 1938; Puslinch Lake, Doherty,
1902 (OAC).

O. longistylis (Torr.) DC. SMOOTH SWEET CICELY.

Puslinch, rich woods, June 10, 1937; Guelph, Hart, 1929 (OAC);
Guelph, 1934 (OAC); Guelph, Hamilton, 1923 (T).

Aegopodium Podagraria L. GOUTWEED.

Guelph, 1915 (OAC).

Cicuta maculata L. WATER HEMLOCK.

Guelph, wet ground, July 16, 1937; Guelph, Mustard, 1921 (OAC);
Guelph, Hart, 1929 (OAC).

C. bulbifera L. BULB-BEARING WATER HEMLOCK.

Puslinch, Stone, 1925 (OAC); Guelph, Hamilton, 1923 (T).

Carum Carvi L. CARAWAY.

Guelph, Simmons, 1931 (OAC).

Sium cicutaefolium Schrank. WATER PARSNIP.

Guelph, shallow water, July 27, 1937; Guelph, Stone, 1928 (OAC).

Cryptotaenia canadensis (L.) DC. HONEWORT.

Guelph, Hart, 1929 (OAC).

Zizia aurea (L.) Koch. GOLDEN ALEXANDERS.

Elora, river banks, June 8, 1938; Elora, Howitt, 1935 (OAC).

Taenidia integerrima (L.) Drude. YELLOW PIMPERNEL.

Puslinch, dry woods, June 3, 1937; Puslinch, Howitt, 1913
(OAC); Puslinch, Corby & Mathews, 1935 (OAC).

Thaspium aureum Nutt. PURPLE MEADOW PARSNIP.

Wellington Co., Howitt, 1906 (OAC).

Pastinaca sativa L. WILD PARSNIP.

Guelph, 1921 (OAC).

Anethum graveolens L. DILL.

Aberfoyle, roadsides, July 18, 1937; Guelph, Evans, 1927 (OAC).

Heracleum lanatum Michx. COW PARSNIP.

Guelph, Jarvis (OAC).

Conioselinum chinense (L.) BSP. HEMLOCK PARSLEY.

Hespeler, swamps, Aug. 19, 1937; Hespeler, Howitt & Hart,
1930 (OAC); Hespeler, 1932 (OAC).

Angelica atropurpurea L. GREAT ANGELICA.

Elora, side of river, 1938*.

Daucus Carota L. WILD CARROT.

Guelph, fields and roadsides, July 18, 1938; Guelph, Duff,
1923 (T); Guelph, 1931 (OAC).

CORNACEAE

(DOGWOOD FAMILY)

Cornus canadensis L. BUNCH BERRY, DWARF CORNELL.

Guelph, moist woods, June 4, 1937; Puslinch Lake, 1933 (OAC).

C. circinata L'Her. ROUND LEAVED DOGWOOD.

Puslinch, 1904 (OAC).

C. Amomum Mill. SILKY CORNELL.

Puslinch, swamps, June 24, 1937; Guelph, Corby, 1934 (OAC).

C. stolonifera Michx. RED OSIER DOGWOOD.

Guelph, ditches, June 22, 1938; Guelph, Weaver, 1933 (OAC).

C. paniculata L'Her. PANICLED DOGWOOD.

Guelph, 1934 (OAC).

C. alternifolia L.f. ALTERNATE LEAVED DOGWOOD.

Puslinch, moist woods, June 1, 1938; Puslinch, 1904 (OAC).

ERICACEAE

(HEATH FAMILY)

Chimaphila umbellata (L.) Nutt. PRINCE'S PINE, PIPSISSEWA.

Puslinch, dry woods, Sept. 7, 1937; Puslinch, Macoun, 1878 (OAC).

Pyrola secunda L. ONE SIDED WINTERGREEN.

Puslinch, 1904 (OAC).

P. chlorantha Sw. GREENISH FLOWERED WINTERGREEN.

Puslinch Lake, Howitt, 1904 (OAC).

P. elliptica Nutt. SHIN LEAF.

Puslinch, dry woods, July 15, 1937; Puslinch, 1904 (OAC).

P. americana Sweet. ROUND LEAVED WINTERGREEN.

Puslinch, dry woods, July 25, 1937; Guelph, Doherty, 1901 (OAC).

P. asarifolia Michx. LIVER LEAF WINTERGREEN.

Guelph, swampy ground, July 10, 1937; Puslinch (OAC).

P. asarifolia Michx. var. incarnata (Fisch.) Fernald. BOG WINTERGREEN.

Puslinch, H.D.L., 1913 (OAC).

Monotropa uniflora L. INDIAN PIPE, CORPSE PLANT.

Guelph, moist woods, Aug. 12, 1937; Puslinch, 1934 (OAC).

M. Hypopitys L. PINESAP, FALSE BEECH DROPS.

Puslinch, Eastham, 1907 (OAC); Puslinch Lake, Klugh, 1914 (H);

Harriston, Brown, 1926 (B).

Ledum groenlandicum Oeder. LABRADOR TEA.

Puslinch, sphagnum bog, Sept. 23, 1937; Puslinch, Simmons,

1933 (OAC); Puslinch, Hamilton, 1923 (T); Killeen, Herriot

1894 (H); Puslinch, 1904 (T).

Kalmia polifolia Wang. PALE LAUREL.

Puslinch, sphagnum bogs, June 1, 1938; Puslinch Lake, Howitt & Stone, 1921 (OAC); Puslinch Lake, Simmons, 1935 (OAC).

Andromeda Polifolia L. WILD ROSEMARY.

Puslinch, sphagnum bog, May 31, 1937; Puslinch Lake, Minshall, 1932 (OAC); Puslinch, 1904 (T).

A. glaucophylla Link. BOG ROSEMARY.

Puslinch Lake, Eastham & Howitt, 1909 (OAC).

Chamaedaphne calyculata (L.) Moench. LEATHER LEAF, CASSANDRA.

Puslinch, sphagnum bog, May 23, 1937; Puslinch Lake, Stone, 1926 (OAC).

Gaultheria procumbens L. TEABERRY; CHECKERBERRY.

Puslinch, sphagnum bog, May 9, 1938; Puslinch Lake, 1904 (OAC).

Chiogenes hispidula (L.) T. & G. CREEPING SNOWBERRY.

Arkell, 1904 (OAC).

Gaylussacia baccata (Wang.) C. Koch. BLACK HUCKLEBERRY.

Puslinch, swamps, June 15, 1938; Puslinch Lake, 1923 (OAC).

Vaccinium pennsylvanicum Lam. EARLY SWEET BLUEBERRY.

Puslinch, dry slopes, June 14, 1937; Puslinch, Stone, 1926 (OAC).

V. canadense Kalm. CANADA BLUEBERRY.

Puslinch, sphagnum bog, June 10, 1937; Puslinch Lake, 1904 (OAC); Hespeler, Herriot, 1902 (H).

V. corymbosum L. HIGH BUSH or TALL BLUEBERRY.

Puslinch, swamps, June 10, 1937; Puslinch, Howitt, 1916 (OAC).

V. Oxycoccus L. SMALL CRANBERRY.

Puslinch, 1891 (OAC); Puslinch, Hart (OAC).

PRIMULACEAE
(PRIMROSE FAMILY)

Primula mistassinica Michx. MISTASSINI PRIMROSE.

Elora, wet river banks, June 8, 1938; Elora, Wright, 1915 (OAC).

Lysimachia punctata L. SPOTTED LOOSESTRIPE.

Guelph, roadsides, June 21, 1937; Guelph, Mann, 1934 (OAC).

L. terrestris (L.) BSP. BULB BEARING LOOSESTRIPE.

Elora, swampy ground, Sept. 13, 1934; Puslinch, Simmons, 1932 (OAC); Puslinch, Hamilton, 1923 (T).

L. Nummularia L. MONEYWORT.

Guelph, river banks, July 13, 1937; Guelph, Simmons, 1935 (OAC).

L. thyrsiflora L. TUFTED LOOSESTRIPE.

Guelph, swamps, June 13, 1937; Guelph, Minshall, 1932 (OAC);
Guelph, Herriot, 1892 (H).

Steironema ciliatum (L.) Raf. FRINGED LOOSESTRIPE.

Guelph, wet meadows, Sept. 13, 1937; Guelph, Hart, 1929 (OAC).

Trientalis americana (Pers.) Pursh. STAR FLOWER.

Puslinch, rich woods, June 1, 1938; Puslinch, Simmons, 1932 (OAC).

Anagallis arvensis L. COMMON PIMPERNEL.

Guelph, moist fields, July 17, 1937; Guelph, Minshall, 1933 (OAC).

OLEACEAE
(OLIVE FAMILY)

Fraxinus americana L. WHITE ASH.

Guelph, Howitt, 1915 (OAC).

F. pennsylvanica Marsh. RED ASH.

Guelph, Howitt, 1915 (OAC).

F. pennsylvanica Marsh. var. lanceolata (Borkh) Sarg. GREEN ASH.

Guelph, fields and roadsides, June 23, 1937.

F. quadrangulata Michx. BLUE ASH.

Guelph, Evans, 1925 (OAC): introduced.

F. nigra Marsh. BLACK ASH.

Guelph, Stone, 1922 (OAC).

Syringa vulgaris L. LILAC.

Guelph, garden escape, May 28, 1938.

Ligustrum vulgare L. PRIVET.

Guelph, escape from hedges, June 27, 1937.

GENTIANACEAE

(GENTIAN FAMILY)

Gentiana crinita Froel. FRINGED GENTIAN.

Hespeler, moist woods, Sept. 29, 1937.

G. Andrewsii Griseb. CLOSED or BOTTLE GENTIAN.

Rockwood, moist meadows, Aug. 11, 1937; Guelph, Simmons, 1932 (OAC).

Halenia deflexa (Sm.) Griseb. SPURRED GENTIAN.

Hespeler, Howitt, 1909 (OAC).

Menyanthes trifoliata L. BUCKBEAN.

Puslinch, shallow ponds, May 23, 1937; Puslinch Lake, Stone, 1926 (OAC).

APOCYNACEAE

(DOGBANE FAMILY)

Vinca minor L. PERIWINKLE.

Guelph, roadsides, May 26, 1938; Guelph, Hart, 1929 (OAC).

Apocynum androsaemifolium L. SPREADING DOGBANE.

Puslinch, roadsides, June 13, 1937; Puslinch, Evans, 1934 (OAC).

A. cannabinum L. INDIAN HEMP.

Puslinch, railroad embankment, June 28, 1937; Puslinch Lake, Simmons, 1934 (OAC).

ASCLEPIADACEAE
(MILKWEED FAMILY)

Asclepias incarnata L. SWAMP MILKWEED.

Puslinch Lake, swampy ground, July 4, 1937; Guelph, 1932 (OAC);
Guelph, Hamilton, 1923 (T); Puslinch, 1904 (T).

A. syriaca L. COMMON MILKWEED.

Guelph, rich ground, July 23, 1937; Guelph, Corby, 1934 (OAC).

A. phytolaccoides Pursh. POKE MILKWEED.

Puslinch, swampy ground, June 28, 1937; Puslinch Lake, Eastham
& Howitt, 1909 (OAC).

Acerates viridiflora Ell. GREEN MILKWEED.

Puslinch, Howitt, 1923 (OAC).

CONVOLVULACEAE
(MORNING GLORY FAMILY)

Convolvulus spithameus L. UPRIGHT BINDWEED.

Guelph, roadsides, June 3, 1937; Puslinch, Evans, 1925 (OAC).

C. sepium L. HEDGE BINDWEED.

Guelph, moist ground, June 19, 1937; Guelph, Evans, 1925 (OAC);
Guelph, Hamilton, 1923 (T).

C. arvensis L. FIELD BINDWEED.

Guelph, fields and meadows, July 31, 1937.

Cuscuta arvensis Beyrich. FIELD DODDER.

Guelph, parasitic on other plants, July 31, 1937.

POLEMONIACEAE
(PHLOX FAMILY)

Phlox paniculata L. GARDEN PHLOX.

Guelph, garden escape, Sept. 24, 1937.

P. divaricata L. WILD BLUE PHLOX.

Guelph, rich woods, May 20, 1937; Guelph, 1936 (OAC); Guelph,

Hamilton, 1923 (T).

P. subulata L. GROUND or MOSS PINK.

Puslinch Lake, sandy ground, May 12, 1937; Guelph, Howitt,
1935 (OAC).

Polemonium reptans L. GREEK VALERIAN.

Guelph, Howitt, 1916 (OAC).

HYDROPHYLLACEAE
(WATERLEAF FAMILY)

Hydrophyllum virginianum L. VIRGINIA WATERLEAF.

Guelph, rich woods, June 7, 1938; Guelph, Van Loon, 1936
(OAC); Guelph, Hamilton, 1923 (T); Guelph, Bryce (T).

BORAGINACEAE
(BORAGE FAMILY)

Cynoglossum officinale L. HOUND'S TONGUE.

Guelph, fields, June 24, 1938; Guelph, 1934 (OAC).

Lappula virginiana (L.) Greene. BEGGAR'S LICE.

Puslinch Lake, Simmons, 1935 (OAC).

L. echinata Gilibert. EUROPEAN STICKSEED.

Guelph, roadsides, June 27, 1937; Guelph, Hamilton, 1923 (T).

Symphytum officinale L. COMFREY.

Guelph, garden escape, June 21, 1937; Guelph, Van Loon, 1936
(OAC); Guelph, Hamilton, 1923 (T).

Lycopsis arvensis L. SMALL BUGLOSS.

Mount Forest, sandy fields, June 22, 1938; Guelph, Howitt,
1920 (OAC).

Myosotis scorpioides L. TRUE FORGET-ME-NOT.

Elora, Corby, 1934 (OAC).

M. laxa Lehm. SMALLER FORGET ME NOT.

Puslinch, wet meadows, June 5, 1938; Aberfoyle, Minshall,
1932 (OAC).

M. arvensis (L.) Hill. FIELD SCORPION GRASS.

Guelph, meadows, May 26, 1938.

M. versicolor (Pers.) Sm. YELLOW AND BLUE SCORPION GRASS.

Rockwood, fields, June 4, 1938.

M. micrantha Pallas. BLUE SCORPION GRASS.

Aberfoyle, fields, May 29, 1937.

M. virginica (L.) BSP. EARLY SCORPION GRASS.

Guelph, Revitt (OAC).

Lithospermum arvense L. CORN GROMWELL.

Puslinch Lake, sandy fields, May 12, 1937; Guelph, Evans,
1925 (OAC); Puslinch, Hamilton, 1923 (T).

Echium vulgare L. BLUE WEED.

Guelph, gravelly fields, June 19, 1937; Guelph, Minshall,
1932 (OAC); Guelph, Nicol, 1886 (Q); Guelph, Hamilton, 1923 (T);
Guelph, Tytler, 1903 (T); Guelph, Scott, 1900 (T).

VERBENACEAE
(VERVAIN FAMILY)

Verbena urticaefolia L. NETTLE LEAVED VERVAIN.

Aberfoyle, moist woods, Oct. 4, 1937; Guelph, 1932 (OAC).

V. hastata L. BLUE VERVAIN.

Guelph, roadsides, July 19, 1937; Guelph, 1932 (OAC); Guelph,
Bryce (T).

LABIATAE
(MINT FAMILY)

Ajuga genevensis L. ERECT BUGLE WEED.

Elora, roadsides, July 19, 1937.

Scutellaria lateriflora L. MAD-DOG SKULLCAP.

Near Freelon, swamps, Aug. 15, 1938; Guelph, Cummings (OAC).

S. galericulata L. MARSH SKULLCAP.

Guelph, wet meadows, Aug. 2, 1937; Guelph, Rowley, 1915 (OAC);

Guelph, Hamilton, 1923 (T); Paslinch, 1904 (T).

Marrubium vulgare L. COMMON HOARHOUND.

Guelph, fields, June 21, 1938; Guelph, Rowley, 1915 (OAC).

Nepeta Cataria L. CATNEP, CAT MINT.

Guelph, roadsides, July 14, 1937; Guelph, Weaver, 1933 (OAC);

Guelph, Hamilton, 1923 (T); Guelph, Tytler, 1903 (T).

N. hederacea (L.) Trevison. GROUND IVY, CREEPING CHARLIE.

Guelph, lawns, July 4, 1937; Guelph, 1931 (OAC); Guelph,

Hamilton, 1923 (T).

Dracocephalum parviflorum Nutt. DRAGON HEAD.

Guelph, Stone, 1918 (OAC).

Prunella vulgaris L. SELF-HEAL, HEAL-ALL.

Guelph, meadows, July 5, 1937; Guelph, 1915 (OAC).

Physostegia virginiana (L.) Benth. FALSE DRAGON HEAD.

Guelph, 1932 (OAC).

Galeopsis Tetrahit L. COMMON HEMP NETTLE.

Guelph, Howitt, 1909 (OAC);

Lamium amplexicaule L. HENBIT.

Guelph, cultivated fields, July 19, 1938.

L. maculatum L. SPOTTED DEAD NETTLE.

Guelph, 1921 (OAC).

Leonurus Cardiaca L. MOTHERWORT.

Guelph, waste land, July 9, 1938; Guelph, 1933 (OAC); Guelph,

Tytler, 1903 (T).

Stachys tenuifolia Willd. var. aspera (Michx.) Fernald. SMOOTH
HEDGE NETTLE.

Wellington Co., Howitt, 1906 (OAC).

S. palustris L. HEDGE NETTLE, MARSH WOUNDWORT.

Puslinch, wet ground, June 30, 1937; Elora, Wright, 1919 (OAC);
Guelph, Heimpel (DAO).

S. germanica L. DOWNY WOUNDWORT or MOUSE EAR.

Guelph, roadsides, July 30, 1937; Guelph, Doherty, (OAC);
Guelph, Scott, 1908 (T); Wellington Co., Clark, 1908 (T).

Salvia Sclarea L. CLEAR-EYE, SEE-BRIGHT.

Guelph, 1932 (OAC).

Monarda didyma L. OSWEGO TEA; AMERICAN BEE BALM.

Puslinch, moist woods, July 13, 1937; Guelph, 1923 (OAC);
Harriston, Brown, 1925 (B).

Hedeoma pulegioides (L.) Pers. AMERICAN PENNYROYAL.

Puslinch, dry fields, July 7, 1938.

Satureja Acinos (L.) Scheele. BASIL-THYME, BASIL-BALM.

Aberfoyle, roadsides, May 31, 1938; Rockwood, Rowley, 1915 (OAC).

S. vulgaris (L.) Fritsch. FIELD or WILD BASIL, BASIL WEED.

Guelph, 1932 (OAC).

Hyssopus officinalis L. HYSSOP.

Puslinch Lake, fields, 1938; Puslinch Lake, Herriot, 1902 (H).

Thymus Serpyllum L. CREEPING THYME.

Guelph, Minshall, 1932 (OAC).

Lycopus virginicus L. BUGLE-WEED, BUGLE-WORT.

Guelph, Cummings (OAC).

L. unifolius Michx. NORTHERN BUGLE-WEED.

Puslinch, moist ground, Sept. 6, 1937; Guelph, Weaver,
1933 (OAC).

L. europaeus L. WATER or MARSH HOARHOUND.

Guelph, McCallum (OAC).

L. americanus Muhl. CUT LEAVED WATER HOARHOUND.

Puslinch, wet ditches, Oct. 3, 1938; Guelph, Hart, 1929 (OAC).

Mentha piperita L. PEPPERMINT.

Guelph, bank of brook, Aug. 29, 1937; Guelph, Tytler, 1903 (T).

M. arvensis L. WFIELD MINT.

Guelph, Stone & Evans, 1925 (OAC).

M. arvensis L. var. canadensis (L.) Briquet. AMERICAN WILD MINT.

Guelph, shallow water, July 12, 1937; Guelph, Hart, 1927 (OAC);

Guelph, Hamilton, 1923 (T); Harriston, Brown, 1925 (B).

Collinsonia canadensis L. HORSE-BALM.

Puslinch, rich woods, June 16, 1937.

Origanum vulgare L. WINTER SWEET, WILD MARJORUM.

Guelph, Corby, 1935 (OAC); Guelph, 1938 (OAC)

SOLANACEAE

(POTATO FAMILY)

Solanum Dulcamara L. CLIMBING BITTERSWEET, BITTER NIGHTSHADE.

Guelph, rich woods, June 15, 1937; Guelph, 1934 (OAC).

S. triflorum Nutt. CUT LEAVED NIGHTSHADE.

Guelph, fields, July 19, 1937.

S. nigrum L. BLACK NIGHTSHADE.

Puslinch, meadows, July 15, 1938; Wellington Co., Galbraith,
1908 (OAC).

S. rostratum Dunal. BUFFALO BUR.

Guelph, 1920 (OAC).

S. tuberosum L. POTATO.

Guelph, 1932 (OAC): garden escape.

Physalis heterophylla Nees. CLAMMY GROUND CHERRY.

Guelph (OAC).

Nicandra Physalodes (L.) Pers. APPLE OF PERU.

Guelph, Simmons, 1935 (OAC).

Lycium halmifolium Mill. MATRIMONY VINE, BOX THORN.

Guelph, roadsides, Aug. 29, 1937; Guelph, Corby, 1934 (OAC).

Hyoscyamus niger L. BLACK HENBANE.

Guelph, fields, June 8, 1937.

Datura Stramonium L. JIMSON WEED, THORN-APPLE, JAMESTOWN WEED.

Hespeler, 1932 (OAC).

D. Tatula L. PURPLE THORN-APPLE.

Guelph, Evañs, 1935 (OAC).

Nicotiana rustica L. WILD TOBACCO.

Guelph, Simmons, 1935 (OAC).

SCROPHULARIACEAE
(FIGWORT FAMILY)

Verbascum Thapsus L. MULLEIN, VELVET DOCK.

Guelph, gravelly hillsides, July 23, 1937; Guelph, 1932 (OAC);

Guelph, Hamilton, 1923 (T); Guelph, Tytler, 1903 (T).

V. Blattaria L. MOTH MULLEIN.

Elora, roadsides, July 14, 1938; Harriston, Brown, 1936 (B).

Linaria vulgaris Hill. BUTTER-AND-EGGS, TOAD FLAX.

Guelph, fields, July 24, 1938; Guelph, Corby, 1934 (OAC).

L. minor (L.) Desf. LESSER TOAD FLAX.

Guelph, railroad tracks, July 29, 1938; Hespeler, Eastham,

1908 (OAC); Harriston, Brown, 1936 (B).

Antirrhinum majus L. SNAPDRAGON.

Guelph, garden escape, Sept. 25, 1937.

Scrophularia marilandica L. FIGWORT.

Hespeler, rich woods, July 5, 1938.

Pentstemon hirsutus (L.) Willd. HAIRY BEARD-TONGUE.

Harriston, Brown, 1936 (B).

P. laevigatus Ait. SMOOTH BEARD-TONGUE.

Guelph, rich fields, July 2, 1937; Guelph, Simmons, 1933 (OAC).

Chelone glabra L. SNAKE HEAD, TURTLE HEAD.

Puslinch, wet meadows, Sept. 23, 1937; Hespeler, 1932 (OAC);

Hespeler, McVittie, 1926 (T); Guelph, Hamilton, 1923 (T).

Mimulus ringens L. SQUARE STEMMED MONKEY FLOWER.

Guelph, wet meadows, July 17, 1937.

Digitalis purpurea L. PURPLE FOX-GLOVE.

Guelph, Stone, 1935 (OAC).

Veronica longifolia L.

Rockwood, open fields, July 27, 1937; Rockwood, Minshall,
1932 (OAC).

V. americana Schwein. AMERICAN BROOKLIME.

Puslinch, wet ditches, July 9, 1937; Guelph, Simmons, 1933 (OAC).

V. scutellata L. MARSH or SKULLCAP SPEEDWELL.

Guelph, swampy ground, July 2, 1937; Puslinch Lake, Howitt,

1920 (OAC); Puslinch Lake, 1934 (OAC); Puslinch, Hamilton, 1923 (OAC).

V. scutellata L. var. villosa Schumacher. HAIRY MARSH SPEEDWELL.

Puslinch Lake, Hart, 1929 (OAC).

V. officinalis L. COMMON SPEEDWELL.

Guelph, fields, July 23, 1938; Guelph, Nicol, 1886 (OAC).

V. Chamaedrys L. GERMANDER SPEEDWELL.

Guelph, Hart, 1929 (OAC).

V. Teucrium L. SPIKED SPEEDWELL.

Guelph, roadsides, Aug. 9, 1938; Guelph, Evans, 1926 (OAC).

V. serpyllifolia L. THYME LEAVED SPEEDWELL.

Guelph, wet meadows, June 18, 1937; Guelph, McCallum (OAC).

V. peregrina L. PURSLANE SPEEDWELL, NECKWEED.

Guelph, cultivated ground, Aug. 17, 1938; Guelph, Hart, 1929 (OAC).

V. arvensis L. CORN or WALL SPEEDWELL.

Puslinch, cultivated land, July 2, 1937; Guelph, Howitt, 1921 (OAC).

V. Tournefortii C.C. Gmel. TOURNEFORT'S SPEEDWELL.

Guelph, cultivated land, Sept. 2, 1937; Guelph, Sr. Madeleine (OAC)

Gerardia purpurea L. PURPLE GERARDIA.

Puslinch, sandy fields, Aug. 24, 1937; Puslinch Lake, Howitt, 1909 (OAC).

G. paupercula (Gray) Britton. SMALL FLOWERED GERARDIA.

Puslinch Lake, swampy ground, Aug. 18, 1937; Puslinch Lake, Simmons, 1932 (OAC).

Pedicularis canadensis L. COMMON LOUSEWORT, WOOD BETONY.

Rockwood, fields, June 19, 1938; Guelph, Wright, 1921 (OAC).

MARTYNIACEAE

(MARTYNIA FAMILY)

Martynia louisiana Mill. UNICORN PLANT.

Guelph, fields, Sept. 17, 1937; Guelph, Stone, 1921 (OAC).

OROBANCHACEAE

(BROOM RAPE FAMILY)

Epifagus virginiana (L.) Bart. BEECH-DROPS, CANCER-ROOT.

Guelph, parasitic on Beech roots, Oct. 4, 1937; Puslinch,

Hamilton, 1923 (T); Hespeler, 1896 (OAC).

BIGNONIACEAE
(CATALPA FAMILY)

Catalpa speciosa Warder. HARDY CATALPA.

Guelph, introduced tree, June 25, 1937; Guelph, Hart, 1920 (OAC).

C. bignonioides Walt. COMMON CATALPA.

Guelph, introduced tree, 1920 (OAC).

LENTIBULARIACEAE
(BLADDERWORT FAMILY)

Utricularia vulgaris L. var. americana Gray. GREATER BLADDERWORT.

Puslinch Lake, shallow ponds, June 28, 1937; Puslinch Lake, 1932 (OAC); Puslinch, 1904 (T).

U. biflora Lam. TWO-FLOWERED BLADDERWORT.

Puslinch Lake, Hart, 1934 (OAC).

U. intermedia Hayne. FLAT LEAVED BLADDERWORT.

Puslinch Lake, shallow ponds, June 23, 1937; Puslinch Lake, Howitt, 1913 (OAC).

PHRYMACEAE
(LOPSEED FAMILY)

Phryma leptostachya L. LOPSEED.

Guelph, moist woods, July 10, 1937; Guelph, Corby, 1934 (OAC).

PLANTAGINACEAE
(PLANTAIN FAMILY)

Plantago major L. COMMON or GREATER PLANTAIN.

Guelph, lawns, July 15, 1937; Guelph, Hamilton, 1923 (T).

P. Rugelii Dcne. RUGEL'S PLANTAIN.

Guelph, lawns, July 24, 1937.

P. lanceolata L. RIBGRASS, ENGLISH PLANTAIN, BUCKHORN.

Guelph, lawns, Aug. 5, 1937; Guelph, Rowley, 1915 (OAC).

P. media L. HAIRY PLANTAIN.

Guelph, fields, June 7, 1938.

RUBIACEAE
(MADDER FAMILY)

Galium Aparine L. CLEAVERS.

Puslinch, rich woods, June 9, 1937; Guelph, Hart, 1934 (OAC).

G. verum L. YELLOW or LADY'S BEDSTRAW.

Guelph, dry fields, July 7, 1937; Guelph, Hart, 1929 (OAC).

G. circaezans Michx. WILD LIQUORICE.

Near Freelton, rich woods, July 5, 1937; Guelph, Howitt, (OAC).

G. boreale L. NORTHERN BEDSTRAW.

Elora, river banks, July 2, 1937; Elora, Hart, 1934 (OAC).

G. Mollugo L. WILD MADDER, WHITE BEDSTRAW.

Hespeler, roadsides, July 15, 1938.

G. palustre L. MARSH BEDSTRAW.

Puslinch, wet meadows, June 13, 1937; Puslinch, Hart, 1934 (OAC).

G. trifidum L. SMALL BEDSTRAW.

Near Freelton, wet woods, July 9, 1937.

G. labradoricum Wiegand. LABRADOR MARSH BEDSTRAW.

Puslinch Lake, Howitt, 1915 (OAC).

G. asprellum Michx. ROUGH BEDSTRAW.

Puslinch, rich ground, July 16, 1937.

G. trifloram Michx. SWEET SCENTED BEDSTRAW.

Guelph, rich woods, July 28, 1937; Guelph, Hart, 1931 (OAC).

Mitchella repens L. PARTRIDGE BERRY, TWIN BERRY.

Puslinch, dry woods, June 29, 1937.

CAPRIFOLIACEAE
(HONEYSUCKLE FAMILY)

Diervilla Lonicera Mill. BUSH HONEYSUCKLE.

Guelph, dry woods, June 25, 1937; Guelph, Stone, 1926 (OAC).

Lonicera caerulea L. var. villosa (Michx.) T.&G. MOUNTAIN FLY
HONEYSUCKLE.

Mount Forest, Klugh, 1905 (Q).

L. Morrowi Gray. MORROW'S HONEYSUCKLE.

Guelph, Howitt, 1918 (OAC).

L. tartarica L. TARTARIAN BUSH HONEYSUCKLE.

Guelph, rocky woods, May 28, 1937; Guelph, Rowley, 1915 (OAC).

L. canadense Marsh. AMERICAN FLY HONEYSUCKLE.

Guelph, rich woods, May 20, 1937; Guelph, Jarvis (OAC).

L. oblongifolia (Goldie) Hook. SWAMP FLY HONEYSUCKLE.

Guelph, swamps, June 20, 1937; Puslinch, Howitt, 1914 (OAC);

Mount Forest, Klugh, 1905 (Q).

L. hirsuta Eat. HAIRY HONEYSUCKLE.

Rockwood, Wright, 1915 (OAC).

L. glaucescens Rydb. DOUGLAS' HONEYSUCKLE.

Guelph, rich woods, June 9, 1937; Guelph, Simmons, 1933 (OAC).

Linnaea borealis L. var. americana (Forbes) Rehder. TWIN-FLOWER.

Puslinch, wet woods, June 13, 1937; Aberfoyle, Simmons,
1933 (OAC).

Triosteum perfoliatum L. TINKER'S COFFEE, HORSE GENTIAN.

Guelph, wet woods, June 13, 1937; Guelph, 1934 (OAC); Guelph,
Hamilton, 1923 (T).

Viburnum Lantana L. WAYFARING TREE.

Guelph, roadsides, May 27, 1937; Guelph, Hart, 1933 (OAC).

V. Opulus L. var. americanum (Mill.) Ait. HIGH BUSH CRANBERRY.

Guelph, 1933 (OAC).

V. acerifolium L. MAPLE LEAVED ARROW-WOOD.

Guelph, rich woods, June 12, 1938; Guelph, Jarvis (OAC).

V. pubescens (Ait.) Pursh. DOWNY LEAVED ARROW-WOOD.

Puslinch Lake, rocky woods, June 1, 1938; Puslinch Lake,
Howitt (OAC).

V. cassinoides L. WITHE-ROD.

Puslinch, swamps, June 1, 1938; Guelph, Howitt, 1915 (OAC).

V. Lentago L. NANNY BERRY.

Guelph, moist woods, June 18, 1938; Puslinch Lake, Howitt,
1910 (OAC); Guelph, Hamilton, 1923 (T).

Sambucus canadensis L. SWEET or COMMON ELDER.

Guelph, Stone & Evans, 1923 (OAC).

S. racemosa L. RED BERRIED ELDER.

Guelph, rocky woods, May 19, 1937; Puslinch, Stone, 1926 (OAC).

VALERIANACEAE
(VALERIAN FAMILY)

Valeriana officinalis L. COMMON GARDEN VALERIAN.

Guelph, moist meadows, July 3, 1937; Guelph, Hart, 1929 (OAC).

DIPSACACEAE
(TEASEL FAMILY)

Dipsacus sylvestris Huds. COMMON TEASEL.

Guelph, fields, July 15, 1937; Guelph, Evans, 1925 (OAC);

Guelph, Herriot (H).

Succisa pratensis Moench. DEVIL'S BIT.

Guelph, Cook, 1910 (OAC): garden escape.

Knautia arvensis (L.) T.Coulter. FIELD SCABIOUS.

Guelph, 1934 (OAC).

CUCURBITACEAE
(GOURD FAMILY)

Sicyos angulatus L. STAR CUCUMBER.

Puslinch, wet banks, Aug. 15, 1937.

Echinocystis lobata (Michx.) T.&G. WILD BALSAM APPLE.

Guelph, rich woods, July 27, 1937; Guelph, Baker, 1908 (OAC);

Guelph, Hamilton, 1923 (T).

CAMPANULACEAE
(BLUEBELL FAMILY)

Campanula rapunculoides L. CREEPING or EUROPEAN BELLFLOWER.

Guelph, roadsides, July 19, 1937; Guelph, Heringa, 1936 (OAC);

Guelph, Tytler, 1903 (T).

C. americana L. TALL BELLFLOWER.

Guelph, moist meadows, July 17, 1937.

C. rotundifolia L. HAREBELL, BLUE BELL.

Puslinch Lake, meadows, June 28, 1937; Guelph (OAC).

C. aparinoides Pursh. MARSH or BEDSTRAW BELLFLOWER.

Guelph, wet meadows, July 16, 1937; Guelph, Corby, 1934 (OAC).

C. uliginosa Rydb. BLUE MARSH BELLFLOWER.

Guelph, Simmons, 1932 (OAC).

LOBELIACEAE
(LOBELIA FAMILY)

Lobelia cardinalis L. CARDINAL FLOWER, RED LOBELIA.

Guelph, wet ground, Aug. 17, 1937; Guelph, Wright, 1919 (OAC);

Guelph, 1904 (T).

L. siphilitica L. GREAT LOBELIA, BLUE CARDINAL FLOWER.

Puslinch, wet ditches, Sept. 29, 1937; Guelph, 1932 (OAC).

L. spicata Lam. PALE SPIKED LOBELIA.

Arkell, swampy ground, June 23, 1937.

L. Kalmii L. BROOK or KALM'S LOBELIA.

Elora, wet bogs, July 14, 1937; Aberfoyle, Simmons, 1932

(OAC); Elora, Corby, 1934 (OAC).

L. inflata L. INDIAN or WILD TOBACCO.

Puslinch, wet meadows, Oct. 4, 1937.

COMPOSITAE
(COMPOSITE FAMILY)

Eupatorium purpureum L. JOE-PYE WEED.

Guelph, wet ground, July 24, 1937; Guelph, Weaver, 1933 (OAC);

Guelph, Hamilton, 1923 (T); Hespeler, McVittie, 1926 (T).

E. perfoliatum L. BONESET, THOROUGHWORT.

Guelph, wet ground, July 27, 1937; Guelph, 1932 (OAC); Guelph,

Hamilton, 1923 (T); Guelph, 1904 (T).

E. urticaefolium Reichard. WHITE SNAKE ROOT.

Guelph, rich woods, July 31, 1937; Elora, Corby, 1934 (OAC);

Guelph, Hamilton, 1923 (T).

Grindelia squarrosa (Pursh) Dunal. BROAD LEAVED GUM PLANT.

Puslinch, railroad track, Aug, 21, 1937; Puslinch, 1934 (OAC).

Solidago squarrosa Muhl. STOUT RAGGED GOLDEN-ROD.

Rockwood, Howitt & Stone, 1919 (OAC); Killean, Klugh, 1904 (Q);

S. caesia L. BLUE STEMMED GOLDEN-ROD.

Killean, Klugh, 1904 (Q).

S. caesia L. var. axillaris (Pursh) Gray.

Guelph, dry woods, Sept. 26, 1938.

S. latifolia L. BROAD LEAVED GOLDEN-ROD.

Guelph, wet ground, Sept. 18, 1937; Guelph, Simmons, 1932
(OAC); Killean, Klugh, 1904 (Q); Guelph, Groh, 1907 (DAO).

S. bicolor L. WHITE or PALE GOLDEN-ROD.

Puslinch Lake, Howitt, 1917 (OAC).

S. hispida Muhl. HAIRY GOLDEN-ROD.

Puslinch Lake, Corby, 1934 (OAC); Killean, Klugh, 1904 (Q).

S. uliginosa Nutt. BOG or SWAMP GOLDEN-ROD.

Guelph, Howitt, 1920 (OAC); Killean, Klugh, 1904 (Q).

S. patula Muhl. ROUGH LEAVED or SPREADING GOLDEN-ROD.

Guelph, Howitt, 1916 (OAC); Killean, Klugh, 1904 (Q).

S. arguta Ait. CUT LEAVED GOLDEN-ROD.

Rockwood, Corby, 1935 (OAC).

S. juncea Ait. EARLY or SHARP TOOTHED GOLDEN-ROD.

Wellington Co., Corby Thesis, 1935.

S. juncea Ait. var. scabrella (T.&G.) Gray.

Puslinch Lake, Klugh, 1904 (Q).

S. neglecta T.&G. SWAMP GOLDEN-ROD.

Killean, Klugh, 1904 (Q); Corby Thesis, 1935.

S. rugosa Mill. WRINKLE LEAVED or PYRAMID GOLDEN-ROD.

Killean, Klugh, 1904 (Q); Puslinch, Hamilton, 1923 (T);

Guelph, Corby, 1934 (OAC).

S. canadensis L. CANADA or ROCK GOLDEN-ROD.

Guelph, roadsides, Aug. 14, 1937; Killean, Klugh, 1904 (Q);

Guelph, Tytler, 1903 (T); Guelph, Hamilton, 1923 (T)

S. altissima L. TALL or DOUBLE GOLDEN-ROD.

Guelph, roadsides, Sept. 23, 1937; Guelph, 1932 (OAC);

Guelph, Hamilton, 1923 (T).

S. serotina Ait. LATE GOLDEN-ROD.

Guelph, Howitt, 1916 (OAC); Guelph, Corby, 1934 (OAC); Killean, Klugh, 1904 (Q).

S. graminifolia (L.) Salisb. BUSHY or FLAT TOPPED GOLDEN-ROD.

Guelph, moist ground, Sept. 4, 1938; Guelph, (OAC).

Bellis perennis L. EUROPEAN or GARDEN DAISY.

Guelph, Rowley, 1915 (OAC).

Aster macrophyllus L. LARGE LEAVED ASTER.

Morrison, dry woods, Aug. 14, 1937; Guelph, 1937 (OAC); Killean, Klugh, 1904 (Q).

A. novae-angliae L. NEW ENGLAND ASTER.

- Guelph, rich ground, Sept. 25, 1937.

A. cordifolius L. HEART LEAVED ASTER.

Guelph, moist woods, Aug. 15, 1937; Guelph, Simmons, 1932 (OAC); Killean, Klugh, 1904 (Q); Guelph, Hamilton, 1923 (T).

A. Lowrieanus Porter. LOWRIE'S or FALL ASTER.

Guelph, dry woods, Oct. 6, 1936.

A. sagittifolius Wedemeyer. ARROW LEAVED ASTER.

Guelph, Lewis (OAC).

A. sagittifolius Wedemeyer var. urophyllus (Lindl.) Burgess.

Killean, Klugh, 1904 (Q); Corby Thesis, 1935.

A. Lindleyanus T.&G. LINDLEY'S ASTER.

Puslinch Lake, Klugh, 1904 (Q).

A. laevis L. SMOOTH ASTER.

Wellington Co., Corby Thesis, 1905.

A. multiflorus Ait. DENSE FLOWERED ASTER.

Morrison, roadsides, Oct. 22, 1938.

A. lateriflorus (L.) Britton. STARVED or CALICO ASTER.

Aberfoyle, ditches, Sept. 15, 1937; Guelph, Corby, 1934 (OAC);

Killean, Klugh, 1904 (Q); Guelph, Hamilton, 1923 (T).

A. Tradescanti L. TRADESCANT'S ASTER.

Freelton, moist ground, Oct. 22, 1938; Guelph, Corby, 1934 (OAC).

A. paniculatus Lam. TALL WHITE or PANICLED ASTER.

Killean, Klugh, 1904 (Q); Corby Thesis, 1935.

A. paniculatus Lam. var. lanatus Fernald.

KILLEAN, Klugh, 1904 (Q).

A. junceus Ait. RUSH ASTER.

Puslinch Lake, Howitt, 1920 (OAC); Killean, Klugh, 1904 (Q).

A. longifolius Lam. LONG LEAVED ASTER.

Killean, Klugh, 1904 (Q).

A. puniceus L. RED STALKED or PURPLE STEM ASTER.

Puslinch, swampy ground, Sept. 23, 1937; Guelph, Doherty, 1901

(OAC); Killean, Klugh, 1904 (Q); Guelph, Hamilton, 1923 (T);

Guelph, Tytler, 1903 (T); Puslinch, Hamilton, 1923 (T).

A. umbellatus Mill. TALL FLAT-TOP WHITE ASTER.

Puslinch, moist woods, Aug. 5, 1937; Puslinch Lake, Corby, 1934

(OAC); Killean, Klugh, 1904 (Q).

Erigeron pulchellus Michx. ROBIN'S or POOR ROBIN'S FLEABANE.

Puslinch, Wright, 1919 (OAC).

E. philadelphicus L. PHILADELPHIA FLEABANE.

Guelph, moist meadows, June 4, 1937; Guelph, Hart (OAC);

Killean, Klugh, 1904 (Q).

E. annuus (L.) Pers. SWEET SCABIOUS, WHITE TOP.

Guelph, fields, July 14, 1937; Guelph, Webster, 1924 (OAC);

Killean, Klugh, 1904 (Q).

E. ramosus (Walt.) BSP. DAISY FLEABANE.

Guelph, fields, July 15, 1937; Puslinch, 1934 (OAC); Killean,

Klugh, 1904 (Q).

E. canadensis L. CANADA FLEABANE.

Guelph, railway tracks, July 31, 1937; Guelph (OAC); Killean, Klugh, 1904 (Q); Wellington Co., Clark (T).

Antennaria plantaginifolia (L.) Richards. PLANTAIN LEAF EVERLASTING.

Guelph, dry fields, July 4, 1937; Guelph, Corby, 1935 (OAC); Guelph, Klugh, 1905 (Q).

A. fallax Greene.

Wellington Co., Corby Thesis, 1935.

A. neodioica Greene. SMALLER CAT'S FOOT.

Guelph, open fields, June 7, 1938; Guelph, 1923 (OAC); Killean, Klugh, 1904 (Q).

A. neglecta Greene. FIELD CAT'S FOOT.

Wellington Co., Corby Thesis, 1935.

Anaphalis margaritacea (L.) B.&H. PEARLY EVERLASTING.

Guelph, dry woods, July 17, 1937; Guelph, Weaver, 1933 (OAC); Guelph, Clark, (T).

Gnaphalium polycephalum Michx. COMMON EVERLASTING.

Killean, Klugh, 1904 (Q).

G. decurrens Ives. CLAMMY EVERLASTING, WINGED CUDWEED.

Guelph, 1928 (OAC); Killean, Klugh, 1904 (Q).

G. uliginosum L. LOW CUDWEED.

Guelph (OAC); Corby Thesis, 1935.

Inula Helenium L. ELECAMPANE, HORSEHEAL.

Guelph, damp fields, July 16, 1937.

Polymnia canadensis L. SMALL FLOWERED LEAF CUP.

Arkell, rich moist woods, Aug. 25, 1937; Guelph (OAC).

Iva xanthifolia Nutt. BURWEED, MARSH ELDER.

Fergus, dry woods, July 31, 1937; Fergus, Corby, 1934 (OAC).

Ambrosia trifida L. GREAT RAGWEED? BITTERWEED.

Guelph, rich soil, July 15, 1938; Guelph, Howitt, 1906 (OAC).

A. trifida L. var. integrifolia (Muhl.) T.&G.

Guelph, Corby, 1934 (OAC).

A. artemisiifolia L. RAGWEED, HOGWEED.

Guelph, roadsides, Aug. 17, 1937; Guelph, Corby, 1934 (OAC);

Guelph, Hamilton, 1923 (T).

A. psilostachya DC. WESTERN RAGWEED.

Elora, roadsides, Sept. 13, 1934; Guelph, Corby, 1934 (OAC).

Xanthium canadense Mill. AMERICAN COCKLEBUR or BURWEED.

Guelph, rich ground, Sept. 1, 1937.

X. commune Britton. COCKLEBUR, CLOTEUR.

Guelph, rich ground, Sept. 11, 1937.

Heliopsis scabra Dunal. ROUGH OX-EYE.

Guelph, 1933 (OAC).

Rudbeckia hirta L. BLACK-EYED SUSAN, YELLOW DAISY.

Guelph, fields, July 17, 1938; Guelph, Minshall, 1932 (OAC).

R. laciniata L. GREEN-HEADED CONE FLOWER.

Elora, Simmons, 1931 (OAC); Guelph, 1904 (T).

Lepachys columnaris (Sims) T.&G. PRAIRIE CONE FLOWER.

Guelph (OAC).

Helianthus annuus L. COMMON SUNFLOWER.

Guelph, Corby Thesis, 1935.

H. scaberrimus Ell. STIFF SUNFLOWER.

Guelph, Corby Thesis, 1935.

H. giganteus L. GIANT SUNFLOWER.

Guelph (OAC).

H. divaricatus L. ROUGH or WOODLAND SUNFLOWER.

Wellington Co., Corby Thesis, 1935.

H. tuberosus L. JERUSALEM ARTICHOKE.

Wellington Co., Corby Thesis, 1935.

Bidens frondosa L. BEGGAR TICKS, STICK-TIGHT.

Guelph, moist fields, Aug. 15, 1937; Guelph, Corby, 1934 (OAC).

B. connata Muhl. PURPLE STEMMED or SWAMP BEGGAR TICKS.

Guelph, swampy ground, Aug. 23, 1937.

B. cernua L. SMALL or NODDING BUR MARIGOLD.

Guelph, wet ditches, Aug. 23, 1937; Guelph, Corby, 1934 (OAC).

Galinsoga parviflora Cav. GALINSOGA.

Guelph, cultivated land, Aug. 14, 1937.

Helenium autumnale L. FALSE or SWAMP SUNFLOWER.

Guelph, Evans, 1925 (OAC).

Gaillardia aristata Pursh. GREAT FLOWERED GAILLARDIA.

Guelph, 1933 (OAC).

Achillea Ptarmica L. SNEEZEWORT, WHITE TANSY.

Guelph, river bank, July 9, 1937; Guelph, Corby, 1934 (OAC).

A. Millefolium L. YARROW, MILFOIL.

Guelph, cultivated land, Aug. 17, 1937; Guelph, Johnston, 1928 (OAC).

Anthemis Cotula L. MAYWEED, STINKING MAYWEED.

Guelph, waste places, July 7, 1937; Guelph, Weaver, 1933 (OAC);

Guelph, Tytler, 1903 (T).

A. tinctoria L. YELLOW or OX-EYE CAMOMILE.

Guelph, fields, July 9, 1937; Guelph, 1931 (OAC).

Matricaria suaveolens (Pursh) Bucheneau. PINEAPPLE WEED.

Guelph, waste places, July 15, 1937; Guelph, 1934 (OAC).

Chrysanthemum Leucanthemum L. WHITE WEED, FIELD or OX-EYE DAISY.

Guelph, 1934 (OAC).

C. Leucanthemum L. var. pinnatifidum Lecoq. & Lamotte.

Guelph, waste places, June 9, 1937.

C. segetum L. YELLOW OX-EYE, CORN MARIGOLD.

Guelph (OAC).

C. Parthenium (L.) Bernh. COMMON FEVERFEW.

Guelph, Hart, 1929 (OAC).

C. Balsamitea L. var. tanacetoides Boiss. COSTMARY, MINT GERANIUM.

Guelph, roadsides, Sept. 28, 1937; Guelph, Eastham, 1908 (OAC).

Tanacetum vulgare L. TANSY.

Guelph, fields, Aug. 17, 1937; Guelph, Stone, 1925 (OAC).

Artemisia ludoviciana Nutt. DARK LEAVED MUGWORT.

Guelph, roadsides, Aug. 3, 1937; Guelph, Wright, 1926 (OAC).

A. vulgaris L. COMMON MUGWORT.

Wellington Co., Corby Thesis, 1935.

A. biennis Willd. BIENNIAL WORMWOOD.

Guelph, cultivated land, July 27, 1938; Guelph (OAC);

Wellington Co., Clark (T); Hespeler, Herriot, 1901 (H).

A. frigida Willd. PASTURE SAGE BRUSH, WORMWOOD SAGE.

Rockwood, Howitt & Stone, 1919 (OAC); Rockwood, Corby, 1934 (OAC).

A. pontica L. ROMAN or HUNGARIAN WORMWOOD.

Wellington Co., Corby Thesis, 1935.

A. gnaphaloides Nutt. WESTERN SAGE, CUDWEED MUGWORT.

Wellington Co., Corby Thesis, 1935.

Petasites palmatus (Ait.) Gray. PALMATE LEAF SWEET COLTSFOOT.

Guelph, Klugh, 1905 (Q).

Erechtites hieracifolia (L.) Raf. FIRE WEED.

Guelph, moist woods, Aug. 22, 1937; Guelph (OAC*).

Senecio vulgaris L. COMMON GROUNDSEL.

Guelph, cultivated land, July 8, 1937; Guelph, Corby, 1934 (OAC); Guelph, Hamilton, 1923 (T); Guelph, Tytler, 1903 (T).
Guelph, Groh, 1907 (DAO); Wellington Co., Clark (T).

S. Jacobaea L. TANSY RAGWORT, STAGGERWORT.

Puslinch, roadsides, July 17, 1937; Puslinch, Corby, 1934 (OAC);
Guelph, Stallwood, 1934 (T).

S. aureus L. GOLDEN RAGWORT, SQUAW WEED.

Guelph, moist meadows, June 8, 1938; Guelph, Van Loon, 1936 (OAC).

S. Balsamitae Muhl. BALSAM GROUNDSEL.

Guelph (OAC).

Arctium minus Bernh. COMMON BURDOCK.

Guelph, roadsides, Aug. 13, 1937; Guelph, Hart, 1929 (OAC).

Carduus nutans L. MUSK THISTLE, PLUMELESS THISTLE.

Guelph, fields, June 21, 1937; Guelph, Weaver, 1933 (OAC);
Guelph, Hamilton, 1923 (T).

C. crispus L. CURLED THISTLE.

Hespeler, 1909 (OAC).

Cirsium lanceolatum (L.) Hill. COMMON BUR or SPEAR THISTLE.

Guelph, waste places, July 5, 1937; Guelph, Corby, 1934 (OAC);
Guelph, Hamilton, 1923 (T); Guelph, Scott, 1904 (T).

C. undulatum (Nutt.) Spreng. WAVY LEAVED THISTLE.

Wellington Co., Fretz, 1911 (OAC).

C. discolor (Muhl.) Spreng. FIELD THISTLE.

Puslinch Lake, rich ground, June 21, 1937.

C. muticum Michx. SWAMP THISTLE.

Puslinch Lake, swamps, July 7, 1937.

C. arvense (L.) Scop. CANADA THISTLE, CREEPING THISTLE.

Guelph, roadsides and fields, July 23, 1937; Guelph, 1933 (OAC);

Guelph, Hamilton, 1923 (T); Guelph, Howitt, 1931 (DAO).

C. arvensis (L.) Scop. var. integrifolium Wimm. & Grab.

Erin, roadsides, Aug. 17, 1937; Ariss, Simmons & Corby, 1935 (OAC)

Onopordum Acanthium L. SCOTCH or COTTON THISTLE.

Guelph, dry fields, July 19, 1937; Guelph, Stone, 1925 (OAC).

Silybum marianum (L.) Gaertn. MILK THISTLE.

Guelph, V.W.E., 1910 (OAC).

Centaurea solstitialis L. BARNABY'S THISTLE.

- Guelph, Eastham, 1908 (OAC)

C. Jacea L. BROWN or RAYED KNAPWEED.

Guelph, fields, July 6, 1937.

C. Jacea L. var. lacera Koch.

Wellington Co., Corby Thesis, 1935.

C. Cyanus L. BLUE BOTTLE, CORN FLOWER.

Guelph, Simmons, 1935 (OAC); Guelph, Stallwood, 1936 (T).

C. Scabiosa L. SCABIOUS, KNAPWEED.

Guelph, Cole (OAC): garden escape.

C. nigra L. BLACK KNAPWEED.

Guelph, roadsides, July 3, 1937; Guelph, Simmons, 1932 (OAC);

Guelph, Stallwood, 1936 (T).

C. vochinensis Bernh. TYROL KNAPWEED.

Guelph, fields, Aug. 17, 1937.

Lapsana communis L. NIPPLEWORT, SUCCORY.

Guelph, fields, July 9, 1937; Guelph, Corby, 1934 (OAC);

Guelph, Stallwood, 1936 (T); Guelph, Tytler, 1902 (T);

Harriston, Brown, 1925 (B).

Cichorium Intybus L. WILD SUCCORY, CHICORY, BLUE SAILORS.

Guelph, waste places, July 7, 1937; Guelph, Corby, 1934 (OAC).

Hypochaeris glabra L. LONG ROOTED CAT'S EAR.

Harriston, Brown, 1925 (B).

Leontodon autumnalis L. FALL DANDELION, LION'S TOOTH.

Guelph, roadsides, July 31, 1937; Guelph, 1932 (OAC).

Picris hieracioides L. HAWKWEED PICRIS.

Guelph, waste places, July 13, 1937; Guelph, Hart, 1930 (OAC).

P. echioides L. BRISTLY OX TONGUE.

Elora, roadsides, June 8, 1938.

Tragopogon porrifolius L. OYSTER PLANT, SALSIFY.

Guelph, roadsides, Aug. 5, 1938; Guelph, Corby, 1934 (OAC).

T. pratensis L. YELLOW GOAT'S BEARD, MEADOW SALSIFY.

Guelph, fields, June 24, 1937; Guelph, Wright, 1918 (OAC).

Taraxacum officinale Weber. DANDELION.

Guelph, waste land, Aug. 27, 1937; Guelph, 1933 (OAC); Guelph, Hamilton, 1923 (T).

T. erythrospermum Andrz. RED SEEDED DANDELION.

Guelph, waste land, Aug. 15, 1938.

Sonchus arvensis L. PERENNIAL SOW THISTLE.

Guelph, roadsides, June 6, 1937; Guelph, 1928 (OAC).

S. oleraceus L. COMMON ANNUAL SOW THISTLE.

Guelph, cultivated ground, Aug. 15, 1938; Guelph, Tytler, 1903 (T); Guelph, Bryce (T).

S. asper (L.) Hill. SPINY ANNUAL SOW THISTLE.

Guelph, cultivated land, Aug. 15, 1938.

Lactuca scariola L. PRICKLY or WILD LETTUCE.

Guelph, roadsides, July 24, 1937; Guelph, 1933 (OAC).

L. scariola L. var. integrata Gren. & Godr.

Guelph, Weaver, 1933 (OAC).

L. canadensis L. WILD or TALL LETTUCE.

Guelph, fields and waste places, Aug. 4, 1937; Guelph (OAC);

Guelph, Hamilton, 1923 (T).

L. hirsuta Muhl. HAIRY or RED WOOD LETTUCE.

Mount Forest, fields, July 29, 1938.

L. spicata (Lam.) Hitchc. TALL BLUE LETTUCE.

Guelph, Hill, 1930 (OAC); Guelph, Corby, 1935 (OAC).

L. spicata (Lam.) Hitchc. var. integrifolia (Gray) Britton.

Wellington Co., Corby Thesis, 1935.

Crepis capillaris (L.) Wallr. SMOOTH HAWKSBEARD.

Guelph, Rowley, 1915 (OAC).

Prenanthes alba L. RATTLESNAKE ROOT, WHITE LETTUCE:

Elora, rich woods, Aug. 5, 1937; Elora, Treherne, 1907 (OAC):

P. altissima L. TALL WHITE LETTUCE.

Puslinch, moist woods, Aug. 15, 1938; Puslinch, 1934 (OAC);

Harriston, Brown, 1937 (B).

Hieracium aurantiacum L. ORANGE HAWKWEED.

Guelph, fields, June 16, 1937; Guelph, Evans, 1925 (OAC);

Killeen, Klugh, 1904 (Q); Guelph, Hamilton, 1923 (T).

H. praealtum Goch. var. decipiens Koch. KING DEVIL.

Guelph, dry fields, June 16, 1937; Guelph, Hart, 1930 (OAC).

H. vulgatum Fries. HAWKWEED.

Guelph, fields, July 6, 1937; Guelph, Corby, 1934 (OAC)

H. canadense Michx. CANADA HAWKWEED.

Guelph, moist woods, Sept. 6, 1937.

ADDENDUM

The plants of Galt region, Waterloo County, collected by William Herriot from 1892 to 1913 for which no record as to their occurrence in Wellington County has been found, comprises the following 209 species:

Phegopteris hexagonopteraPolystichum lonchitisBotrychium simplexB. dissectum var. obliquumEquisetum variegatumSparganium simplexS. minimumPotamogeton alpinusP. angustifoliusP. lucensP. praelongusP. pusillusP. foliosusP. filiformisNajas flexilisScheuchzeria palustrisSagittaria gramineaElodea canadensisPanicum dichotomumP. lanuginosumP. xanthophysumP. microcarponOryzopsis pungensMuhlenbergia tenuifloraBrachyelytrum erectumSporobolus neglectusAgrostis perennansCalamagrostis hyperboreaTrisetum melicoidesBouteloa cuttipendulaTridens flavusRestuca octofloraBromus purgansB. KalmiiB. ciliatus var. laeviglumisElymus striatusCyperus diandrusC. esculentusC. erythrorhizosEleocharis intermediaFimbristylis autumnalisScirpus pauciflorusS. debilisS. Smithii

<u>S. americanus</u>	<u>Sisyrinchium gramineum</u>
<u>S. rubrotinctus</u>	<u>Spiranthes lucida</u>
<u>Eriophorum virginicum</u> var. <u>album</u>	<u>Epipactis repens</u> var. <u>ophioides</u>
<u>Rhynchospora capillacea</u>	<u>Aplectrum hyemale</u>
<u>Cladium mariscoides</u>	<u>Saururus cernuus</u>
<u>Scleria verticillata</u>	<u>Salix nigra</u>
<u>Carex scoparia</u>	<u>S. serissima</u>
<u>C. mirabilis</u>	<u>S. alba</u>
<u>C. straminea</u>	<u>S. sericea</u>
<u>C. suberecta</u>	<u>S. candida</u>
<u>C. festucacea</u> var. <u>brevior</u>	<u>S. purpurea</u>
<u>C. foenea</u>	<u>S. pedicellaris</u>
<u>C. aenea</u>	<u>S. rostrata</u>
<u>C. stellulata</u> var. <u>angustata</u>	<u>S. candida</u> X <u>S. cordata</u>
<u>C. arcta</u>	<u>S. cordata</u> X <u>S. angustata</u>
<u>C. Muhlenbergii</u>	<u>Myrica asplenifolia</u>
<u>C. cephalophora</u>	<u>Carya alba</u>
<u>C. diandra</u>	<u>C. glabra</u>
<u>C. chordorrhiza</u>	<u>Betula lenta</u>
<u>C. granularis</u> var. <u>Haleana</u>	<u>B. pumila</u>
<u>C. Craweii</u>	<u>Quercus alba</u>
<u>C. Oederi</u> var. <u>pumila</u>	<u>Q. Muhlenbergii</u>
<u>C. capillaris</u>	<u>Q. prinoides</u>
<u>C. capillaris</u> var. <u>elongata</u>	<u>Q. coccinea</u>
<u>Juncus brachycephalus</u>	<u>Q. velutina</u>
<u>J. brevicaudatus</u>	<u>Polygonum Muhlenbergii</u>
<u>J. canadensis</u>	<u>P. Careyi</u>
<u>Lilium superbum</u>	<u>P. virginianum</u>
<u>Erythronium albidum</u>	<u>P. sagittatum</u>

<u>Scleranthus annuus</u>	<u>Lespedeza capitata</u>
<u>Arenaria stricta</u>	<u>L. frutescens</u>
<u>Ceratophyllum demersum</u>	<u>Vicia caroliniana</u>
<u>Castalia tuberosa</u>	<u>Lathyrus venosus</u>
<u>Brasenia Schreberi</u>	<u>Linum medium</u>
<u>Anemone riparia</u>	<u>Geranium carolinianum</u>
<u>Cimicifuga racemosa</u>	<u>Polygala polygama</u>
<u>Benzoin aestivale</u>	<u>P. verticillata</u>
<u>Arabis Drummondii</u>	<u>Euphorbia humistrata</u>
<u>A. brachycarpa</u>	<u>Callitriche palustris</u>
<u>Pyrus coronaria</u>	<u>Rhus Vernix</u>
<u>Crataegus tomentosa</u>	<u>Vitis aestivalis</u>
<u>Potentilla arguta</u>	<u>Hypericum canadense</u>
<u>P. fruticosa</u>	<u>Helianthemum majus</u>
<u>Rubus setosus</u>	<u>Lechea intermedia</u>
<u>R. nigricans</u>	<u>Viola fimbriatula</u>
<u>R. villosus</u>	<u>V. Rafinesquii</u>
<u>Agrimonia mollis</u>	<u>Epilobium molle</u>
<u>Rosa carolina</u>	<u>E. palustre</u>
<u>R. virginiana</u>	<u>Myriophyllum heterophyllum</u>
<u>R. humilis</u>	<u>Proserpinaca palustris</u>
<u>Prunus instititia</u>	<u>Sanicula trifoliata</u>
<u>Medicago hispida</u>	<u>S. gregaria</u>
<u>Astragalus neglectus</u>	<u>Hydrocotyle americana</u>
<u>Desmodium nudiflorum</u>	<u>Moneses uniflora</u>
<u>D. grandiflorum</u>	<u>Pyrola secunda var. obtusata</u>
<u>D. bracteosum</u>	<u>Epidaea repens</u>
<u>D. Dillenii</u>	<u>Vaccinium vacillans</u>
<u>D. paniculatum</u>	<u>V. corymbosum var. amoenum</u>

V. atrococcumV. macrocarponSamolus floribundusLysimachia quadrifoliaSteironema quadriflorumGentiana quinquefoliaAsclepias tuberosaA. quadrifoliaCuscuta epithymumCynoglossum virginianumLithospermum canescensL. angustifoliumOnosmodium hispidissimumVerbena angustifoliaTeucrium canadenseAgastache nepetoidesLamium purpureumSatureja glabraPycnanthemum virginianumPhysalis subglabrataIlysanthes dubiaVeronica Anagallis-aquaticaGerardia pediculariaG. flavaG. virginicaG. tenuifoliaCastilleja coccineaMelampyrum lineareUtricularia gibbaCephalanthus occidentalisLonicera dioicaValeriana edulisV. uliginosaEupatorium purpureumvar. maculatumLiatris cylindraceaSolidago OhioensisAster divaricatusA. azureusA. ptarmicoidesAntennaria petaloideaHelianthus strumosusH. decapetalusBidens laevisMatricaria inodoraSenecio canusArctium LappaLeontodon hastilis nvar. vulgarisHieracium scabrumH. Gronovii

LITERATURE CITED.

1. Adams, J. 1926. A Survey of Canadian Plants in Relation to Their Environment. Dom. Can. Bul. 58 - New Series.
2. - - 1938. The Flora of Canada. Canada Year Book: 43-55.
3. Brainerd, E. 1921. Violets of North America. Vt. Ag. Expt. Sta. Bul. 224.
4. Britton, N.L. & Brown, A. 1913. Illustrated Flora of Northern United States, Canada and the British Possessions. 3 vols.
5. Brown, M. 1938. An Index to North American Ferns.
6. Coleman, A.P. 1936A. Geology of the North Shore of Lake Ontario. Ont. Dept. Mines. XLV part VII: 37-74.
7. - - 1936B. Lake Iroquois. Ont. Dept. Mines. XLV part VII: 1-36.
8. Colgate, E.J. 1905. The Orchidaceae of Wellington County, Ontario. Ont. Nat. Sci. Bul. 1:32.
9. Connor, A.J. 1931. Meteorological Tables. Canada Year Book.
10. Corby, H. 1935. The Compositae of Wellington County. Unpublished Thesis as partial requirement for the Degree Bachelor of Science in Agriculture, Ontario Agricultural College, Guelph, Ontario.
11. Engler, A. & Gilg, E. 1924. Syllabus der Pflanzenfamilien. 9 th. & 10 th. Edition.
12. Gröb, H. 1938. William Herriot, Botanist. Can. Field Nat. Vol. 52, No. 2: 28-29.
13. Herriot, W. 1905. Some New or Little Known Canadian Plants. Ont. Nat. Sci. Bul. 1: 26-30.
14. - - 1906. The Cyperaceae of the Vicinity of Galt, Ontario. Ont. Nat. Sci. Bul. 2: 35-38.
15. - - 1908. The Grasses of Galt, Ontario and Vicinity. Ont. Nat. Sci. Bul. 4: 126-132.
16. - - 1909. The Ericaceae and Orchidaceae in the Vicinity of Galt, Ontario. Ont. Nat. Sci. Bul. 5: 26-30.
17. - - 1910. The Compositae of Galt, Ontario and Vicinity. Ont. Nat. Sci. Bul. 6: 55-64.

18. Herriot, W. 1912. The Rosaceae and Leguminosae of Galt, Ontario and Vicinity. Ont. Nat. Sci. Bul. 7: 26-34.
19. - - 1913. The Crowfoot and Poppy Families and their Allies Around Galt, Ontario. Ont. Nat. Sci. Bul. 8: 40-46.
20. - - 1914. The Trees of Waterloo County. Waterloo Historical Society. Vol. 3. 119-121.
21. Jarvis, T.D. 1905. The Gramineae of Vicinity of Guelph. Ont. Nat. Sci. Bul. 1: 37-38.
22. Klugh, A.B. 1905. The Genus Aster at Puslinch Lake. Ont. Nat. Sci. Bul. 1: 30-31.
23. - - 1906. The Cyperaceae of Wellington County. Ont. Nat. Sci. Bul. 2: 38-42.
24. Macoun, J.M. & Malte, M.O. 1915. The Flora of Canada. Canada Year Book: 43-55.
25. Moore, T.J. 1907. Ferns of Wellington County. Ont. Nat. Sci. Bul. 3: 12-14.
26. New World Loose Leaf Atlas. Sixth Edition: 197.
27. Peattie, D.C. 1922. The Atlantic Coastal Plain Element in the Flora of the Great Lakes. Rhod. 24: 37-50; 80-88.
28. Robinson, B.L. & Fernald, M.L. 1908. Gray's New Manual of Botany. Seventh edition.
29. Taylor, F.B. 1913. Niagara-Iroquois Beach. Ont. Dept. Mines. Guide Book 4: 5-70.
30. Weaver, J.E. & Clements, F.E. 1929. Plant Ecology.
31. White, J. 1916. Dictionary of Altitudes. Dom. Comm. of Conservation.
32. Williams, M.Y. 1919. The Silurian Geology and Faunas of the Ontario Peninsula, and Manitoulin and Adjacent Islands. Dept. of Mines, Canada. Mem. 111.
33. Zenkert, C.A. 1934. The Flora of the Niagara Frontier Region. Buffalo Soc. Nat. Sci. XVI.