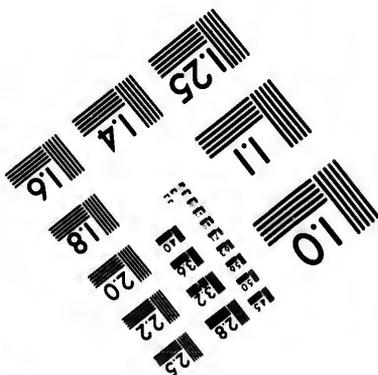
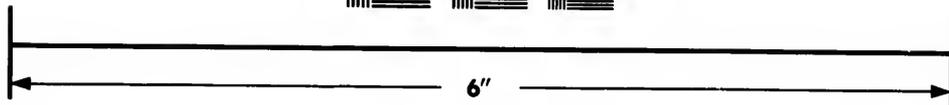
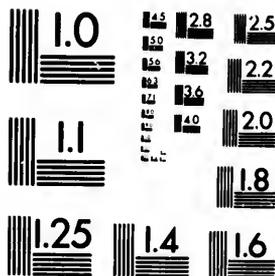


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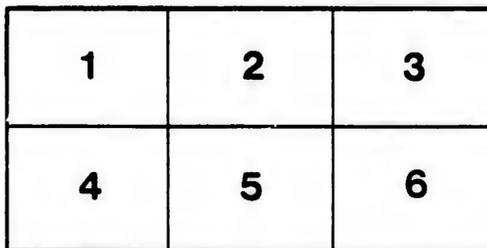
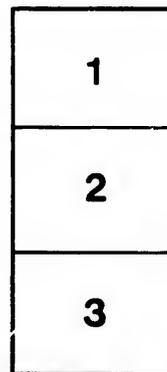
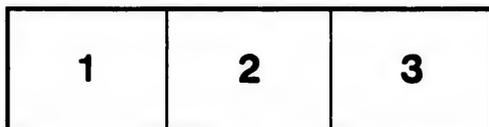
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FLORA * OTTAWIENSIS

BY

JAMES FLETCHER. F.R.S.C., F.L.S.

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FLORA OTTAWAENSIS.

BY JAMES FLETCHER, F.R.S.C., F.L.S.

It is now eight years since my first list of the plants of this district was prepared for the members of the club. This was merely a bare list of the names of 810 species collected by the writer during the summer of 1879. "This district" was then understood to mean a radius of about twelve miles from the City of Ottawa, and was defined as the country lying between the following points:--Mecchi's Lake, in the Chelsea Mountains, on the one side, and the Mer Bleue on the other; down the Ottawa River East Templeton and Green's Creek were included, and up the river Britannia and the islands above Aylmer. Latterly, however, by general consent of the botanists of the club, this radius has been extended to about thirty miles, so as to include Casselman on the one side and Wakefield on the other, and up the river as far as the Chats Rapids and down to Buckingham.

Previous to the appearance of the above-mentioned list there had been printed by the Ottawa Natural History Society a "List of plants collected by Mr. B. Billings in the vicinity of the City of Ottawa during the summer of 1866." This contained the names of 404 species, with the dates of their inflorescence, which appear in the present list marked (B).

The following collections had also been made previous to 1879:-- By Mr. B. Billings (1866-7) which is now in the museum of the Ottawa Literary and Scientific Society; by Mr. A. H. Moore, an energetic collector, and one who added largely to our knowledge of the flora of the vicinity (1870-71). Through the generosity of the last named gentleman this collection now forms part of my own herbarium. By Mr. Robert Whyte and Dr. H. B. Small, who began to collect about 1875, and are still active members of the botanical branch of the club. The present list contains every species up to this time found in the district and identified with certainty. Further additions will be published annually as they are reported. It has been prepared at the request of the Council, more especially as an aid for those beginning to study our flora.

The 1879 list gave merely the names of all species at that time known to have been found at Ottawa, but gave no information upon some of the most important points the local botanist requires to know

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• BARKER, BOSTON
• BARKER, BOSTON

about, such as the prevalence of any species in the locality, whether it be indigenous or introduced, plentiful or scarce.

Certain plants common in some localities are rare here, and *vice versa*; again, plants indigenous to Canada but not to the Ottawa district have been introduced either by accident or have escaped from cultivation. All of these facts should be made known to students or they may fall into error. It was therefore thought well, this time, to add short notes under each species, giving the general habitat, special localities and approximately the date in the year when collectors may expect to find the different species in flower.

With the exception of two or three species, all have been found by the writer in the localities mentioned, and in every case the actual specimens recorded have been carefully examined by him.

A general habitat is given for each species, and in the case of rarities exact localities are mentioned. When no special locality is given it is intended to show that the species is of common occurrence.

When no collector's name is given after a locality or the initials (J. F.) appear the writer is responsible for the record. When a plant of interest is recorded from other localities than those where the writer has found it the name of the collector is given in parentheses. In instances where a person's name is followed by an asterisk (*) it is to show that this was the first record of the plant having been discovered in the Ottawa district.

In indicating the time of the year when the plant may be looked for in flower the months have been divided into four quarters, so that when the name of a month is followed by the numbers 1, 2, 3 or 4 it shows that the plant may be expected to flower in the 1st, 2nd, 3rd or 4th quarter of the month.

Synonyms have been, for the most part, omitted, except in cases where plants appear in the list under other names than those given in Dr. Gray's "Manual." These, as well as introduced plants (whether into this district or into Canada) are printed in italics.

In compiling this new list Prof. Macoun's Catalogue, issued by the Geological and Natural History Survey of Canada, 1883, *et seq.*, has been followed, and as Canadian botanists now arrange their collections by that excellent catalogue I have thought it well to give before each species Prof. Macoun's number.

POLYPETALOUS EXOGENS.

RANUNCULACEÆ—Crow-foot Family.

CLEMATIS, L. Traveller's Joy. Virgin's Bower.

1. C. VERTICILLARIS, D.C. (Mauve-flowered Clematis).

Atragene Americana. Sims.

Creeping over rocks and low shrubs. King's and other mountains, Chelsea, P.Q. Not uncommon. May—4.

2. C. VIRGINIANA. (Common Virgin's-Bower.)

Borders of streams. Aug.—1.

ANEMONE, L. Wind Flower.

12. A. CYLINDRICA, Gray (Long-fruited Anemone).

Dry pastures. Ju.—2.

13. VIRGINIANA, L.

Rocky, open woods. There are two forms of this plant: (i) with greenish flowers like the preceding, but always with much shorter heads of fruit; and (ii) with white flowers almost as large as those of No. 15. From this latter, however, it is easily distinguished by the woolly seeds. (i) Common; (ii) on the rocks round Lake Flora, Hull, P.Q. Ju.—2. (B.)

15. A. DICHOTOMA, L. (Round-headed Anemone).

A. Pennsylvanica, L.

Along river margins and in low meadows. Ju.—2. (B.)

17. A. HEPATICA, L. (Liverwort. Blue May-flower).

Hepatica triloba, Chaix.

Dry, rocky woods. One of our earliest flowers; not quite as common as No. 18. Ap.—3 (B.)

18. A. ACUTILOBA, Lawson ("May-flower").

Dry, shady woods. Ap.—3 (B.)

THALICTRUM, Tourn. Meadow-rue.

20. T. DIOICUM, L. (Early Meadow-rue).

River banks and low woods. Ju.—1. (B.)

21. *T. PURPURASCENS* (Purplish Meadow-rue).

Templeton and along the Ottawa below the city (H. M. Ami*),
Hull (J. F.) This species is distinguishable from *T. Cornuti*
by having the anthers drooping on capillary filaments and the
flowers greenish purple. On the other hand, *T. Cornuti* has
white flowers, short filaments and anthers not drooping.

22. *T. CORNUTI*, L. (White-flowered Meadow-rue).

Islands and wet meadows and swamps; a tall, handsome plant.
July—1. (B.)

RANUNCULUS, L. Crow-foot. Buttercup.

28. *R. AQUATILIS*, L. *v.* *TRICHOPHYLLUS*, Chaix (White Water Crow-foot).

Stagnant and slow-flowing waters. Ju.—1.

29. *R. MULTIFIDUS*, Pursh (Yellow Water-Crow-foot).

In shallow water, and creeping over mud, Malloch's Bay, Dow's
Swamp and Kettle Island (J. F.), Billings Bridge (R. B. Whyte).
Ju.—2.

Var. *y. REPENS*, Watson.

Leaves all round-reniform, palmately, 3—8 cleft; stems creeping
in mud, Casselman and Gatineau Point (Prof. Macconn). Ju.—2.

31. *R. FLAMMULA*, L. *var.* *REPTANS*, Meyer (Smaller Creeping Crow-foot).

Mud-flats and river margins July—1.

32. *R. CYMBALARIA*, Pursh (Salt-water Crow-foot).

In a low, wet meadow at Thurso, P.Q. Ju.—2.

37. *R. ABORTIVUS*, L. *var.* *MICRANTHUS*, Gray (Small-flowered Buttercup).

Woods and Meadows. From "Macconn's Catalogue," Part III.,
p. 480, it would appear that our Ottawa plant is not the type of
R. abortivus, L. May—2. (B.)

30. *R. RECURVATUS*, Poir (Downy Wood-Buttercup).

Woods. An attractive species with large leaves and small flowers.
May—2. (B.)

45. *R. acris*, L. (Meadow Buttercup).

Introduced from Europe. Very abundant in meadows. June (B.)

47. *R. PENNSYLVANICUS*, L. (Bristly Buttercup).

River flats and swampy woods. July—2. (B.)

48. *R. repens*, L. (Creeping Crow-foot).

Introduced from Europe. Governor-General's Bay, New Edinburgh. I have not succeeded in finding the native form of this species at Ottawa.

CALTHA, L. Marsh Marigold.

54. *C. PALUSTRIS*, L. (Water-Cowslip).

Margins of streams and in swamps. May—2. (B.)

COPTIS, Salisb. Gold-thread.

57. *C. TRIFOLIA*, Salisb. (Three-leaved Gold-thread).

Low woods and on hummocks in swamps. A lovely little plant with shining leaves and white, starry flowers. May—1. (B.)

AQUILEGIA, Tourm. Columbine.

59. *A. CANADENSIS*, L. (Wild Columbine. "Honey suckle").

Rocky woods. A beautiful plant well worth cultivation for its red and yellow flowers. May 3. (B.)

DELPHINIUM, Tourm. Larkspur.

65. *D. Consolidida*, L. (Blue Field Larkspur).

Introduced from Europe in seed grain and escaped from gardens.

Flowers sometimes pink or white. June—4.

ACTÆA, L. Baneberry.

73. *A. ALBA*, Bigelow (White-berried Cohosh).

Woods and river banks. The spikes of flowers longer and blooming a week later than those of No. 74. The conspicuous waxy white berries on their thick red pedicels render this one of our most notable berry-bearing plants. May—4. (B.)

74. *A. SPICATA*, L. var. *RUBRA*, Ait. (Red-berried Cohosh).

Rich woods. The flowers in a more compact head than the preceding, on longer pedicels and of a clearer white. A white-berried variety of this species frequently occurs; but it may be readily distinguished from the preceding not only by the shape of the raceme, but by the slender pedicels. May—3.

MENISPERMACEÆ.—Moonseed Family.

MENISPERMUM, L. Moonseed.

81. *M. CANADENSE*, L. (Canada Moonseed.)

River banks and along streams, generally in woods or thickets.

July—2. (B.)

BERBERIDACEÆ.—Barberry Family.

BERBERIS, L. Barberry.

82. *B. Vulgaris*, L. (Common Barberry.)

Introduced from Europe. Occasionally found in woods, as at New Edinburgh, where the seeds were probably dropped by birds.

CAULOPHYLLUM, Michx. Blue Cohosh.

86. *C. THALICTROIDES*, Michx. (Papoose Root.)

Rich woods. An interesting plant with the parts of the flowers in sixes and of the same colour as the purplish foliage. These are followed by large dry berries with a beautiful blue bloom upon them. May—1. (B.)

All our plants are of a dull purple, not yellowish green, as they are stated to be west of Lake Erie.

NYMPHÆACEÆ.—Water-lily Family.

BRASENIA, Schreber.

91. *B. PELTATA*, Pursh, (Water-shield.)

In lakes and rocky pools.

Rideau River at Black Rapids and McLaurin's Bay, East Templeton (J. F.), Lake Winedago, (*Dr H. B. Small*).

NYMPHÆA, Tourm. Water-lily.

93. *N. TUBEROSA*, Paine, (Liber-bearing Water-lily.)

Rivers and Lakes. This is the common white water-lily of this locality. The flowers are less double and have much less scent than the next. July.

94. *N. ODORATA*, Ait. (Sweet-scented Water lily.)

Slow streams and lakes. Rideau River. Meach's Lake.

Flowers generally smaller than in No. 93. Rare. July (B.)

NUPHAR, Smith. Yellow Pond-lily.

95. *N. ADVENA*, Ait. (Common Yellow Pond-lily.)

Streams and lakes. Ju.—1. (B.)

97. *N. ADVENA* + *KALMIANA*, Caspary.*N. rubrodiscum*, Moirong.

This is a very beautiful hybrid between *N. advena* and *N. Kalmiana*. It is intermediate in size and appearance between *advena* and *Kalmiana*. The floating leaves are purple beneath with slender petioles. The submerged membranaceous leaves were freely produced and like those of *N. Kalmiana*. The flowers expand $1\frac{1}{2}$ inches, have 6 sepals and a bright velvety crimson—10-15 rayed stigmatic disk. The perfect fruit, which is seldom produced, bears a closer resemblance to that of *N. Kalmiana* than to that of *N. advena*, being almost globose with a constriction beneath the stigma.

Leamy's Lake and Gilmore's Piling-grounds. July—1.

98. *N. KALMIANA*, Ait. (Least Yellow Pond-lily.)*N. luteum*, var *pumilum*. Gray's Manual, 57.

Streams and lakes. Leamy's Lake, Gilmore's Piling-grounds (J.F.).

Green's Creek. (B. Billings.) July—1. (B.)

A charming little species. Quite distinct, I believe, from the European *N. luteum*, var *pumilum*.

SARRACENIACEÆ.—Pitcher-Plants.

SARRACENIA, Tourn.

99. *S. PURPUREA*, L. (Side-saddle Flower).

Peat bogs. Lake Flora, Hull, and Mer Bleue, abundant. A few plants in the Race-course Swamp, Bank Street Road. One of our most interesting Canadian plants. Ju.—2.

Used in Lower Canada as a remedy for small-pox.

———— var *HETEROPHYLLA*, Torrey.

This, I think, is merely an albino form of *S. purpurea*. I have found three plants at Lake Flora, Hull. The leaves are pale green without red veins, and the flowers yellowish white. Ju.—2.

PAPAVERACEÆ.—Poppy Family.**PAPAVÉR, L. Poppy.**

- 100.
- P. somniferum*
- , L. Opium Poppy.

An escape from cultivation occasionally found in wheat fields and upon rubbish heaps. July—2.

- 101.
- P. Rhæus*
- , L.

Introduced with seed wheat at Billings Bridge. Occasionally found by road-sides, but nowhere permanently introduced. July.

SANGUINARIA, L. Blood-root.

- 104.
- S. CANADENSIS*
- , L. (Blood-root.)

Roads and clearings. One of our earliest and most beautiful spring flowers. Largely used by the Indians both as a dye-plant and medicinally. April—4.

CHELIDONIUM, L. Celandine.

- 105.
- C. majus*
- , L. (Celandine.)

Introduced. Occasionally found by way-sides as at Stewarton and New Edinburg. June.

FUMARIACEÆ.—Fumitory Family.**ADLUMIA, Raf. Climbing Fumitory.**

- 106.
- A. CIRRHOSA*
- , Raf. (Cypress Vine.)

Rocky woods. Common. A most beautiful creeper with delicate foliage and a profusion of pink pendent blossoms, flowering all the summer. Sometimes creeping over bushes 10 or 12 feet high. Ju.—2.

DICENTRA, Bork.

- 107.
- D. CUCULLARIA*
- , DC. (Dutchman's Breeches.)

Rich woods. May—1. (B.)

- 108.
- D. CANADENSIS*
- , DC. (Squirrel Corn, "Wood Hyacinth.")

Rich woods. May—2. (B.)

CORYDALIS, Vent.

- 110.
- C. GLAUCA*
- , Pursh. (Pale Corydalis.)

Hill sides and amongst rocks. May—2. Flowering all the summer. B.

111. *C. AUREA*, Willd. (Golden Corydalis.)
Hill sides and rocky woods. May—2. (B.)

CRUCIFERÆ.—Mustard Family.

NASTURTIUM, R. Br. Cress.

114. *N. officinale*, R. Br. (Water cress.)
Springs and brooks. Billings Bridge. Chelsea. New Edinburgh,
&c. June. (B.)
115. *N. PALUSTRE*, DC. (Marsh-cress.)
Low ground. A smooth species with pods more than twice as
long as broad. Ju.—2. (B.)
——— var. *HISPIDUM*, Fisch. & Mey.
Low ground. A rougher plant than the above with round pods.
Ju.—2.

116. *N. AMPHIBIUM*, R. Br.

Low ground. A coarser and larger plant than the above, the
stem generally decumbent and rooting at the base, Biennial or
perennial with pods shaped like those of *N. palustre*. Ju.—2.

117. *N. LACUSTRE*, Gray. (River-cress.)

Margins of rivers. Malloch's Bay, Ottawa, and abundant in the
Nation river at Casselman. An interesting plant with the
submerged leaves much lacinated. The flowers and fruit are
not very freely produced ; but when mature the leaves fall off,
throw out roots and become new plants. Ju.—2.

120. *N. Armoracia*, Fries. (Horse Radish.)

An escape from cultivation. Occasionally found on waste places
in the suburbs of the city.

DENTARIA, L. Tooth-wort.

121. *D. DIPHYLLIA*, Michx. (Crinkle-root.)
Rich woods. May—2. (B.)
122. *D. LACINIATA*, Muhl. (Cut-leaved Tooth-wort.)
Rich woods. A very local species, so far only found at Beech-
wood, near the S.W. corner of the cemetery. May 1. (B.)

CARDAMINE, L. Bitter Cress.

124. *C. RHOMBOIDEA*, DC.
River bank, Hull, P.Q. May—2. The plant I have referred
here is an erect species with almost sessile leaves up the stem

125. *C. ROTUNDIFOLIA*, Michx.
 Springy wood. Billings Bridge. This is a weak-stemmed few-flowered plant with angular root leaves upon long petioles. Stem fleshy at the base. May—3.
129. *C. PRATENSIS*, L. (Ladies' smock. "Cuckoo-pint.")
 Peat-bogs and wet meadows. Dow's swamp. Billings Bridge. Beechwood. Lake Flora, (J. F.); Janeville, (R. B. Whyte). The Canadian plant, as noticed in Macoun's catalogue, is more slender than the European, and also white-flowered. Young plants are produced in great abundance from the leaflets which fall off and float on the top of the water. May—2. (B.)
130. *C. HIRSUTA*, L. (Small Bitter cress.)
 Low ground and springy woods. An inconspicuous plant with a very inappropriate name, being almost glabrous. June—2.
- ARABIS, L. Rock-Cress.
135. *A. HIRSUTA*, Scot. (Hairy Rock-cress.)
 Rocky open woods and pastures. Little Chaudiere. Britannia. Hull. Aylmer. Chelsea, &c. May—4.
138. *A. DRUMMONDII*, Gray. (Tower-mustard.)
 Rocky pastures. A large distinct species. May—4. (B.)
140. *A. PERFOLIATA*, Law. (Smooth Tower-mustard.)
 Sandy woods and pastures. A tall slender plant with yellowish flowers and leaves only apparently, not really, perfoliate. June —2.
141. *A. LÆVIGATA*, Poir.
 Mountain side. King's Mountain, Chelsea, P.Q. June.
- BARBARÆA, R. Br. Winter-cress.
145. *B. VULGARIS*, R. Br. (Yellow Rocket.)
 On rocks and by waysides. Lovers' Walk. New Edinburgh. Billings Bridge. Ju.—3.
 ——— var. *STRICTA*, Regel (Native winter-cress.)
 Swampy woods. Beechwood. A much less conspicuous plant than the type, with slender stem and small flowers. Ju.—2.
- ERYSIMUM, L. Treacle Mustard.
146. *E. CHEIRANTHOIDES*, L. (Worm-seed Mustard.)
 Everywhere. June. (B.)

SISYMBRIUM, L. Hedge Mustard.

150. *S. officinale*, Scop.

Roadsides. July—1. (B.)

BRASSICA. Tourn. Cabbage. Mustard.

159. *B. Sinapistrum*, Boiss. (Wild Mustard. "Charlock.")

Cultivated ground. A most troublesome and persistent weed in many parts of Canada. Pods knotty, smooth, one-third consisting of a stout two-edged and one-seeded beak. Seeds reddish black. June. (B.)

160. *B. alba*, Gray. (Garden Mustard.)

A garden escape. Easily known by its bristly pods, more than half of which consist of the one-seeded beak. Seeds yellow. July—1.

161. *B. nigra*, Koch. (Black Mustard.)

Roadsides. Scarce at Ottawa. Pods smooth, four-cornered, erect on appressed pedicels. Seeds dark brown. June.

CAMELINA, Crantz. False Flax.

191. *C. sativa*, Crantz.

An occasional weed in fields of grain. Ju.—2.

NESLIA, L.

2107. *N. paniculata*, L.

Rarely introduced with bird seed. A small plant with sparse stellate-pubesence, small bright yellow flowers and round pods. Ju.—3.

CAPSELLA, Vent. Shepherd's Purse.

197. *C. Bursa-pastoris*, Mœnch.

Everywhere around inhabited localities, May. (B.)

THLASPI, Tourn. Penny-cress.

199. *T. arvense*, L. (Mithridate Mustard.)

Waste places. Ju.—1.

LEPIDIUM, L. Pepper-wort.

202. *L. sativum*, L. (Garden-cress.)

A garden escape frequently found in waste places. Ju.—2.

207. *L. VIRGINICUM*, L.
Rocky pastures. Ju.—1. (B.)

RAPHANUS, L. Radish.

213. *R. sativus*, L. (Garden Radish.)
Introduced. Borders of fields and way sides. Ju.—1.

VIOLACEÆ—Violet Family.

VIOLA, L. Heart's-Ease. Pansy.

229. *V. BLANDA*, Willd. (Small Sweet White Violet)
Damp woods. May—1. (B.)
230. *V. RENIFOLIA*, Gray. (Kidney-leaved Violet.)
Damp woods and swamps. Sometimes confounded with the above. The leaves, however are pubescent and more or less kidney-shaped, one always decidedly so, and the flowers are scentless. May—2.
234. *V. SELKIRKII*, Pursh. (Large-spurred Violet.)
Damp, shaded rocks. Our earliest Blue Violet. A very distinct species, easily recognized by the leaves being smooth beneath and sparsely hairy above, and by the large blunt spur. Hemlock Lake, Beechwood, Chelsea. May—1.
235. *V. CUCULLATA*, Ait. (Hooded Violet.)
Damp woods or meadows. A most variable species, both as to flowers and foliage. There are, however, two very distinct forms: (1) A large plant with blue flowers and very pubescent leaves; and (2) a smaller plant growing in meadows or beside water, with large violet flowers and almost smooth leaves. May—3. (B.)
240. *V. CANINA*, L., var. *SYLVESTRIS*, Regel. (Dog Violet.)
Woods and pastures. May—2. (B.)
241. *V. ROSTRATA*, Muhl. (Long-spurred Violet.)
Governor-General's Bay, New Edinburgh. Ju.—1.
242. *V. CANADENSIS*, L. (Canada Violet.)
Rich woods. A charming species, flowering in May and November. (B.)
243. *V. PUBESCENS*, Ait. (Down Yellow Violet.)
Rich woods. A lovely plant, with golden yellow flowers and fine foliage. There are two forms.

var. *eriocarpa*, Nutt, has the pods covered with woolly white pubescence. This is probably the type of the species. May—3. (B.)

———var. *SCABRIUSCULA*, T. & G.

In this the pods are perfectly smooth and the leaves almost so. Some forms of this variety resemble closely the western *V. glabellu*, Nutt. May—3.

247. *V. tricolor*, L., var. *arvensis*, Ging (Wild Pansy.)

Cultivated ground. Billings Bridge. Hintonburgh. Ju.—1.

POLYGALACEÆ—Milk-wort Family.

POLYGALA. Milk-wort.

251. *P. SENEGA*, L. (Seneca Snake root.)

Rocky banks. Not uncommon. Ju.—1. (B.)

253. *P. PAUCIFOLIA*, Willd. (Fringed Polygala.)

Dry, open woods. A lovely little flower. Ironsides (J. F.), near St. Louis Dam (H. M. Ami*). May—3. (B.)

CARYOPHYLLACEÆ—Pink Family.

SILENE, L. Catchfly. Champion.

255. *S. inflata*, Smith. (Bladder Champion.)

Introduced. Waysides and grain fields. July—2. (B.)

258. *S. ANTIRRHINA*, L. (Sleepy Catchfly.)

Sandy and rocky banks. Ju.—1.

560. *S. Armeria*, L. (Sweet-William Catchfly.)

A garden escape. Billings Bridge, and occasional in waste places. July. (B.)

261. *S. noctiflora*, L. (Night-flowering Cathfly.)

Introduced. An abundant weed in fields and gardens. Ju.—3. (B.)

LYCHNIS, Tourn. Lychnis, Cockle.

268. *L. Githago*, Lam. (Corn-Cockle.)

Introduced. Grain fields. July—2.

269. *L. Vespertina*, Sibth. Evening Lychnis.

Introduced with grass seed. July.

SAPONARIA, L. Soapwort.

275. *S. officinalis*, L. (Bonning Bet.)

A garden escape. Roadsides and waste places. Billings Bridge, Hull, &c. July—3. (B.)

276. *S. Vuccaria*, L. (Common Cow-herb.)

Introduced. Grain fields and waysides. July—2.

ARENARIA, L. Sandwort.

284. *A. MICHAUXII*, Hook.*A. stricta*, Mx. Gray's Manual.

Dry rocks. Nepean Point, Rockcliffe. July—1.

288. *A. serpyllifolia*, L. (Thyme-leaved Sandwort.)

Introduced (?) Dry rocky banks. Rockcliffe, Hull and Aylmer. Ju.—4. (B.)

289. *A. LATERIFLORA*. (Broad-leaved Sandwort.)*Mœrhingia lateriflora*, Fenzl.

Gravelly banks. Green's Creek, Chelsea, Aylmer. Ju.—2. (B.)

STELLARIA, L. Chickweed. Star-wort.

293. *S. media*, Smith. (Chickweed.)

Introduced. In cultivated ground, everywhere.

294. *S. LONGIFOLIA*, Muhl. (Long-leaved Stitch-wort.)

Low woods and fields. Ju.—1. (B.)

2113. *S. graminea*, L. (Narrow-leaved Stitch-wort.)Introduced. This species, which is abundant in Nova Scotia and New Brunswick, has only been found here once. Casselman. (*Miss I. Grant*.) Aug.—3.295. *S. BOREALIS*, Bigel. (Northern Stitch-wort.)

Swamps and low woods. Ju.—1. (B.)

CERASTIUM, L.

306. *C. viscosum*, L. (Mouse-ear Chickweed)*C. vulgatum*. Gray's Manual, p. 94.

Cultivated ground. Introduced. Annual. Nearly erect.

307. *C. VULGATUM*, L. (Larger Mouse-ear Chickweed.)

C. viscosum. Gray's Manual, p. 94.

Perennial, spreading, a larger plant than the preceding. (B.)

308. *C. NUTANS*, Raf. (Nodding Cerastium.)

Damp places amongst rocks. Hull, Little Chaudière. Ju.—2.

309. *C. arvense*, L. Field Chickweed.

Rocky pastures. New Edinburgh (*Mrs. Chamberlin*), Juneville
(*R. B. Whyte*). Ju.—2.

SPERGULA, L. Spurrey.

322. *S. arvensis*, L. Corn Spurrey.

Introduced. Grain fields. Billings Bridge, Bell's Corners.
Ju.—2.

PORTULACACEÆ.—Purslane Family.

PORTULACA, Tourn. Purslane.

326. *P. oleracea*, L. (Pusley.)

Introduced. Cultivated ground. Cultivated in France as a
vegetable. Ju.—2. (B.)

CLAYTONIA, L.

331. *C. CAROLINIANA*, Mx. (Broad-leaved Spring-beauty.)

Rich woods. One of our earliest flowers, and sometimes called
"May-flower." May—1. (B.)

C. Virginica, common in Western Ontario, was collected at Perth
by Mr. R. B. Whyte, but has not yet been detected in this locality.

HYPERICACEÆ.—St. John's-wort Family.

HYPERICUM, L. St. John's Wort.

343. *H. PYRAMIDATUM*, Ait. (Great St. John's-wort.)

H. Ascyron, L.

River side. Casselman. Aug.—1.

345. *H. ELLIPTICUM*, Hook.

Low ground, river banks. A small pretty species. July—3. (B.)

346. *H. perforatum*, L. Common St. John's-wort.

Introduced. Abundant in dry pastures. July—2. (B.)

347. *H. CORYMBOSUM*, Muhl. (Spotted St. John's-wort.)

H. maculatum, Walt.

River banks. Juneville, St. Louis Dam, Aylmer, Hull. July—4.

348. *H. MUTILUM*, L. (Small Swamp St. John's wort.)
 Low ground. Ju.—4. (B.)
349. *H. CANADENSE*, L.
 Low ground. July—1.
- ELODES, Adus. Marsh St. John's-wort.
353. *E. VIRGINICA*, Nutt.
H. Virginicum, L.
 Swamps and margins of streams. July—2. (B.)

MALVACEÆ.—Mallow Family.

MALVA. Common Mallow.

354. *M. rotundifolia*, L. (Round-leaved Mallow.)
 Introduced. Roadsides and waste-places. Ju.—2. (B.)
355. *M. sylvestris*, L. (High Mallow.)
 Introduced. Gatineau Point. Eastman's Springs. Bank St.
 Road. July—2.
356. *M. crispa*, L. (Curled Mallow.)
 A garden escape. Billings Bridge, Hull. Aug.—1.
357. *M. moschata*, L. (Musk Mallow).
 Introduced. Roadsides and pastures. Flowers both pink and
 white. July—2.

ABUTILON. Indian Mallow.

362. *A. Avicennæ*, Gærtn. (Velvet-leaf).
 Introduced. Waste-places. Aug.—2.

HIBISCUS, L. Rose Mallow.

364. *H. Trionum*, L. (Bladder Ketmia.)
 A garden escape. Aug.—1.
 Flowers open between 9 o'clock and noon.

TILIACEÆ.—Linden Family.

TILIA, L. Basswood.

366. *T. AMERICANA*, L. (Basswood.)
 Woods and pastures. Ju.—2. (B.)
 ——— var. *PUBESCENS*, Loud. (Downy-leaved Basswood.)
 Near St. Louis Dam. Ju.—2.

LINACEÆ.—Flax Family.

LINUM, L. Flax.

373. *L. usitatissimum*, L. (Common Flax, Linseed)
Introduced with seed grain. July—2.

GERANIACEÆ.—Geranium Family.

GERANIUM.

379. *G. pratense*, L. (Meadow Crane's-bill.)
A garden escape at Aylmer, P.Q. Ju.—2. (*R. B. Whyte.*)
380. *G. CAROLINIANUM*, L.
Rocky woods and sandy fields. Ju.—2. (B.)
381. *G. ROBERTIANUM*, L. (Herb Robert.)
Rocky Woods. Little Chaudiere, Hull, and Chelsea. Ju.—1.

ERODIUM, L'Her. Storks bill.

384. *E. cicutarium*, L'Her.
Introduced. Waste-places. Rare. July—1.
385. *E. moschatum*, Willd. Musky Storks-bill.
A garden escape. Stewarton. Not uncommon. July—1.

IMPATIENS, L. Balsam, Jewel-weed.

387. *I. FULVA*, Nutt. (Spotted Touch-me-not).
Low ground. July—2. (B.)
A variety with yellow unspotted flowers is found along the
St. Louis Dam.

OXALIS, L. Wood Sorrel.

389. *O. ACETOSELLA*, L. (Wood Sorrel.)
Shady swamps and damp woods. Ju.—2.
391. *O. CORNICULATA*, L. var. *STRICTA*, Sav. (Yellow Wood Sorrel.)
O. stricta, L.
Common in low ground and gravelly places. Ju.—2. (B.)
This I think is probably a distinct species, and not a variety of
O. corniculata, L.

RUTACEÆ.—Rue Family.

XANTHOXYLUM, Colden. Prickly Ash.

392. *X. AMERICANUM*, Mill. (Northern Prickly Ash.)
River banks. May —2.

CELASTRACEÆ.—Staff-tree Family.

ILEX, L. Holly.

395. *I. VERTICILLATA*, Gray. (Canadian Holly, Black Alder.)

Swamps and river margins. Ju.—2.

A beautiful shrub bearing heavy clusters of scarlet berries.

NEMOPANTHES, Raf. Mountain Holly.

396. *N. CANADENSIS*, DC.

Peat bogs. Ju.—1.

A shapely shrub of even greater beauty than the preceding with slender branches which bear a profusion of delicate light-green foliage and purplish-red berries on slender pedicels.

CELASTRUS, L.

397. *C. SCANDENS*, L. (Wax-work, "Climbing Bitter-sweet.")

Rocky woods. Ju.—1 (B.)

RHAMNACEÆ.—Buckthorn Family.

CEANOTHUS, L. Red-root.

401. *C. AMERICANUS*, L. (New Jersey Tea).

Rockcliffe. Very rare. July—1.

RHAMNUS, Tourn. Buckthorn.

405. *R. ALNIFOLIA*, L'Her.

Peat bogs. May—4.

VITACEÆ.—Vine Family.

VITIS, Tourn. Grape Vine.

409. *V. RIPARIA*, Mx. (Frost Grape).

V. cordifolia, Mx. Gray's Manual, p. 112.

River-sides. Ju.—2. (B.)

AMPELOPSIS, Mx.

411. *A. QUINQUEFOLIA*, Mx. (Virginian Creeper, American Ivy.)

Low woods. July—1.

SAPINDACEÆ.

STAPHYLEA, L. Bladder-nut.

412. *S. TRIFOLIA*, L. (American Bladder-nut.)

River-side at Billings Bridge. Rare. May—2. (B.)

ÆSCULUS, L. Horse Chestnut.

413. *A. Hippocastanum*, L.

Introduced. Cultivated for its beauty; but not so successfully here as in Western Ontario.

ACER, Tourn. Maple.

414. *A. PENNSYLVANICUM*, L. (Striped Maple.)

Rocky and sandy woods. May—3.

415. *A. SPICATUM*, Lam. (Mountain Maple.)

Wet woods. Ju.—3.

419. *A. SACCHARINUM*, Wang. (Sugar Maple, Hard Maple.)

Rocky and sandy woods. May—2.

————— var. *NIGRUM*, T. & G. (Downy Maple.)

Easily distinguishable from the type with which it occurs by the foliage, which is dull dark green, pubescent beneath, turning to yellow in the autumn. The leaves are generally recurved at the sides, which gives them a rounded appearance.

420. *A. DASYCARPUM*, Ehrh. (Silver, or White Maple.)

Islands and river banks. Apl.—3.

One of the first plants to flower in the spring.

421. *A. RUBRUM*, L. (Red, or Soft Maple.)

River banks and low woods. May—1. (B)

NEGUNDO. Ash-leaved Maple.

422. *N. ACEROIDES*, Mœneh. (Manitoba Maple, Box Elder.)

Introduced. Now largely cultivated as a shade tree from its rapid growth. It is not, however, well suited for this purpose. May—2.

ANACARDIACÆ—Sumach Family.

RHUS, L. Sumach.

423. *R. TYPHINA*, L. (Stag's-horn Sumach.)

Rocky woods and fields. July—1. (B)

427. *R. TOXICODENDRON*, L. (Poison Ivy.)

Rocky woods and fields, Ju.—2. (B)

429. *R. AROMATICA*, Ait. (Scented Sumach.)

In a rocky field near Lake Flora, Hull, P.Q., is a large straggling patch of this species. It is evidently all one plant many years old; but as it only bears staminate flowers there are no seedlings. (*H. M. Ami.*) May—2.

LEGUMINOSÆ—Pea Family.

TRIFOLIUM. Clover.

450. *T. arvense*, L. (Rabbit-foot Clover.)
 Introduced. In a field at Billings Bridge. Rare. Ju.—1.
451. *T. pratense*, L. (Red Clover.)
 Introduced. Ju.—1. (B)
453. *T. repens*, L. (White or Dutch Clover.)
 Introduced. Ju.—1. (B)
460. *T. agrarium*, L. (Hop Clover.)
 Introduced. An erect, handsome plant, sometimes 18 inches high, with showy flowers. Eastman's Springs, Aylmer. (*J. F.*) Beechwood. (*R. B. Whyte.*)
461. *T. procumbens*, L. (Low Hop Clover.)
 Introduced. Billings Bridge (*J. F.*) Near St. Louis Dam (*R. B. Whyte.*) Daly street (*J. T. McLaughlin.*) Ju.—2.
462. *T. hybridum*, L. (Alsike Clover.)
 Introduced. Ju. 2.

MEILOLOTUS, Tourn. Melilot.

465. *M. alba*, Lam. (Sweet Clover.)
 Introduced. Waysides. July—2. (B)
466. *M. officinalis*, Willd. (Yellow Melilot.)
 Introduced. Waysides and waste places. July—2.

MEDICAGO, L. Medick.

467. *M. lupulina*, L. (Black Medick, Hop Trefoil.)
 Introduced. Fields and waysides. Ju.—1. (B)

ROBINIA, L. Locust Tree.

486. *R. Pseudacacia*, L.
 Introduced. Growing spontaneously from seeds. Rockcliffe, Beechwood, Hull. Ju.—2.

ASTRAGALUS, L. Milk Vetch.

491. *A. CANADENSIS*, L.
 River banks. Hull, Rockcliffe, Billings Bridge. Ju.—3.
504. *A. COOPERI*, Gray.
 Rocky woods. Rockcliffe, Hull. Ju.—1. (B.)
 As compared with *A. Canadensis*, with which it may be confounded, this is a smaller and smoother plant, with thin one-celled pods, and leaflets from 11-21 in number and opens its

flowers in the beginning of June, whilst *A. Canadensis* has thick completely two celled pods in long close spikes, leaflets 21-27 in number and flowers late in July.

DESMODIUM, DC. Tick Trefoil.

536. *D. ACUMINATUM*, DC.

Rich woods. Meech's Lake, Patterson's Creek and Billings Bridge. July—1.

543. *D. CANADENSE*, DC.

Dry banks and in thickets. Billings Bridge, St. Louis Dam (*J. F.*); East Templeton (*R. B. Whyte*). July—3. (B.)

VICIA. Vetch, Tare.

549. *V. sativa*, L. (Common Tare.)

Introduced. Appearing in all cultivated lands. July—1. (B.)

550. *V. tetrasperma*, Loisel.

Introduced. Bank street road, 1871 (*A. H. Moore*.)

551. *V. hirsuta*, Koch.

Introduced. A garden weed (*R. B. Whyte*); Billings Bridge in a wheat field (*J. F.*) Aug.—2.

552. *V. Cracca*, L.

Introduced. Railway banks and in hay fields. Ju.—3.

LATHYRUS.

558. *L. OCHROLEUCUS*, Hook.

Rocky woods. Hull, Chelsea, Rockcliffe, Little Chaudière. July—2. (B.)

559. *L. PALUSTRIS*, L.

River sides and damp meadows. Ju.—2. (B.)

—— var. *MYRTIFOLIUS*, Gray.

With the above, and perhaps hardly worthy of a varietal name, intermediate forms occurring all the way from the extreme form back to the type.

APIOS. Ground Nut.

561. *A. TUBEROSA*, Mönch.

River banks. A most interesting perennial, with handsome foliage and dense racemes of beautiful brown-purple, violet-scented flowers, and bearing edible tubers at short distances along underground stems. Aug.—1. (B.)

AMPHICARPEA, Ell. Hog Peanut.

563. *A. MONOICA*, Ell.

River banks and islands. Aug.—1. (B.) A graceful creeper, with pretty trifoliate foliage, slender twining stems and delicate purplish flowers; bearing, as well as the thin scymetar-shaped pods which follow the upper flowers, large fleshy reniform subterranean pods which are generally one-seeded.

ROSACEÆ. Rose Family.

PRUNUS, Tourn. Plum, Cherry.

568. *P. AMERICANA*, Marshall. (Wild Red Plum.)

Thickets. May—3. (B)

The fruit of this species varies very much upon different trees, both in size and colour, and also in quality. Many varieties are cultivated, and form a valuable fruit for domestic purposes
——— var. *MOLLIS*, T. & G. Fl. 1. 107.

In Prof. Macomb's Catalogue this variety is recorded as follows :

“Chaudière Falls, Ottawa (4) (Pursh.) This is the black fruited variety of our wild plum, and is to be looked for throughout Ontario. It is probable we have two species in our territory.” I have never succeeded in finding it here.

570. *P. PUMILA*, L. (Dwarf Cherry.)

Growing in crevices and trailing over rocks. Chaudière Islands and Rockcliffe. Rare. Ju.—1. This is possibly the plant recorded as *P. maritima* from the “borders of the Ottawa” by Pursh.

571. *P. PENNSYLVANICA*, L. (Bird Cherry, Red Cherry.)

Sandy and rocky woods. A graceful tree, sometimes 30 feet high. Well suited for lawns. May—2. (B)

573. *P. VIRGINIANA*, L. (Choke Cherry.)

River banks and thickets. An ornamental shrub bearing a profusion of racemes of white flowers. Fruit, dark purplish red; very astringent. May—3. (B)

575. *P. SEROTINA*, Ehrh. (Black Cherry.)

Woods. An uncommon tree in this locality. King's Mountain, Chelsea. Billings Bridge. Beechwood. Fruit in long racemes, black, slightly astringent. May—4. (B)

SPIRÆA, L. Meadow Sweet.

577. *S. SALICIFOLIA*, L. (Willow-leaved Meadow Sweet.)

Low ground. July—2. (B.)

578. *S. TOMENTOSA*, L. (Hardhack, Pink Spiræa.)

Low ground. Aug.—1. (B.)

NEILLIA, Don.

584. *N. OPULIFOLIA*, Benth & Hook. (Nine-bark.)

Spiræa opulifolia, L.

Rocky river banks. An ornamental shrub with bright foliage and bearing a profusion of white flowers, which are followed by corymbs of pinkish, membranaceous, inflated pods. Ju.—3. (B)

RUBUS, Tourn. Bramble. Raspberry.

586. *R. ODORATUS*, L. (Purple Flowering Raspberry, "Mulberry.")

Thickets and rocky fields. Ju.—2. (B.)

590. *R. DALIBARDA*, L. (Barren Raspberry.)

Dalibarda repens, L.

In a low swampy wood at Eastman's Springs (*J. F.*). Damp wood at Casselman (*Prof. Macoun*). Very local, only detected in the above localities. July—2.

592. *R. TRIFLORUS*, Rich. (Swamp-berry.)

Swamps and peat bogs. May—3 (B.)

594. *R. STRIGOSUS*, Mx. (Red Raspberry.)

Rocky woods and borders of fields. Ju.—2. (B.)

595. *R. OCCIDENTALIS*, L. (Black Raspberry.)

Rocky woods. A useful fruit, ripening between the last and the next. A variety with yellow fruit has twice been found in this district. Ju.—3. (B.)

600. *R. VILLOSUS*, Ait. (Blackberry, Thimbleberry.)

Rocky and sandy woods. What I take to be the type of this species is found at Kingsmere. The whole plant is more glandular than the ordinary form, and although the lower bracts are generally leafy the description answers as to inflorescence, &c.

——— var. *FRONDOSUS*, Tor.

Woods and thickets. The common form. Ju.—2. (B.)

——— var. *HUMIFUSUS*, T. & G.

Low ground and shady river banks. This is a very distinct variety, which seems worthy of a specific name. Stems low (1 to 2 feet) and trailing, with weak prickles. Flowers few in number, fine and large. Patterson's Creek. Hull. Aylmer. Ju.—3.

601. *R. CANADENSIS*, L. (Low Blackberry.)

Rocky woods and sandy fields. Montreal Road. (*R. B. Whyte*) King's Mountain and Aylmer (*J. F.*) Ju.—2.

602. *R. HISPIDUS*, L. (Swamp Blackberry.)

Borders of peat-bogs. Mer Bleue. Race-course swamp, Bank Street Road. Aylmer. Ju.—2.

GEUM, L. Avens.607. *G. ALBUM*, Gmelin. (White Avens.)

Low woods. July—1. (B.)

609. *G. MACROPHYLLUM*, Willd. (Large-leaved Avens.)

Rocky woods. Little Chaudiere. Hull. Chelsea. July—1.

610. *G. STRICTUM*, Ait. (Yellow Avens.)

Woods and thickets. July—1. (B.)

612. *G. RIVALE*, L. (Nodding or Purple Avens.)

Swamps. Lake Flora. Buckingham. Dow's Swamp. Stewarton. Ju.—3.

WALDSTEINIA, Willd.616. *W. FRAGARIOIDES*, Tratt. (Barren Strawberry.)

Woods and thickets. May—3. (B.)

FRAGARIA, Tourn. Strawberry.

620. *F. VIRGINIANA*, Duchesne. (Round-fruited Strawberry.)

Woods and fields. May—3. (B.)

621. *F. VESCA*, L. (Wood Strawberry.)Woods and rocky fields. Fruit pointed and seldom more than 2 ripe at once upon a scape, while *F. Virginiana* frequently has 5 or 6. The whole plant of *F. vesca* is villous downy. Ma.—1 (B.)

POTENTILLA, L. Five Fingers.

623. *P. ARGUTA*, Pursh.Rocky banks. A tall coarse plant with cream-coloured flowers. Rare. Britannia (*R. B. Whyte*). King's Mountain (*J.F.*) Ju.—2.625. *P. NORVEGICA*, L.

Fields. Ju.—2. (B.)

637. *P. argentea*, L. (Silvery Potentilla.)

Introduced. Fields and waysides. Very much commoner than a few years ago. Stewarton abundant. New Edinburgh. Theodore street. July—1.

645. *P. PALUSTRIS*, Scop. (Marsh Five-finger.)*Comarum palustre*, L.

Peat-bogs and Marshes. July—1.

649. *P. ANSERINA*, L. (Silver Weed.)

Sandy margins of rivers. July—1. (B.)

650. *P. CANADENSIS*, L.Pine woods at Dylmer. Rare in this district. Some of the specimens in open dry spots taking the form of the var. *simplex*. T. & G. Ju.—1.

AGRIMONIA, Tourn. Agrimony.

654. *A. EUPATORIA*, L. (Common Agrimony.)

Borders of woods. July—1. (B)

ROSA, Tourn. Rose.

660. *R. CAROLINA*, L. (Swamp Rose.)

Borders of swamps. Rare. Hull. Aylmer (*J.F.*) Meech's Lake
(*H. M. Ami*). July—2.

662. *R. BLANDA*, Ait. (Early Wild Rose.)

Rocky islands and fields. Ju.—1. (B.)

2135. *R. SAYII*, Schwein. (Prickly Wild Rose.)

R. blanda, Ait. var. *setigera*, Crépin.

A pretty species somewhat like *R. blanda*; but with very prickly stems and glaucous pinkish-tinged round, oval, or almost pear shaped fruit. Hull. Kingsmere. Ju.—1.

670. *R. micrantha*, Smith. (Sweet Brier.)

Introduced. A few bushes of this rose are to be found growing wild as at Hull and near the St. Louis Dam; but they do not increase here as they do in Western Ontario. Ju.—1.

PIRUS, L. Pear.

672. *P. malus*, L. (Cultivated Apple.)

Introduced. Trees which have grown from seed of cultivated apples are occasionally found in thickets and by waysides. The native crab, *P. coronaria*, L. has never yet been found in this district.

673. *P. ARBUTIFOLIA*, L. (Choke-berry.)

P. arbutifolia, L. var. *erythrocarpa*, G.

Peat-bogs. Pedicels and leaves beneath pubescent. Fruit purple.
Ju.—1.

————— var. *MELANOCARPA*, Hook.

Peat-bogs. With the above, but much more abundant. Leaves and pedicels almost smooth, and the somewhat smaller berries much blacker. Ju.—1.

674. *P. AMERICANA*, DC. (American Mountain Ash.)

Rocky woods. King's Mountain and other places near Chelsea.
Ju.—2. The buds of this species are covered with a resinous gum.

————— var. *MICROCARPA*, T. & G.

Rocky woods. Fruit much smaller. Trees of this variety brought from King's Mountain are now growing in the two gardens on the N.E. and N.W. corners of Metcalfe and Cooper streets.

675. *P. sambucifolia*, Cham & Schlecht.

Peat-bog. A shrub closely resembling *P. Americana*, but with downy buds, is growing in the Lake Flora bog, Hull. This species and the preceding appear to run so close together as to suggest that they are, as Michaux thought, only varieties of one species. Ju.—2.

—, *P. Aucuparia*, Meyer. (Rowan Tree.)

Introduced. Extensively cultivated as an ornamental tree, and naturalized from seed in many of our woods.

CRATÆGUS, L. Hawthorn.

678. *C. coccinea*, L. Scarlet-fruited Thorn.

Thickets and fields. May—4.

Leaves thin, pedicels glabrous or nearly so.

————— var. *MACRALTHA*, Lodd.

C. tomentosa, L. of Gray's Manual and other authors.

Thickets. May—4. (B.)

Leaves thicker, pedicels calyx, and leaves when young villous-pubescent.

Prof. Macoun tells me that what has up to this time been taken as *C. tomentosa*, from this locality is not that species, but merely a pubescent variety of *C. coccinea*, as is also the var. *pyrifolia* of his catalogue.

The working up of the Thorns of this locality is a simple matter.

We have only detected the above mentioned forms, and these seem to vary very little. They require more study, however and careful search should be made for the true *C. tomentosa*, which is described in "Garden and Forest," 1888, p. 249, as flowering some weeks later than the forms of *C. coccinea*, with pale gray branches almost destitute of thorns, leaves thicker and more pubescent, without glands, gradually contracted into a stout margined petiole, densely pubescent on the under side as are the calyx and stems of the inflorescence, corymbs broader and looser, fruit smoother. We have none of the yellow-fruited varieties of Western Ontario at Ottawa.

AMELANCHIER, Medic. June-berry. Service-berry.

685. *A. CANADENSIS*, T. & G. (Shad-bush.)

A. Canadensis, T. & G. var. *Botryopium*, Gray.

Thickets and woods, May—3. (B.)

This is a most variable species,⁹ and it is sometimes difficult to refer specimens to the characterised varieties. Those referred to the type have pointed, sharply serrate, glabrous leaves (varying, however, to villous-pubescent when young), flowers large, in pendulous racemes. Here, too, must come a beautiful variety found upon King's Mountain, recorded in the 1887 list as var. *alnifolia*. The leaves are large, oblong, coarsely-serrate and glabrous. The flowers larger than those of the type. In fact it resembles *A. alnifolia* of the West very closely, and only differs in the leaves, which in the Ottawa plant are thin and toothed much lower down to the base. I have never seen the fruit.

————— var. (*l*) *OBLONGIFOLIA*, T. & G.

Rocky banks. Parliament Hill. Little Chaudiere. Hull. May—4.

A small shrub. If a variety of *A. Canadensis*, a very distinct one with erect racemes of small creamy-white flowers and the leaves beneath, & branchlets thickly covered with yellowish-white down.

SAXIFRAGACEÆ.—Saxifrage Family.

SAXIFRAGA, L. Saxifrage.

699. *S. VIRGINENSIS*, Mx. (Spring Saxifrage.)

Rocks. Rockcliffé. Chelsea Hills. May—3.

TIARELLA, L. False Mitre-wort.

720. *T. CORDIFOLIA*, L. ("Wood Mignonette.")

Rich woods. A charming spring flower. May—2. (B.)

MITELLA, Tourn. Mitre-wort.

723. *M. DIPHYLLA*, L.

Rich woods. May—2. (B.)

724. *M. NUDA*, L.

Cold swampy woods. May—2. (B.)

This is one of the gems of our woods. The inconspicuous green flowers are of exquisite beauty when examined, and have a most powerful odour for such small flowers.

CHRYSOSPLENIUM, Tft. Golden Saxifrage.

735. *C. AMERICANUM*, Schwein.

In brooks and swampy woods. May—3. (B.)

RIBES, L. Gooseberry. Currant.

747. *R. OXYACANTHOIDES*, L. (Smooth Gooseberry.)

R. hirtellum, Mx.

Swamps. May—3.

The fruit, although small, is very pleasant.

749. *R. CYNOSBATI*, L. (Prickly Gooseberry.)

Rocky banks. May—3. (B.)

750. *R. LACUSTRE*, Poir: (Bristly Gooseberry.)

Wet woods. May—4. (B.)

Young stems thickly beset with slender prickles. Fruit bristly and growing in a raceme, almost tasteless.

752. *R. RUBRUM*, L. (Red Currant.)

Cool woods. May—2.

Fruit sparsely produced, astringent.

753. *R. PROSTRATUM*, L'Her. (Fetid Currant. Skunk Currant.)

Swamps and cool woods. May—3.

Stems prostrate. Fruit red, bristly, and very unpleasant.

757. *R. FLORIDUM*, L'Her. (Wild Black Currant.)

River banks and thickets. May—3. (B.)

A useful shrub bearing a profusion of greenish yellow flowers followed by quantities of palatable ovoid fruit of the same character as the cultivated Black Currant.

CRASSULACEÆ.—Orpine Family.

PENTHORUM, Gronov. Ditch Stone-crop.

762. *P. SEDOIDES*, L.

Ditches. July—1. (B.)

SAXIFRAGA, Tourn. Stone Crop.

763. *S. acre*, L. (Mountain Moss. Stone Crop.)

Introduced. On limestone rocks. Richmond Road. New Edinburgh. Mount Sherwood. June—3.

768. *S. Telephium*, L. (Live for ever. Orpine.)

Introduced. On the rocks round Parliament Hill. Near St. Louis Dam. July—1.

DROSERACEÆ—Sundew Family.

DROSERA, L. Sundew.

771. *D. ROTUNDIFOLIA*, L. (Round-leaved Sundew.)

Peat bogs. June—4.

773. *D. INTERMEDIA*, Drev & Hayne, var. *AMERICANA*, DC.

D. longifolia, Mx.

Peat bogs, with the last. Mer Bleue. Dow's Swamp, &c. Ju.—4.

HAMAMELACEÆ—Witch Hazel Family.

HAMAMELIS, L. Witch Hazel.

775. *H. VIRGINIANA*, L.

H. Virginica, L.

Thickets. Very rare at Ottawa. The only locality being on the Chelsea Road about 2 miles from Hull, where there are a few bushes. An interesting shrub, flowering after the leaves have fallen. Oct.—3.

HALORAGEÆ—Water Milfoil Family.

MYRIOPHYLLUM, Vaill. (Water Milfoil.)

776. *M. SPICATUM*, L.

In ponds and slow-running streams. July—1.

PROSERPINACA, L. (Mermaid Weed.)

780. *P. PALUSTRIS*, L.

In shallow water. "Banks of the Nation River at the crossing of the Ottawa & Prescott Railway." (*B. Billings*.) July—1.
Not since found. To be looked for at Casselman and at the Mer Bleue.

HIPPURIS, L. Mare's Tail.

781. *H. VULGARIS*, L.

In mud on the banks of rivers. Rare. Malloch's Bay. Hull. New Edinburgh.

ONAGRACEÆ—Evening-Primrose Family.

LUDWIGIA, L.

784. *L. PALUSTRIS*, Ell. (Water Purslane.)*Ismardia palustris*, L.

Ditches and borders of rivers. July.

EPILOBIUM, L. Willow Herb.

786. *E. SPICATUM*, L. (Fire Weed. Great Willow-herb.)*E. angustifolium*, L.

Low ground in woods, especially after fires have run over them.

July—1. (B)

792. *E. COLORATUM*, Muhl.

Low ground. July—1. (B)

794. *E. PALUSTRE*, L. VAR. *LINEARE*, L.

Swamps. July—1. (B)

796. *E. MOLLE*, Torrey.Swamps. Lake Flora (*J. A. Guignard*). Upon a small island inthe Rideau Canal near C. A. Railway station. Mer Bleue. (*J.F.*)

Uncommon. Leaves wider and the rose-coloured flowers larger

than those of 794. Whole plant villous-pubescent. July.

ŒNOTHERA, L. Evening Primrose.

800. *Œ. BIENNIS*, L. (Common Evening Primrose.)

Fields and waste places. July—1. (B)

An exceedingly variable species. What I have considered as the type has green stems and pods without tubercles or bristles and petals almost the length of the stamens. This almost answers to Gray's var. *parviflora*, but the flowers are too large.

 var. *MURICATA*, Lindl.

This is the commonest form at Ottawa, with stems and pods rough with red bristle-bearing tubercles. Petals rather longer than the stamens.

 var. *GRANDIFLORA*, Lindl.

A distinct variety with large showy flowers. Stems and pods without bristles. Malloch's Bay. Hull. Stewarton.

Œ. BIENNIS, L. var. OAKESIANA, Gr.

Leaves and stems apparently glabrous, but with a minute appressed pubescence. On the rocks above the Locks going up to Major's Hill Park.

803. Œ. PUMILA, L. (Dwarf Evening Primrose.)

River banks. July—1. (B) When growing in damp places almost glabrous. When on dry sandy banks the stems are more slender and the whole plant more pubescent, it is then *Œ. chrysantha*, Mx.

CIRCŒA. Enchanter's Nightshade.**817. C. ALPINA, L.**

Low shady woods and swamps. July—1. (B)

818. C. LUTETIANA, L.

C. Lutetiana, var. *Canadensis*, L.

Woods. July—2. (B)

Linné considered our Canadian plant a distinct variety. It certainly seems to me to be different from the European form.

LYTHRACEÆ—Loosestrife Family.**LYTHRUM, L. Loosestrife.****822. L. SALICARIA, L. (Spiked Loosestrife.)**

Introduced here. Railway bank. Found along the line of the Canada Atlantic Railway, a quarter of a mile from the Elgin street station (*W. Scott, B.A.*) Aug.—2.

NESŒA, Juss. Swamp Loosestrife.**823. N. VERTICILLATA, HBK.**

Borders of ponds and rivers, Aug.—1.

CUCURBITACEÆ—Gourd Family.**SICYOS, L. Star Cucumber.****827. S. ANGULATUS, L.**

Not indigenous in this locality. Frequently found on waste heaps, but always as a garden escape. Ju.—2.

ECHINO CYSTIS, T. & G.

828. *E. LOBATA*, T. & G. (Wild Cucumber.)

Introduced from the North-West, where it grows along streams.

Extensively cultivated as a creeper for its rapid growth, as well as its showy flowers and fruit. Ju.—2.

UMBELLIFERÆ—Parsley Family.

HYDROCOTYLE, Tourn. Water Penny-wort.

834. *H. AMERICANA*, L.

Borders of swamps and damp places. July—1.

SANICULA, Tourn. Black Snake-root.

835. *S. CANADENSIS*, L. (Canada Sanicle.)

Rich woods. Lare. Billings Bridge. Hull. Ju.—2.

836. *S. MARILANDICA*, L.

Rich woods. Common. Ju.—1. (B)

Easily distinguished from the last by the long styles, which are much longer than the prickles of the fruit, and are recurved.

The leaves are all 5-7-parted, whilst those of *S. Canadensis* are 3-5-parted (the upper only 3).

CONIUM.

840. *C. maculatum*, L. (Poison Hemlock.)

Introduced. Uncommon. July—2.

APIUM, L. Parsley,

844. *A. Petroselinum*, L. Parsley.

Introduced. Occasionally spontaneous and living over the winter to produce seed; but of uncertain tenure.

CORIANDRUM, L. Coriander Seed.

— *C. sativum*, L.

Introduced. Ju.—3.

CARUM, Koch. Carraway.

845. *C. Carui*, L.

Introduced, Waste heaps. Not uncommon. Ju.—3.

THASPIUM, Nutt. Meadow Parsnip.

849. *T. AUREUM*, Nutt.Rocky river bank. Casselman. Aug.—2. (*Miss Isabel Grant*).

CICUTA, Koch. (Water Hemlock.)

851. *C. MACULATA*, L. (Spotted Cowbane.)

River sides and ditches. Billings Bridge. Hull. July—1. (B)

853. *C. BULBIFERA*, L.

River sides and swampy ground. Aug.—1.

SIUM, L. Water Parsnip.

854. *S. CICUTÆFOLIUM*, Gmelin.*S. lineare*, Mx.

River sides. July—2 (B)

CRYPTOTÆNIA, DC. (Honewort.)

855. *C. CANADENSIS*, DC.

Rich damp woods. Ju.—2. (B)

BUPLEURUM, L. Thorough Wax.

2151. *B. rotundifolium*, L.

Introduced. Out-field at Billings Bridge, 3 or 4 plants. Ju.—2.

OSMORRHIZA, Raf. Sweet Cicely.

858. *O. LONGISTYLIS*, DC. (Smoother Sweet Cicely.)

Rich woods. Uncommon. Gatineau Point. Hull. Beechwood.

Styles conspicuous. May—4.

859. *O. BREVISTYLIS*, DC. (Hairy Sweet Cicely.)

Rich woods, Common, Smaller than the last. Styles very short, inconspicuous. May—4. (B)

PEUCEDANUM, Hog Fennel.

882. *P. sativum*, Benth. & Hook. (Parsnip.)*Pastinaca sativa*, L.

Low ground and by waysides. Introduced, Ju.—4, (B)

HERACLEUM, L. Cow Parsnip.

883. *H. LANATUM*, Michx.Low ground near Rockcliffe (*J. A. Guignard*). Casselman (*J. F.*)

Ju.—3. A tall handsome plant. Rare in this locality.

THE
 CABELL LIBRARY
 OF OTTAWA

DAUCUS, Tourn. Carrot.

887. *D. Carota*, L. Cultivated Carrot,

Introduced. Thoroughly established and spreading in some localities, Ironsides. Billings Bridge, July—2,

ARALIACEÆ—Ginseng Family.

ARALIA, Tourn.

889. *A. RACEMOSA*, L. (Spikenard.)

Rich low woods and swamps. July—1. (B)

890. *A. HISPIDA*, Vent. (Bristly Sarsaparilla. "Dwarf Elder.")

Rocky and Sandy woods, Ju.—3.

891. *A. NUDICAULIS*, L. (Wild Sarsaparilla.)

Rich damp woods. May—4, (B)

892. *A. QUINQUEFOLIA*, Decsne. (Ginseng.)

Rich low woods, Rare and local. Beechwood, Powell's Grove, Billings Bridge. A fine species with bright scarlet berries. July—1.

893. *A. TRIFOLIA*, Decsne. (Dwarf Ginseng. Ground-nut.)

Rich woods, May—2, (B)

CORNACEÆ—Dogwood Family.

CORNUS, Tourn. Cornel. Dogwood.

895. *C. CANADENSIS*, L. (Bunch-berry. "Pigeon-berry.")

Sandy woods. A charming plant. Ju.—1, (B)

900. *C. CIRCINATA*, L'Her. (Round-leaved Cornel.)

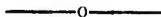
Rocky woods, Ju.—4, (B)

A handsome species with large leaves, which are white beneath, and bluish berries.

901. *C. SERICEA*, L. (Silky Cornel.)

River bank. Parliament Hill, Britannia, Rare. Often confounded with the next, and sometimes difficult to separate. The leaves are more pointed and more pubescent. The cymes and flowers are a little larger and the buds are more inflated at the base.

902. *C. STOLONIFERA*, Mx. (Red-osier Dogwood.)
Wet places. Common. Growing in large clumps. Young branches bright red. Ju.—2. (B) This is the "Kinnikinnik" of the Indians on the great plains.
905. *C. PANICULATA*, L'Her. (Panicled Cornel.)
Sandy woods and river banks. Rare. Hull. Aylmer. Casselman. Easily distinguished by the taper-pointed ovate-lanceolate leaves and the pyramidal cymes. Ju.—4.
906. *C. ALTERNIFOLIA*, L.
Rocky woods and thickets. Not uncommon. Ju.—1. (B)
A small tree with a flattish top. Branches greenish-grey streaked with white, alternate. Cymes white, large and showy, with red stems. Rather a difficult species for beginners to identify.



GAMOPETALOUS EXOGENS.

CAPRIFOLIACEÆ—Honeysuckle Family.

- SAMBUCUS, L. Elder.
909. *S. RACEMOSA*, L, var. *PUBENS*, Watson. (Red-berried Elder.)
S. pubens, Mx.
River sides and rocky thickets. May—4. (B)
910. *S. CANADENSIS*, L. (Black-berried Elder.)
Low thickets. July—1. (B)
- VIBURNUM, L. Arrow Wood.
911. *V. LENTAGO*, L. (Sheep-berry.)
River sides and low thickets. May—3. (B)
912. *V. CASSINOIDES*, L.
V. nudum, var. *cassinoides*, T. & G.
Swamps and low woods. Ju.—2.
914. *V. PUBESCENS*, Pursh. (Downy Arrow-wood.)
Rocky woods. An ornamental shrub. Ju.—2.

915. *V. ACERIFOLIUM*, L. (Maple-leaved Arrow-wood.)
Thickets and woods. Ju.—3.
917. *V. OPULUS*, L. (High-bush Cranberry. "Guelder Rose.")
Low thickets and river sides. Rather uncommon. Casselman.
Aylmer. Britannia. Billings Bridge. July—2. (B)
918. *V. LANTANOIDES*, Mx. (Hobble-bush.)
Cool or rocky woods. Stewarton. Chelsea. May—2. (B)

LINNÆA.

919. *L. BOREALIS*, Gronov. (Northern Twin-flower.)
Cool woods and borders of swamps. Very common. Ju.—1. (B)
Certainly one of our most attractive native plants, both for the
grace of the delicate pink flowers with their exquisite scent and
the beauty of the foliage.

SYMPHORICARPUS, Juss. (Snow-berry.)

920. *S. RACEMOSUS*, Mx. var. *PAUCIFLORUS*, Robbins.
Rocky banks. Along both banks of the Ottawa. July—2.

LONICERA, L. Honeysuckle.

924. *L. HIRSUTA*, Eaton. (Yellow-flowered Honeysuckle.)
Rocky woods. Rare. Hull (*J.F.*) March (*A. H. Moore*). July—2
926. *L. GLAUCA*, Hill. (Smooth Honeysuckle.)
L. parviflora, Lam.
Rocky banks and woods. A straggling shrub with glaucous leaves
and small clusters of flowers purple or greenish purple outside
and yellow inside. Ju.—1. (B)
928. *L. CILIATA*, Muhl. (Fly Honeysuckle.)
Damp and rocky woods. May—3. (B)
930. *L. OBLONGIFOLIA*, Hook. (Swamp Honeysuckle.)
Peat bog. Mer Bleue. Rare. July—4.
931. *L. Tartarica*, L. (Garden Fly Honeysuckle.)
Escaped from cultivation. Not uncommon in woods. Beechwood.
Hemlock Lake. Stewarton. June.

DIERVILLA.

932. *D. TRIFIDA*, Mœnch. Bush Honeysuckle.
Rocky banks and woods. Ju.—2. (B)

TRIOSTEUM.

933. *T. PERFOLIATUM*, L. (Fever-wort. Horse Gentian.)
Rich woods and low meadows. Chelsea. Casselman. Ju.—1. (B)

RUBIACEÆ—Madder Family.

CEPHALANTHUS, L. Button-bush.

934. *C. OCCIDENTALIS*, L. (Button-bush.)
Alluvial banks of streams. July—2. (B)

MITCHELLA, L. Partridge-berry.

937. *M. REPENS*, L. ("Twin-flower.")
Dry woods, particularly under *Coniferae*. An interesting little plant with dark shining foliage, and bright scarlet berries each of which is formed from the joined ovaries of a pair of flowers. July—1.

GALIUM, L. Cleavers. Ladies' Bed-straw.

938. *G. APARINE*, L. (Goose-grass.)
Fields and borders of woods. Uncommon. Billings Bridge. Hull.
Mer Bleue The Canadian plant is a smaller and slenderer form than the English, with smaller fruit. July—1.

939. *G. ASPRELLUM*, Mx. (Rough Bed-straw.)

Low ground. Common. July—1. (B)

941. *G. TRIFIDIUM*, L. Small Bed-straw.

Low grounds in swamps and wet woods. A very variable species.

942. *G. TRIFLORUM*, Mx. (Three-flowered Galium.)

Cool woods. Very common. May—4. (B)

945. *G. CIRCEZANS*, Mx. (Smaller Wild Liquorice.)

Dry open wood beyond Beechwood Cemetery. Rare. Ju.—2.

946. *G. LANCEOLATUM*, Tor. (Wild Liquorice.)

Rocky woods. Uncommon. Chelsea. Hull. Hemlock Lake. Ju.—1

950. *G. verum*, L. (Yellow Bed-straw.)

Introduced. Two miles from Ottawa along the Montreal Road are two large patches of this plant, one in the Roman Catholic Cemetery, the other in a meadow. It is evidently well established and is increasing. (*R. B. Whyte*)

SHERARDIA, L. Blue Field Madder.

951. *S. avensis*, L.

Introduced. Roadside. Gathered two years in succession upon
Friel street. (*H. M. Ami*).

COMPOSITÆ—Daisy Family.

EUPATORIUM, L. Thorough-wort.

959. *E. PURPUREUM*, L. var. *MACULATUM*, Darl. (Joe-Pye Weed.)*E. purpureum*, L. in part of Gray's Manual.

Low woods and meadows. July—4. (B)

960. *E. PERFOLIATUM*, L. (Boneset.)

Low woods and meadows. July—4. (B)

961. *E. AGERATOIDES*, L. (White Snake-root.)

Rich damp woods. A lovely species well worthy of cultivation.

Aug.—1. (B)

SOLIDAGO, L. Golden Rod.

980. *S. SQUARROSA*, Muhl.

Rocky woods & ravines. An erect handsome species. Aug.—1. (B)

981. *S. CÆSIA*, L.

Rich woods. Billings Bridge. Found only in the above locality

(*Miss Isabel Grant*). Aug.—1.————— var. *AXILLARIS*, Gray.

Mountain woods, Hull. Chelsea, &c. Aug.—1.

This is the common form of this beautiful species—the short
spikes springing from the axils of the upper leaves.

982. *S. LATIFOLIA*, L.

Rich woods and borders of ravines. A fine species. Aug.—1.

983. *S. BICOLOR*, L. (Soft Golden-rod.)

Dry rocky woods and river banks, Rockcliffe. Rare. Aug.—1. (B)

Flowers cream-coloured.

————— var. *CONCOLOR*. T. & G.

Rocky woods. Common. Larger than the type. Inflorescence
more frequently branching. Flowers yellow. Aug.—1.

992. *S. ULIGINOSA*, Nutt. (Swamp Golden-rod.)
Swamps. Mer Bleue. Swamp on King's Mountain. Aug.—3.
An almost smooth species with an erect plumose panicle of bright yellow flowers.
995. *S. RUGOSA*, Mill. (Rough Golden-rod.)
S. altissima, Hook.
Fields and woods. Aug.—1. (B) The whole plant covered with short coarse pubescence.
996. *S. NEGLECTA*, T. & G.
Wet clay bank along the Gatineau at Ironsides. Rare. Aug.—2.
998. *S. ARGUTA*, Ait.
S. Muhlenbergii, T. & G. and of Gray's Manual.
Rocky woods. Kirk's Ferry. Aug.—2. Root-leaves large, thin and smooth. Panicle erect, but open,
999. *S. JUNCEA*, Ait.
S. arguta, T. & G. and of Gray's Manual.
Sandy and rocky woods. Near St. Louis Dam and Kirk's Ferry.
Rare. Aug.—2. Root leaves smaller and narrower. Stems red,
Panicle corymbose, with long drooping racemes.
1001. *S. SEROTINA*, Ait.
S. gigantea, T. & G. and of Gray's Manual.
Borders of woods. Common but not abundant. Aug.—1. (B)
Leaves quite smooth on both sides. Panicle pubescent.
-
- var. *GIGANTEA*, Gray.
S. serotina, T. & G. and of Gray's Manual.
Rocky woods. Commoner than the last. Aug.—1. Leaves hairy on the veins beneath.
1004. *S. CANADENSIS*, L. (Common Golden-rod.)
Woods and fields. Aug.—1. (B) Our commonest species extending under one form or another from the Atlantic to the Pacific. As represented at Ottawa the plants may be divided into three forms, ranging from almost smooth to softly downy. One of the most striking is

S. CANADENSIS, L. var. *PROCERA*, T. & G.

This is a tall, softly pubescent, almost canescent form, generally found in low ground. Although very distinct, it grows with the other forms.

1005. *S. NEMORALIS*, Ait.

Dry sandy fields. Aug.—1. A dwarf rough species.

1010. *S. LANCEOLATA*, L.

Low wet ground. July—3. (B)

ASTER, L. Star-wort.

1017. *A. CORYMBOSUS*, Ait.

Shady woods. Rather rare, July—4. Leaves large and thin stem slender and weak.

1018. *A. MACROPHYLLUS*, L. (Large-leaved Aster.)

Rocky open woods. Common. Aug.—1. (B) Leaves large, thick and rough; stems stout and rigid.

1033. *A. CORDIFOLIUS*, L.

Woodlands and thickets. Aug.—1. (B) A showy species well worthy of cultivation. This and the next are the only species found here with the lower leaves all cordate.

1034. *A. LINDLEYANUS*, T. & G.

Woodlands and thickets. Aug.—1. Usually taller and slenderer than the last. The stem-leaves with margined petioles and the mid-rib with a fringe of long soft hairs beneath,

1041. *A. PANICULATUS*, Lam.

Low ground. Aug.—2. (B)

Under this species are now grouped all the forms formerly included in *A. simplex*, T. & G. and *A. tenuifolius*, T. & G. In it is included all the forms occurring here with smoothish, very much branched stems, and with long narrow leaves and whitish flowers. I cannot help thinking that Dr. Gray has brought together too many forms under this name.

1042. *A. DIFFUSUS*, Hook.

A. miser, T. & G.

A. miser, T. & G. var. *hirsuticaulis*. T. & G.

Low ground. Aug.—1. (B)

This name also now covers a multiplicity of forms of very different

habit and appearance. They are either low, much branched and spreading over the ground or erect and simple. The leaves vary from short, and obtuse, to 4 inches in length, with a tapering point as in the var. *hirsuticaulis*. The size of the flowers and the degree of pubescence vary no less than the leaves.

With regard to these closely allied forms of this genus it is imperative that they should be grown from the seed under the same conditions and several specimens studied in a living state.

1044. *A. JUNCEUS*, Ait.

A. aestivus, Ait.

Peat bogs, in shade. July—2. (B) A slender species with long narrow leaves. Flowers white tinged with pink, and few in number. Our earliest Aster.

1049. *A. PUNICEUS*, L. (Tall Michaelmas Daisy.)

Low ground. July—3. (B) A tall handsome species with hairy red stems, auricled clasping leaves and bluish-lilac flowers.

————— var. *LAEVICAULIS*, Gray.

var. *firmus*, T. & G. Macoun's Cat. p. 226.

var. *vimineus*, Gray.

Much scarcer than the type, with paler flowers and almost glabrous stems.

2170. *A. VIMINEUS*, Lam.

A. vimineus, Lam. var. *foliolosus*, Gray. of Macoun's Cat. p. 545.

In damp soil along the Nation River at Casselman. (Prof. Macoun) Aug—3. A tall species akin to, but distinct from *A. paniculatus*, with long narrow leaves and whitish flowers.

Prof. Macoun tells me that his Casselman specimens recorded above belong to the species and not to the variety *foliolosus*.

1050. *A. NOVE-ANGLE*, L. (Purple Michaelmas Daisy.)

Rocky banks. Aug—2.

Found only at Casselman so far, in this locality. (Miss Nellie Macoun). Easily recognized by its bright purple flowers and viscid glandular pubescence.

1061. *A. ACCUMINATUS*, Mx. (Pale Aster.)

Sandy and rocky woods, local but abundant where it occurs. Chelsea, Hull, Stewart's bush, Beechwood. A low plant with a rosette of leaves beneath the few-flowered panicle.

ERIGERON, L. Flea-bane.

1087. *E. PHILADELPHICUS*, L. (Pink Flea-bane.)

Low grassy places. Ju—1. (B.)

1089. *E. ANNUUS*, Pers.

Fields and roadsides. July—1. (B.)

A tall coarse species with stem-leaves coarsely toothed.

1090. *E. STRIGOSUS*, Muhl.

Dry fields and open woods. July—1. (B.)

Slenderer than the last with stem-leaves entire. Stems rough.

1094. *E. CANADENSE*, L. ("Fire weed.")

Fields, open woods and waste places. July—2. (B.)

ANTENNARIA.

1097. *A. PLANTAGINEFOLIA*, Hook.

Fields and open woods. May—3. (B.)

ANAPHALIS.

1102. *A. MARGARITACEA*, Benth and Hook. (Pearly Everlasting.)

Dry fields and woods. July—2. (B.)

GNAPHALIUM, L. Cudweed.

1103. *G. DECURRENS*, Ives. (Sticky Everlasting.)

Dry fields. July 1.

Easily recognized by the decurrent leaves.

1108. *G. ULIGINOSUM*, L. (Low Cudweed.)

Waysides and in dried up places where water has stood in the spring. July—2. (B.)

1109. *G. POLYCEPHALUM*, Mx. (Scented Cudweed.)

Dry pastures. Near St. Louis Dam. Beyond Beechwood Cemetery. Sep—1.

Smaller than No. 1103. Leaves not decurrent: whole plant strongly scented.

INULA, L. Elecampane.

1112. *I. Helenium*, L.

Introduced. Waysides and pastures. July—2.

AMBROSIA, Tourn. Rag weed.

1119. *A. TRIFIDA*, L.

Not indigenous in this locality. Low ground. Near St. Louis Dam. Major's Hill. Sep—1.

1120. *A. ARTEMISLEFOLIA*, L.

Roadsides and fields. Aug—1.

XANTHIUM, Tourn. Cocklebur.

1125. *X. CANADENSE*, Mill. var. *ECHINATUM*, Gray.

X. strumarium, L.

Waste places and alluvial flats. July—1.

RUDBECKIA, L. Cone-flower.

1129. *R. HIRTA*, L. (Yellow Daisy.)

Fields and railway banks. Introduced from the West. Occasional in various localities, but in great abundance in a pasture at Kingsmere, P. Q.

1130. *R. LACINIATA*, L.

River sides and wet woods. Casselman. Rare. Aug—2.

HELIANTHUS, L. Sun-flower.

1135. *H. annuus*, L. (Garden Sun-flower.)

Frequent on waste heaps. July—1.

It is rather remarkable that we have so far found none of the native *Helianthi* wild in this locality.

BIDENS, L. Bur-Marigold.

1155. *B. FRONDOSA*, L.

Ditches and fields. Aug—1. (B.)

Some of the upper leaves trilobed.

1156. *B. CONNATA*, Muhl.

Margins of rivers and ponds. Aug—1. (B.)

Leaves connate. None divided.

1157. *B. CERNUA*, L. Smaller Bur Marigold.

Margins of ponds and streams. A low plant creeping over mud and rooting at the joints. Aug—1. (B.)

1158. *B. CHRYSANTHEMOIDES*, Mx. (Greater Bur Marigold.)

Alluvial flats. At the foot of Parliament Hill are some tall erect plants five feet high, with flowers and leaves like *B. cernua*, which I refer here.

1159. *B. BECKII*, Torr. (Water Bidens.)

In shallow water. Not uncommon in the Ottawa and Rideau rivers, but seldom flowering. July—4. (B.)

HELENIUM, L. Sneeze-weed.

1168. *H. AUTUMNALE*, L.Islands and river margins. Chandiere Islands. (*H. M. Ami.*)
The Chats. (*Mrs. Chamberlin.*)

ACHILLEA, L. Yarrow.

1173. *A. MILLEFOLIUM*, L. (Milfoil.)

Meadows and fields. Ju--4. (B.)

A variety with pink flowers is sometimes found.

MARUTA.

1179. *M. Cotula*, DC. (May-weed.)

Introduced. Waste places. Ju--2. (B.)

CHRYSANTHEMUM, L.

1180. *C. Leucanthemum*, L. Ox-Eye Daisy.Introduced. Meadows and cultivated ground. A troublesome
weed. Ju--2.

TANACETUM, L.

1189. *T. vulgare*, L. Common Tansy.Roadsides, an escape from cultivation. Both the type and the var.
crispum, DC. occur here.

ARTEMISIA, L. Worm-wood.

1203. *A. VULGARIS*, L. (Mug-wort.)

Rocky banks and sandy fields. Aug--1.

1200. *A. BIENNIS*, Willd.

Not indigenous in this locality. Low ground. July--2.

1211. *A. Absinthium*, L. (Wormwood.)

Introduced. Waste places. July--2.

PETASITES, Tourn. Sweet-Coltsfoot.

1214. *P. PALMATA*, Gray.*Nardosmie palmata*, Hook.

Low wood. Powell's Grove, Very rare. May--1.

ERECTITES, Raf. Fire weed.

1227. *E. HIERACIFOLIA*, Raf.

Moist places, particularly in recently burnt clearings. Ju--2.

SENECIO, L. Groundsel.

1228. *S. vulgaris*, L. Common Groundsel.

Introduced. A rare weed in gardens. July--2.

1237. *S. ACREUS*, L.
Rocky woods and banks. Ju—2. (B.)
- ARCTIUM. Burdock.
1251. *A. Lappa*, L. Common Burdock.
Lappa officinalis All. var. *major*, Gray's Manual.
Introduced. Waysides. July—4. (B.)
- CNICUS, Vaill. Thistle.
1254. *C. lanceolatus*, Hoffm. (Scotch Thistle.)
Cirsium lanceolatum, Scop.
Naturalized. Roadsides, pastures and woods. July—2. (B.)
1259. *C. MUTICUS*, Parsh.
Cirsium muticum, Mx.
Swamps. Ange Gardien. (*H. M. Ami.*) Templeton. Buckingham. (*J. F.*) July—4.
1262. *C. arvensis*, Parsh. ("Canada Thistle.")
Cirsium arvense, Scop.
Naturalized throughout the country. Ju—3. (B.)
- ONOPORDON, Vaill. (Scotch Thistle.)
1266. *O. acanthium*, L.
Introduced. Roadsides. Montreal Road. (*R. B. Whyte.*) July—4.
Called "Scotch Thistle," but not a native of Great Britain.
- CENTAUREA, L. Star Thistle.
1269. *C. Cyanus*, L. (Blue bottle. Corn-flower.)
Introduced. In wheat fields, Billings Bridge. July—1.
- CICHORIUM, Tourn. Succory, Endive.
1271. *C. Intybus*, L. (Chicory.)
Introduced. Abundant in ditches and by way-sides. Ju—3.
- LAMPSONA, Tourn. Nipple-wort.
1276. *L. communis*, L.
A weed in gardens and by way-sides. (*H. B. Small.*)
- HIERACIUM, L. Hawkweed.
1288. *H. CANADENSE*, Mx.
River banks and in thickets. Aug.—1.
1289. *H. SCABRUM*, Mx.
Sandy fields and woods. Aug.—1.
- TARAXACUM, Hall. Dandelion.
1308. *T. officinale*, Weber.
Taraxacum Dens-leonis, Desf.
Completely naturalized throughout Canada. May—2. (B.)
- LACTUCA, L. Lettuce.
1309. *L. CANADENSIS*, L.
Damp woods. A tall, wand-like plant. Stem thick, hollow and very leafy, smooth. Flowers generally pale yellow, in a long, narrow naked panicle. Aug.—1. (B.)
1310. *L. INTEGRIFOLIA*, Bigel.
L. Canadensis var. *integrifolia*, T. & G.
Parliament Hill. Leaves smooth, undivided, and generally entire.
Rare. Aug.—3.

It seems to me that neither this nor the next present sufficient characters to warrant their being separated from *L. Canadensis* as anything more than varieties.

1311. *L. HIRSA*, Muhl.

L. Canadensis var. *sanguinea*, T. & G.

Railway banks and rocky woods, not uncommon. Leaves all runcinate-pinnatifid, hirsute on the mid-ribs beneath. Flowers purplish-yellow. Aug.—2.

1314. *L. LEUCOPHLEA*, Gray.

Mulgedium leucophæum, D. C.

Low, rich woods. A tall plant much like *L. Canadensis*, but with brownish pappus. Aug.—2.

1315. *L. SATIVA*, L. (Garden Lettuce.)

Occasionally found on waste heaps; but never permanently established.

PRENANTHES, L. Rattlesnake-root.

1316. *P. ALBA*, L. (White Lettuce.)

Nabalus albus, Hook.

Rocky woods. An interesting plant with glaucous foliage and purplish-red stems, peduncles, and involucre. Flowers white and pappus deep brown. Aug.—2. (B.)

1318. *P. ALTISSIMA*, L.

Nabalus altissimus, Hook.

Woods. A tall, slender plant with yellow flowers and dusky pappus. Aug.—2. (B.)

SONCHUS, L. (Sow Thistle.)

1321. *S. oleraceus*, L. (Common Sow-thistle.)

Cultivated ground and waste places. Annual. Aug.—1. Leaves clasping by a heart-shaped base, the auricles acute.

1322. *S. asper*, Vill. (Prickly Sow-thistle.)

With the last, but commoner. Leaves more prickly, the auricles of the base rounded.

1323. *S. arvensis*, L. (Perennial Sow-thistle.)

At the base of Parliament Hill is a large and rapidly increasing patch of this plant, which is now becoming a troublesome weed in Canada. It has also been noticed at Chelsea and at Billings Bridge at the edges of fields. Aug.—1.

TRAGOPOGON, L. Goat's-beard.

1326. *T. pratensis*, L. (Yellow Goat's-beard.)

Along the railway near the St. Louis Dam. A few plants have been found at the above locality for the last 12 years. Flowers, large, yellow.

1327. *T. porrifolius*, L. (Salsify.)

An escape from cultivation. In a hay-field at Billings Bridge and occasional on waste heaps. Flowers purple.

LOBELIACEÆ.

LOBELIA, L.

- 1332.
- L. CARDINALIS*
- , L. (Cardinal Flower.)

River-sides and along streams common. July—4. (B.) This is undoubtedly one of our finest Canadian wild flowers, and has been cultivated in Europe for many years.

- 1337.
- L. INFLATA*
- , L. (Indian Tobacco.)

Sandy fields. July—4. (B.)

CAMPANULACEÆ—Bell-wort Family.

CAMPANULA.

- 1312.
- C. rapunculoides*
- , L.

Waste ground. Introduced. For many years there was a large patch of this persistent plant on the vacant lot where the rooms of the Ottawa Literary and Scientific Society now stand.

- 1344.
- C. ROTUNDIFOLIA*
- , L. (Hare-bell.)

Crevices of rocks. Not uncommon. June—2. (B.)

- 1345.
- C. APARINOIDES*
- , Pursh. (Rough Bell-flower.)

Marshes and along streams. Common. A slender plant, the weak stems rough with short spines on the angles. Flowers nearly white. July—2. (B.)

VACCINIACEÆ.—Blueberry Family.

GAYLUSSACIA, HBK. Huckleberry.

- 1350.
- G. RESINOSA*
- , T. & G.

Sandy fields and swamps. Race-course swamp. Aylmer. East Templeton. June—1. Whole plant covered with resinous globules. Fruit black.

VACCINIUM, L. Blue-berry.

- 1352.
- V. PENNSYLVANICUM*
- , Lam. (Early Blueberry.)

Borders of swamps and hill-sides. Chelsea Mountains. Aylmer. Race course on Bank street road. May—2.

A smooth dwarf shrub with oblong, serrate, leaves, which are smooth on both sides. Flowers cylindrical bell-shaped, white tinged with red. Our earliest blue-berry ripe by the middle of July.

- 1353.
- V. CANADENSE*
- , Kalm.

Swamps, sandy fields and hill-sides, with the last, not uncommon. May—2. A dwarf shrub, the whole plant downy. Flowers small, green tinged with red.

- 1355.
- V. CORYMBOSUM*
- , L. (Swamp Blue-berry.)

Swamps and mossy rocks. May—2.

Under this name are grouped several very different varieties.

Var. *ATROCOCUM* is a high bush found in swamps with leaves entire and downy underneath, as also are the branchlets. Flowers white; berries black without bloom.

Var. *PALLIDUM*, Gray, is a low shrub found growing in crevices of rocks along the Gatineau river and at Aylmer. The whole plant glaucous, leaves smooth and serrulate.

1358. *V. CESPITOSUM* Mx. (Dwarf Billberry.)

Mossy rocks. Kirk's Ferry. June.—1.

A dwarf shrub 2 or 3 inches in height with thin leaves and blue berries.

OXYCOCCUS, Pers. Cranberry.

1365. *O. VULGARIS*, Pursh. (Small Cranberry).

Vaccinium Oxycoccus, L. Peat-bogs. Common. June—2.

Easily distinguished from the next by its small revolute leaves and terminal fascicle of flowers.

1366. *O. MACROCARPUS*, Pursh. (Large American Cranberry).

Vaccinium macrocarpon, Ait.

Peat bogs, common. June—1. Larger than the last in all its parts. Flowers lateral.

CHIOGENES, Salisb. Creeping Snowberry.

1367. *C. HISPIDULA*, T. & G. (Capillaire).

Creeping over decayed logs or hummocks in cedar swamps. May—2. (B). A beautiful little creeper with large, white, waxy aromatic berries.

ARCTOSTAPHYLOS.

1370. *A. UVA-URSI*, Spreng. (Bearberry. Kinuikinnick).

Rocky or sandy soil. May 2.

GAULTHERIA, L. Aromatic Wintergreen.

1374. *G. PROCUMBENS*. (Tea-berry).

Sandy fields and woods, July—4. A lovely little plant with beautiful white pendent flowers, beneath a rosette of shining leaves. The bright cherry-red berries (formed of the calyx), remain on the stems all the winter.

CASSANDRA, Don. Leather leaf.

1376. *C. CALYCVLATA*, Don.

Peat-bogs. Common. May—1.

The beautiful but rather inconspicuous white flowers are produced in great profusion beneath the many slender branches, from buds formed the previous summer.

EPIGÆA. Mayflower.

1382. *E. REPENS*, L. (Trailing Arbutus. Mayflower.)

Rocky islands and banks, sandy borders of swamps. Gilmour's Grove, Chelsea. Aylmer. May—1.

A most lovely flower with exquisite scent. This is the true Mayflower; altogether that name is applied to a great many other spring flowers in different localities.

ANDRÔMEDA, L.

1383. *A. POLIFOLIA*, L.

Peat-bogs. Mer Bleue. Hull. Chelsea. May—3.

Leaves thick and white beneath with strongly revolute margins.

KALMIA.

1393. *K. ANGUSTIFOLIA*, L. (Lambkill, Sheep Laurel.)

Peat-bogs. July—1. (B.)

A showy shrub bearing a profusion of lateral corymbs of pinkish-crimson flowers.

1394. *K. GLAUCA*, Ait. (Pale Laurel.)

Peat-bogs. June—2. (B.)

Leaves almost sessile, branchlets two-edged, few-flowered corymbs terminal. Flowers paler and larger than in the last species.

LEDUM.

1396. *L. LATIFOLIUM*, Ait. (Labrador Tea.)

Peat-bogs. Common. May—4.

A charming shrub with terminal umbel-like clusters of white flowers. Leaves with a rusty woolly pubescence *beneath glandular* and aromatic.

PYROLA, L. Wintergreen.

1410. *P. SECUNDA*, L. (Green-flowered Pyrola.)

Swamps and rich woods. A pretty plant with the pale green flowers all turned to one side of the stem. July—1. (B)

1411. *P. CHLORANTHA*, Schwartz. (Yellow-flowered Pyrola.)

Dry open woods. Rather uncommon. Rockcliffe. Stewart's Bush. Aylmer. Chelsea. Leaves thick, dull green with pale veins. Flowers large and greenish yellow. July—1.

1412. *P. ELLIPTICA*, Nutt. (Shin-leaf.)

Rich woods. A lovely flower with large thin leaves and white flowers like lilies of the valley. June—2.

1413. *P. ROTUNDIFOLIA*, L. (Round-leaved Wintergreen.)

Sandy woods. This is a very variable species. What I take for the type has white flowers like *P. elliptica*, but thick roundish leaves and a more robust habit. Beechwood (*Dr. H. B. Small*). Billings Bridge. Hull. Aylmer. Chelsea. Rather uncommon. July—1. (B)

————— var. *INCARNATA*, D.C.

Peat-bogs. Common. Leaves thinner and smaller. Flowers pink. June—2.

————— var. *ASARIFOLIA*, Hook.

Damp woods. Rare. Aylmer. Leaves round-reniform or oblate. Calyx-lobes almost triangular, flowers white or tinged with pink. July—1.

MONESSES, Salisb. One-flowered *Pyrola*.

1416. *M. UNIFLORA*, Gray.

Pyrola uniflora, L.

Peat bogs and low woods. One of our most charming flowers. The leaves are small and close to the ground; from their centre is thrown up one large white pendent flower of great beauty and delicious scent. Dow's Swamp. Kingsmere. Mer Bleu. Casselman. July—1. (B)

CHIMAPHILA, Pursh. Pipsissewa.

1417. *C. UMBELLATA*, Nutt. (Prince's Pine.)

Dry coniferous woods. Uncommon. This is another plant of great beauty. The evergreen leaves are thick and shining and borne in a whorl, or are slightly scattered along the short stems. Flowers borne in a corymb above the leaves. Petals pink, anthers violet, stigma green.

PTEROSPORA, Nutt. Pine-drops.

1418. *P. ANDROMEDEA*, Nutt.

Pine woods. This is a very local plant. Along the bank of the Gatineau between Ironsides and Chelsea, upon a heavy clay bank, beneath pines, it is very abundant. With the exception of a single plant found at Rockcliffe by Mr. A. J. Forward, this is the only locality so far discovered in this district. It is a curious plant, consisting of a stout, pinkish-white, erect, clammy-pubescent, fleshy stem about two feet in height, bearing at the base lanceolate scales instead of leaves, and above nodding white flowers like those of *Andromeda*, in a long bracted raceme. Root, a mass of fleshy fibres. It is supposed to be a parasite on the roots of pines.

MONOTROPEÆ.—Pipe-wort Family.

MONOTROPA, L. Pine-sap.

1422. *M. UNIFLORA*, L. (Indian Pipe.)

Dry woods. Common. June—4. A parasite upon roots of trees. The beautiful white single-flowered alabaster-like stems are thrown up in a cluster from a ball of matted fibrous roots. Flowers nodding, becoming erect as the fruit ripens.

PRIMULACEÆ.—Primrose Family.

TRIENTALIS, L. Chickweed Wintergreen.

1441. *T. AMERICANA*, Pursh. (Star-flower.)

Low woods. Common. May—2. (B). A delicate beautiful plant.

STEIRONEMA, Raf. Loosestrife.

1443. *S. CILIATUM*, Raf.*Lysimachia ciliata*, L.

River sides and damp thickets. Common. July—1. (B)

LYSIMACHIA, L. Loosestrife.

1447. *L. STRICTA*. (Racemed Loosestrife.)

Rocky river-sides and damp thickets. Common. July—1. (B)

1449. *L. nummularia*, L. (Moneywort.)

A garden escape. Parliament hill. A pretty trailing perennial with large golden yellow flowers borne singly in the axils of the leaves.

1450. *L. THYRSIFLORA*, L. (Tufted Loosestrife.)*Naumburgia thyrsiflora*, Reich.

Cold wet thickets. Common. May—4. (B)

ANAGALLIS, L. Pimpernel.

1452. *A. arvensis*, L. Shepherd's Weather-glass.)

Introduced. Wheat fields. Uncommon. July—1. A small procumbent plant with bright scarlet flowers, which open in bright weather but quickly close before rain.

————— var. *cerulea*. Benth.

Introduced with canary seed. This form, which is probably introduced from Germany, is more frequent than the type. It is a larger and coarser plant with purplish blue flowers. Aug.—1.

SAMOLUS, L. Water Pimpernel.

1454. *S. VALERANDI*, L. var. *AMERICANUS*, Gray.

River side. Rideau River, at the rifle range. Very rare. July—3.

A smooth branched herb four to eight inches in height, with alternate entire leaves and small white flowers in racemes. Corolla bell-shaped, 5-cleft, with small processes (sterile filaments) in the sinuses. True stamens on the tube of the corolla, included.

OLEACEÆ.—Olive Family.

FRAXINUS, L. Ash.

1455. *F. AMERICANA*, L. White Ash.

Rich woods. A fine and valuable tree. Frequently three or four stems from the same root. There is a common variety of this species with the fruit and young shoots purple. The seeds germinate the first spring after sowing.

1456. *F. PUBESCENS*, Lam. (Red Ash, Rim Ash, River Ash.)

Banks of rivers and lakes. A fine tree with branchlets and petioles velvety downy; seed germinating the first year. May—3. (B.) This species is sometimes difficult to distinguish from the last, the distinguishing characters not always being well marked. It is generally a smaller tree, the pubescence on the petioles and on the branchlets, although it often disappears late in the season on some trees, is always present on the young shoots. The seed is less swollen, and smaller in proportion to the wing of the samara, than in *F. Americana*. In growing several thousands from the seed I notice that *F. Americana* takes a few days longer to germinate, and leafs out a few days later in the spring. With seedlings sown in rows side by side *F. pubescens* has made in two years twice the growth of *F. Americana*.

1460. *F. SAMBUCIFOLIA*, Lam. (Black Ash, Water Ash.)

Swamps and low ground. May—3. (B.) A smaller tree than 1455 and 1456. Easily distinguished by its fruit, which is winged all round the seed. The seed does not germinate until the second spring after it is sown. The tough stringy wood is largely used for making baskets and fruit boxes.

APOCYNACEÆ.—Dogbane Family.

APOCYNUM, Linn. Dogbane, Indian Hemp, Lesser Milkweed.

1462. A. ANDROSÆMIFOLIUM, Linn. (Spreading Dogbane.)

Rocky woods and fields. Common. June—2. (B.) An interesting perennial. The frequently forking branches bear a profusion of small sweetly-scented open bell-shaped flowers (4 lines broad), from each of which is produced a pair of slender pods from three to four inches in length.

1463. A. CANNABINUM, L. (Indian Hemp.)

Sandy fields and on islands, in lower ground than the last. June—2. (B.) A more erect plant, with smaller white flowers borne in close many-flowered cymes.

ASCLEPIADACEÆ.—Milkweed Family.

ASCLEPIAS, L. Milkweed, Silkweed.

1465. A. INCARNATA, L. (Swamp Milkweed.)

Borders of rivers and lakes. Common. July—1. (B.) A tall handsome plant with rose-purple flowers scented like vanilla, and smooth pods. The fibre in the stem of this plant is very tough and it should make a good fibre plant.

1467. A. CORNUTI, Decaisne. (Milkweed.)

Fields and borders of thickets. Common. July—2. (B.) A handsome and sturdy wayside weed.

GENTIANACEÆ.—Gentian Family.

GENTIANA, L. Gentian.

1497. G. ANDREWSII, Griseb. (Closed Gentian.)

River sides and moist ground. Common. Aug.—2. (B.) A very handsome species with deep green glossy foliage, and large bluish-purple flowers, over an inch in length, borne in a terminal cluster and in the axils of the upper leaves.

MENYANTHES, L. Buckbean.

1506. M. TRIFOLIATA, L.

Bogs. Not uncommon. May—3. (B)

POLEMONIACEÆ.—Polemonium Family.

PHLOX, L.

1510. *P. DIVARICATA*, L. (Blue Phlox.)

Damp woods. Casselman. Rare. Ju.—2. A delicate plant well worthy of cultivation.

HYDROPHYLLACEÆ.—Waterleaf Family.

HYDROPHYLLUM, L. Water Leaf.

1536. *H. VIRGINICUM*, L.

Damp woods. Casselman. Ju.—2. A coarse weedy plant.

BORRAGINACEÆ. Borage Family.

CYNOGLOSSUM, L. Houndstongue.

1549. *C. officinale*, L. (Common Houndstongue Burr.)

Introduced from Europe. Common. Ju—1, (B). A troublesome weed.

1550. *C. VIRGINICUM*, L. (Blue Comfrey.)Woods. Rather rare. King's Mountain. Green's Creek (*J. F.*)
Britannia (*R. B. Whyte*). Ju—1. A showy plant with delicate blue flowers.

ECHINOSPERMUM. Swartz. Stickseed.

1555. *E. VIRGINICUM*, Lehm. (Beggars' Lice.)*Cynoglossum Morisoni*.

Rich open woods. Common. July—2.

1556. *E. Lappula*, Lehm. (Small Sheep Burr.)

Introduced from Europe. A troublesome weed. Ju—2. (B).

MYOSOTIS, L. Forget-me-not.

1576. *M. laxa*, Lehm.River side. Billings Bridge. New Edinburgh. Gatineau Point.
July—1. A slender plant with small flowers.

LITHOSPERMUM, L. Gromwell.

1581. *L. arvense*, L. (Corn Gromwell.)

Introduced. Occasional with grain, but not persistent. Ju—2.

1582. *L. officinale*, L. (Common Gromwell.)

Introduced and very abundant in rocky pastures. Ju—2. (B).

1585. *L. HIRTUM*, Lehm. (Hairy Puccoon.)

River side in sand. On the banks of the Ottawa above Aylmer.

Rare. (Mrs. Chamberlin) June—3. Flowers bright orange, woolly inside.

SYMPHYTUM, L. Comfrey.

1590. *S. officinale*, L. (Common Comfrey.)

Introduced. Rideau rifle range. Buckingham. Aylmer. July—2.

LYCOPSIS, L. Bugloss.

1591. *L. Arvensis*, L. (Small Bugloss.)

Introduced. Rare in sandy fields. Theodore street and at Billings Bridge. June—2.

ECHIUM, L. Viper's Bugloss.

1592. *E. vulgare*, L. (Blue weed.)

Introduced. Gradually becoming a troublesome weed. Ju—2.

CONVOLVULACEÆ. Bindweed Family.

IPOMÆA, L. Morning Glory.

1594. *I. purpurea*, L. (Common Morning Glory.)

A garden escape, frequently found in waste places.

CONVOLVULUS, L. Bindweed.

1597. *C. SPITHAMEUS*, L. (Low Bindweed.)

Calystegia spithamea, Pursh.

Clay banks, sandy shores, and rocky islands. Rare. Bank of the Ottawa below Rockcliffe. Kettle Island. and formerly on the rocky island opposite the end of Bank street. A very attractive plant with short stems and large pure white flowers. July—1.

1598. *C. sepium*, L. (Bracted Convolvulus. Hedge Bindweed.)

Calystegia sepium, R. Br.

Introduced. Chelsea Road, one locality. July—1. This is evidently the European form, which has in some way got introduced. It climbs up over high bushes fifteen or twenty feet from the ground and has snow-white flowers.

————— var. *AMERICANUS*, Sims.

River sides, trailing over sand or low plants. Distinguished from the type by the short stems, obtuse bracts and pink flowers: July—1. (B)

1599. *C. arvensis*. (Small Bindweed.)

Introduced. Cummings Bridge. Billings Bridge. Parliament Hill. The original plants here are very persistent, but it does not seem to spread much by seed. July—1.

CUSCUTA, L. Dodder.

1603. *C. GRONOVII*, Willd.

Low open woods and river sides. Trailing over low plants, particularly *Eupatorium ageratoides*. Not uncommon. July—2. A curious and interesting parasite, having bright orange stems, and, for the genus, large white flowers borne in close clusters at intervals along the stems. The only species of the genus so far detected in this district.

SOLANACEÆ, L.—Nightshade Family.

SOLANUM, L.

1608. *S. nigrum*, L. (Common Nightshade.)

Introduced. Common in low ground. July—1. (B)

1609. *S. Dulcamara*, L. (Bittersweet.)

Introduced. Rare in low woods. Billings Bridge and near the Rideau rifle range. June—2.

1610. *S. rostratum*, Dunal.

Introduced. This is a curious case of persistence. *S. rostratum* is a Colorado plant, and interesting as being in all probability the original food plant of the Colorado potato beetle. It can generally be found every year in some part of the city in waste places, but nowhere in abundance. First noticed by Mr. J. A. Guignard in 1876.

LYCOPERSICUM, Mill. Tomato.

1612. *L. esculentum*, Mill.

Introduced. The tomato in some of its many cultivated forms is always to be found growing on waste heaps and by waysides.

PHYSALIS, L. Ground Cherry.

1613. *P. Peruviana*, L. (Cape Gooseberry.)Introduced. Waste heaps. Occasionally found, but not persistent.
July—4.1614. *P. GRANDIFLORA*, Hook.Rocky woods. Not common. Generally found after woods have
been burnt over. June—3. A showy plant with large pure
white flowers spotted in the centre with greenish yellow.1615. *C. pubescens*, L. (Downy Physalis.)Introduced. Occasionally found on waste heaps. Not persistent.
July—1.

NICANDRA, Adans. Apple-of-Peru.

1618. *N. physaloides*, Gærtn.Introduced. Often found on waste heaps and by roadsides in the
city. A fine plant with spreading branches and pretty lavender-
blue flowers, which are followed by a large dry berry enclosed in
the enlarged calyx-lobes. July—1.

DATURA, L. Thorn-apple.

1620. *D. Stramonium*, L. (Thorn-apple.)Introduced. Waste places. A rank-smelling, poisonous and
narcotic weed. Not uncommon. Flowers white, followed by
large 4-valved prickly pods. July—4. (B)1621. *D. Tatula*, L. (Jamestown Weed.)Introduced. Less common than 1620. A taller plant with purple
stems and much larger pale violet-purple flowers, emitting a
most sickening odour when handled or bruised. July—4.

HYOSCYAMUS, L. Henbane.

1622. *H. niger*, L. (Black Henbane.)Introduced. July—1. (B.) Not common, but often appearing.
A coarse, clammy and strongly scented plant with yellow,
purple-veined, flowers.

NICOTIANA, L. Tobacco.

1623. *N. rustica*, L. (Wild Tobacco.)

Introduced. A coarse weed with green flowers.

SCROPHULARIACEÆ.—Fig-wort Family.

VERBASCUM, L. Mullein.

1625. *V. Thapsus*, L. (Common Mullein. Flannel-leaf.)

Introduced. Very common. July—1. (B)

1627. *V. Blattaria*, L. (Moth Mullein.)Introduced. Rare. Near Cummings Bridge (*R. B. Whyte*), near the St. Louis Dam. Beechwood. There are two forms of this plant—one with yellow flowers, probably identical with the English plant, and a form with larger white flowers tinged with purple. It is probable that this last is an American variety.

LINARIA, Juss. Toad-flax.

1629. *L. vulgaris*, Mill. (Butter and Eggs.)

Introduced. Common. July—1. (B) The flowers vary much in depth of colour, from almost white to orange.

————— var. *Peloria*. This is a rare monstrous state with a regular 5-cleft border to the corolla, 5 spurs and 5 stamens. Plants collected in Metcalfe street produced racemes with every flower of this nature for several years.

CHELONE, L. Turtle-head.

1637. *C. GLABRA*, L.

In bogs and wet meadows. Common. July—1. (B)

PENTSTEMON, Mitchell. Beard Tongue.

1647. *P. PUBESCENS*, Solander.

Rocky banks. Rare. Hull. Little Chaudiere. Aylmer. July—1. (B)

MIMULUS, L. Monkey-flower.

1654. *M. ringens*, L.

In ditches and low ground. July—1. (B)

GRATIOLA, L. Hedge Hyssop.

1660. *G. VIRGINIANA*, L.

Low ground. July--2. (B) A low clammy pubescent plant.
Flowers small, whitish, with the tubes yellow.

1661. *G. AUREA*, Muhl.

Alluvial flats. Rather rare. Malloch's Bay. Billings Bridge.
New Edinburgh. A small slender plant growing amongst
grasses, etc., with large golden-yellow flowers.

ILYSANTHES, Raf. False Pimpernel.

1662. *I. GRATIOLOIDES*, Benth. (False Pimpernel.)

On mud by the sides of rivers. July--2. (B) Small smooth
annuals, very much branched and growing over the mud. The
small purplish flowers produced all the summer.

VERONICA, L. Speedwell.

1667. *V. ANAGALLIS*, L. (Water Speedwell.)

In water, in ditches and streams. Leaves sessile. Ju.--2.

1668. *V. AGRESTIS*, Schwein. (American Brooklime.)

Brooks and ditches. July--1. Leaves thick, petioled. Pods
swollen.

1669. *V. SCUTELLATA*, L. (Marsh Speedwell.)

Swamps and marshes. June--2. (B) Stems slender and weak.
Leaves linear. Flowers in very slender zig-zag racemes. Pods
flat, broader than long.

1671. *V. OFFICINALIS*, L. (Common Speedwell.)

Sandy woods. Rather rare. Beechwood. Hull. Chelsea. Aylmer.
July--1. A pubescent prostrate plant with erect many-flowered
racemes of pale, lavender flowers. Pod obovate-triangular,
broadly notched.

1675. *V. SERPYLLIFOLIA*, L. (Thyme-leaved Speedwell.)

Open grassy places. May--3. (B) A prostrate, almost glabrous
plant, the branchlets terminating in loose elongated racemes.
Pod swollen broader than long.

1676. *V. PEREGRINA*, L. (Neckweed. Purslane Speedwell.)
 Low ground where the water has lain in the spring. Ju.—1. (B)
 An erect, branched, almost smooth, weedy looking plant with
 minute flowers.
1677. *V. arvensis*, L. (Corn Speedwell.)
 Rocky woods and fields. Ju.—2. Very pubescent, generally erect.
 Lower leaves petioled, crenate. The form found here has quite
 a different aspect from the English, which is a diffusely spread-
 ing plant with larger flowers and greener leaves.
1678. *V. agrestis*, L. (Field Speedwell.)
 Introduced. Occasionally introduced with English grass-seed, but
 usually dying out after four or five years. Parliament Hill.
 Major's Hill Park. A pretty prostrate plant with bright blue
 and white flowers.

GERARDIA, L.

1684. *G. PURPUREA*, L. var. *PAUPERCULA*, Gray.
 Marshes and on floating logs. Rideau Canal. Along the Ottawa.
 July—2. A slender branched plant with linear leaves and
 large funnel-shaped purplish-pink flowers.

PEDICULARIS, L. Lousewort.

1708. *P. CANADENSIS*, L. (Wood Betony.)
 Dry woodlands and sandy fields. May—3. (B) A coarse but
 attractive plant with pinnately-parted leaves and dense spikes
 of yellow flowers tinged with rich brown.

MELAMPYRUM, L. Cow-wheat.

1719. *M. AMERICANUM*, Mx.
 Sandy and rocky woods. Lake Windeago (*Dr. H. B. Small*).
 Rockcliffe. King's Mountain. July—1. Slender branching
 annuals with opposite leaves, the lower entire, the upper larger
 and fringed at the base. Flowers yellow, solitary in the axils
 of the upper leaves.

OROBANCHACEÆ.—Broom-rape Family.

EPIPHEGUS, Nutt. Beech-drops.

1728. *E. VIRGINIANA*, Bart. (Cancer-root.)

Under beech trees and parasitic upon their roots. Woods near St. Louis Dam. Beechwood. Chelsea. Oct.—2. (B) A curious branched, leafless, purplish herb about nine inches in height. Flowers many, of two kinds, the upper conspicuous, with a long tubular striped corolla, but sterile; the lower fertile, with a very short corolla.

LENTIBULARIACEÆ.—Bladder-wort Family.

UTRICULARIA, L. Bladder-wort.

1731. *U. VULGARIS*, L. var. *AMERICANA*, Gray.

Floating in ditches and slow streams. Common. July—2. (B) Perennial. In autumn round, solid, winter-buds about half an inch in diameter form at the tips of the branchlets. These sink to the bottom of the water and the rest of the plant dies.

1731. *U. INTERMEDIA*, Hague.

Floating in shallow water and creeping over soft mud, beneath carices and other marsh vegetation. Rideau canal. Billings Bridge. Gatineau Point. Hull. July—2. A much slenderer plant than 1731, with all the bladders on separate leafless branches. Flowers large and few, very rarely produced.

1736. *U. CORNUTA*, Mx.

Sphagnous swamps. At the gas-spring in the Mer Bleue, Eastman's Springs. In a small swamp at Black Lake, Kingsmere. July—2. A remarkable plant, consisting of a slender stem with a few large yellow flowers at the summit, no leaves, and very few rootlets.

VERBENACEÆ.—Verbena Family.

PHYMA, L. Lop-seed.

1744. *P. LEPTOSTACHYA*, L.

Low open woods. Not uncommon. July—1. (B).

VERBENA, L. Verbena.

1745. *V. URTICEFOLIA*, L. (White-flowered Vervain).Roadsides and rocky pastures. Rare in this locality. Hinton-
burgh. Beechwood. July—1.1746. *V. HASTATA*, L. (Purple Vervain).

Roadsides and meadows. July—2. (B).

LABIATÆ.—Mint Family.

TEUCRUM, L. Germander.

1750. *T. CANADENSE*, L.Sandy river banks. Along the Ottawa and Rideau Rivers.
July—2.

MENTHA, L. Mint.

1753. *M. viridis*, L. (Spearmint).

A garden escape. Flowers in a slender terminal spike. Aug.—1.

1754. *M. piperita*, L. (Peppermint).Introduced, but very common in low ground and along streams.
Flowers in an interrupted terminal spike. Aug.—1.1758. *M. CANADENSIS*, L. (False Pennyroyal.)In low ground. The whole plant canescently hairy with a strong
odour of Pennyroyal. July—2. (B.)

—————var. GLABRATA, Benth.

With the last: but stouter and much smoother with dark coloured
foliage and a different scent. July—1.

LYCOPUS, L. Water Horehound.

1759. *L. VIRGINICUS*, L. (Bugle weed).Low wet woods. July—2 (B) Calyx-teeth 4, ovate. Leaves
almost sessile, toothed, entire towards the base. Angles of the
stem rounded.1761. *L. SINUATUS*, Ell,*L. Europæus*, L. var. *sinuatus*, Gray.Low woods, July—2. Calyx-teeth 5, tapering to a very sharp
point. Angles of the stem acute. Leaves very variable, sinuate-
toothed to pinnatifid.

HYSSOPUS, L. Hyssop.

1762. *H. officinalis*, L. (Garden Hyssop.)

Introduced—Richmond Road. Dalhousie Square. The white-flowered form abundant. The purple-flowered scarce. A perennial herb with simple branches, linear, entire leaves, and the flowers which are in clusters forming crowded spikes. July--1.

SATUREIA, L. Savory.

1767. *S. hortensis*, L. (Summer Savory.)

Introduced. Frequently found on waste heaps and road sides.

CALAMINTHA, Mench. Calamint.

1770. *C. CLINOPIDIUM*, Benth. (Basil.)

Rocky woods and fields. Common. June. (B)

HEDEOMA, Pers. (Pennyroyal.)

1772. *H. PULEGIOIDES*.

Rich wood Billings Bridge. Very rare. A slender erect herb, strongly scented. July—1.

LOPHANTHUS, Benth. Giant Hyssop.

1779. *L. NEPETOIDES*, Benth.

River bank at Casselman. Aug.—2. A tall, smooth perennial, with a sharply 4-angled stem bearing petioled coarsely crenate-toothed leaves and long terminal spikes of greenish yellow flowers.

NEPETA, L. Cat-mint.

1782. *N. Cataria*, L. (Catnip.)

Introduced, but common everywhere. July--2. (B)

1783. *N. Glechoma*, Benth. (Ground Ivy.)

A garden escape. Occasionally found by waysides. Stewarton. Hintonburgh. Aylmer. Aug.--1.

DRACOCEPHALUM, L. Dragon-head.

1784. *D. PARVIFLORUM*, Nutt.

Rocky woods; particularly after fires have run through them. June—1.

SCUTELLARIA, L. Skull-cap.

1785. *S. LATERIFLORA*, L. (Mad-dog Skull-cap.)

Low ground. July—1. (B.) Flowers small in axillary and terminal one-sided racemes.

1787. *S. PARVULA*, Mx.

Dry banks and in sand. June—2. Not so common as our other two species. A low, branching, pubescent plant, spreading by means of stolons which bear several elongated and connected tuber-like swellings.

1789. *S. GALERICULATA*, L. (COMMON SKULL-CAP.)

On floating logs and banks of streams. July—1. (B.) A tall, graceful plant with showy flowers.

BRUNELLA, Tourm. Self-heal.

1790. *B. VULGARIS*, L. (Common Heal-all.)

Prunella vulgaris, L.

Introduced (!) Damp woods and fields. June --2. (B)

LEONURUS, L.

1794. *L. Cardiaca*, L. (Common Motherwort.)

Pastures and clearings. July—1. (B)

LAMIUM.

1795. *L. amplexicaule*, L. (Hen-bit Dead-nettle.)

Introduced. Rare and not persistent. Billings Bridge. Stewarton. Bell's Corners. July—3.

GALEOPSIS, L. Hemp-nettle.

1798. *G. Tetralix*, L. (Common Hemp-nettle.)

Introduced. Common in waste places and cultivated fields. July—3. (B) Easily known by the bristly stems which are swollen beneath the joints. Flowers often yellowish or white.

STACHYS, L. Woundwort.

1800. *S. PALUSTRIS*, L.

Wet ground along streams. July—1. (B.) A variable plant in which 1801 should probably be included as a variety. Plants which answer to var. *cordata*, Gray, and var. *glabrata*, Gray, are found both at Billings Bridge and Kettle Island.

1801. *S. ASPERA*, Mx.

S. palustris, L., var. *aspera*, Gray.

With the last. A slenderer plant with narrower leaves, the angles of the stem beset with stiff reflexed bristles.

PLANTAGINACEÆ.—Plantain Family.

PLANTAGO, L. Plantain.

1804. *P. major*, L. (Common Plantain.)

Introduced. July—1. (B.) The var. *bracteata*, Macoun, is an accidental form which is sometimes found in low ground, but which is not permanent under cultivation.

1805. *P. RUGELLII*, Decaisne. (Pale Plantain.)

Low ground. Common. June—4. Easily distinguishable from *P. major* by its slenderer spikes, and much more erect pale yellowish-green leaves. Petioles purplish at the base.

1810. *P. lanceolata*, L. (Rib-wort Plantain.)

Introduced with seed of lawn grasses. Not very persistent. August—2.

1814. *P. media*, L. (Scented Plantain.)

Sparingly introduced; but thoroughly naturalised and very persistent on Parliament Hill and Major's Hill. Leaves ovate, caespitously downy, flat on the ground, petioles very short. Flowers silvery and showy with pale purple filaments. Sweetly scented.

APETALOUS EXOGENS.

AMARANTACEÆ.—Amaranth Family.

AMARANTUS, L. Amaranth.

1825. *A. retroflexus*, L. (Pig weed. Red root.)

Introduced but thoroughly naturalised in all well-manured soils throughout Ontario. July—2. (B)

1826. *A. albus*, L.

Naturalised. July—2. A low spreading plant with whitish stems and the greenish flowers crowded in the axils of the long-petioled obovate leaves.

ACNIDA, L. Water-hemp.

1828. *A. RUSCOCARPA*, Gray.

Montelia tamariscina, Gray.

In low marshy ground along rivers. Brigham's Creek, Hull. Casselman. Aug.—1. A diœcious annual plant with much the appearance of an *Amarantus*.

1829. *A. TUBERCULATA*, Moq.

M. tamariscina, var. *concatenatu*, Gray.

A. cannabinu, L.

Sandy river banks and flooded fields. Britannia. Hull. Gatineau Point. Aug.—2. Flowers of the lower clusters, in the fertile plant, forming thick distant heads in the axils of the leaves.

CHENOPODIACEÆ.—Goosefoot Family.

CHENOPODIUM. Goosefoot.

1831. *C. album*, L. (Lamb's quarters. Pig weed.)

Introduced. Abundant everywhere. June—2. (B.) A most variable plant in all its stages. In early spring the young leaves of some plants, particularly beneath, are a rich pinkish purple. When growing in poor sandy soil, the whole plant is silvery

white. Late in the season, most of the plants are greener with very little mealiness and fewer flowers. The leaves are no less variable in shape than they are in colour. Until all these forms have been grown separately throughout the season, they must all be classed under the type *C. album*, L.

1833. *C. hybridum*, L. (Maple-leaved Goosefoot.)

Introduced. Cultivated ground. July—2. (B.) Plants tall and widely branching. Leaves thin and glabrous.

1834. *C. urbicum*, L. (Upright Goosefoot.)

Waste places in the city. Not common. Aug.—2. An erect, fleshy-leaved plant, generally tinged with red. Flowers chiefly in erect axillary clusters or in a short terminal leafy panicle. Seeds large and horizontally placed.

1835. *C. botrys*, L. (Jerusalem Oak. Feather Geranium.)

Introduced. Scarce; most abundant along the Rideau below Cummings Bridge. July—2. An erect, ornamental, bright-green, glandular-pubescent, branching plant. Flowers in feathery terminal cymose racemes. Whole plant pleasantly aromatic.

1836. *C. ambrosioides*, L. (Mexican Tea.)

Sparingly introduced. Stewarton. July—2. A tall, coarse, branching herb with tapering repand-toothed leaves and the flowers in dense leafy spikes. Strongly and unpleasantly scented.

1837. *C. glaucum*, L. (Oak-leaved Goosefoot.)

Introduced. Low ground. Not common. Aug.—2. A low spreading or erect plant with glaucous-mealy, pinnatifid-toothed leaves. Stems pinkish.

1838. *C. Bonus-Henricus*, L. (Good King-Henry. Perennial Goose-foot.)

Introduced. Rare. Aylmer, Mer Bleue. July—1.

1839. *C. CAPITATUM*, Benth & Hook. (Strawberry Blite.)

Blitum capitatum, L.

Damp woods and clearings, particularly after fires. June—2. (B.)

ATRIPLEX, L. Orache.

1841. *A. patula*, L.

"Specimens which we take for this species, are almost smooth and bright-green, with the cusps of the leaves erect. In every case introduced. This form is found around all towns and villages in Ontario." (Macon's Cat., Pt. III, p. 401.)

var. HASTATA, Gray.

Low ground. Uncommon. River side below Parliament Hill. Gattineau Point. New Edinburgh. Aug.—2. Leaves thick, the lower ones triangular-halberd-shaped.

KOCCHIA.

K. scoparia, L.

Introduced. Two patches of this annual plant have been noticed for some years; one by the roadside near the old Crown Timber Office, the other by the roadside at Billings Bridge. It is a curious, erect, branching plant with somewhat the appearance of a *Suaeda*. Leaves lanceolate, thin and pubescent. Flowers bearing a tuft of white down at the base.

PHYTOLACCACEÆ.—Poke-weed Family.

PHYTOLACCA, L. Poke-weed.

1860. *P. decandra*, L. ("Pigeon Berry." Garget.)

Introduced, here. Waste places, Stewarton. Aug.—2. A tall, handsome perennial with deep green foliage and purplish red stems. The flowers small and white, in slender racemes, followed by dark purple, depressed, 5—12-celled berries.

POLYGONACEÆ—Buckwheat Family.

POLYGONUM, L. Knot-weed.

1869. *P. AVICULARE*, L. (Knot-grass Door-weed.)

Sandy soil and waste places. June—4. (B.) A very variable plant. We doubtless have both native and introduced forms of this plant. Dr. Gray notices in his Manual that the American form has "stamens, chiefly 5 in the American, 8 in the European plant."

1878. *P. LAPATHIFOLIUM*, L. (Dock leaved Persicaria.)

P. nodosum, Pers. Macoun, Cat. III, 409.

Low ground. Aug.—1. Sheaths and bracts not ciliate. Spikes short, erect or nearly so. Peduncles with scattered sessile glands.

1879. ————— var. *INCARNATUM*, Watson.

P. incarnatum, Ell. Macoun, Cat. III, 409.

Low, rich ground. Not uncommon. Aug.—1. A tall, coarse plant sometimes four feet high, with long leaves and nodding, slender, spikes of pale pink flowers.

1880. *P. PENNSYLVANICUM*, L.

Low, rich ground. Common. Aug.—1. (B) A tall handsome species with conspicuous flowers. Easily recognisable by the stalked glands on the peduncles.

1882. *P. AMPHIBIUM*, L. (Water Persicaria.)

In shallow water. Common. Aug.—1. (B) Flower spike erect, terminal, borne above the water from the centre of two or three floating leaves.

1884. *P. HARTWRIGHTII*, Gr.

P. amphibium, L. var. *terrestre*, Auct.

In ditches and at the sides of streams and ponds. Not uncommon.

Aug.—1. This species has been, until lately, confounded with *P. amphibium* and *P. Muhlenbergii*, Watson. It differs from the former in its habit of growth and the nature of the inflorescence. In this species and *P. Muhlenbergii* the flowers are borne in a slender elongated spike. *P. Hartwrightii* has foliaceous and ciliate sheaths. These characters are lacking in *P. Muhlenbergii*, which, however, is rough, with appressed hairs all over.

1885. *P. Persicaria*, L. (Lady's Thumb.)

In cultivated and waste ground. Common. July—2. (B) Leaves usually blotched, sheaths fringed, peduncles without glands, spikes short and thick.

1886. *P. Hydropiper*, L. (Common Smartweed.)

Low ground. Annual. Aug.—2. (B) Whole plant smooth. Flowers greenish, tipped with pink, spikes nodding.

1887. *P. ACRE*, H B K. (Water Smartweed.)

Low ground. Rare. Billings Bridge. Aug.—1. Perennial.

Spike slender, erect, terminal. Flowers whitish. Sheaths covered with rusty hairs. The sepals of this and the last species are dotted with conspicuous glands.

1888. *P. HYDROPIPEROIDES*, Mx. (Mild Water-Pepper.)

In water and wet places along streams. Billings Bridge. Casselman. Hull. Aug.—1. Perennial. Stem smooth, weak, branching. Sheaths hairy. Flowers white in erect spikes. Sepals not dotted.

1890. *P. orientale*, L. (Prince's Feather.)

A garden escape. A tall, handsome annual with dense cylindrical spikes of large rose-coloured flowers. Billings Bridge. Aug.—2.

1895. *P. ARIFOLIUM*, L. (Halberd-leaved Tear-thumb.)

Swamps. Lake Flora. Mer Bleue. July—2. (B) Leaves large, long-petioled. Peduncles glandular, bristly.

1896. *P. SAGITTATUM*, L. (Arrow-leaved Tear-thumb.)

Low ground and along streams. Much commoner than the last. July—2. (B) Leaves short-petioled. Peduncles smooth.

Both of these last-named plants are annuals, with weak stems, beset on the angles with sharp, reflexed prickles, by means of which they support themselves amongst the low herbage where they grow.

1897. *P. Convolvulus*, L. (Black Bind-weed. Wild Buckwheat.)

An introduced and troublesome weed throughout the Dominion. June—4. Seeds black, dull.

1898. *P. CILINODE*, Mx. (Hairy-jointed Bind-weed.)

Sandy and clayey banks. Not uncommon. Aug.—1. (B) A rather attractive plant, with deeply-veined leaves. Stems red, climbing. Flowers white, in paniced racemes. Seeds smooth and shining.

1899. *P. DUMETORUM*, L. var. *SCANDENS*, Gray. (Climbing False Buckwheat.)

Climbing over bushes. Township of March (*A. H. Moore*). Chats Rapids. Rare. Aug.—1. Seed smooth and shining.

FAGOPYRUM, Tourn. Buckwheat.

1900. *F. Tartaricum*, L. (Rough Buckwheat.)

An accidental introduction. Billings Bridge. Stewarton. July

—3. This plant differs from *F. esculentum* in having smaller greenish flowers and a wrinkled seed.

1901. *F. esculentum*, Mœnch. (Common Buckwheat.)

Introduced. Common. Aug.—1.

RUMEX, L. Dock.

1904. *R. OCCIDENTALIS*, Watson.

Swamps. St. Louis Dam. Lake Flora. Hull. July—1. A tall species. Valves of the seed rounded, heart-shaped, without exterior grain like tubercles.

1906. *R. BRITANNICA*, L. (Great Water-Dock.)

R. orbiculatus, Gray.

Swamps and beside streams. Malloch's Bay. Hull. Mer Bleue. Aug.—2. Tall and stout, with a contracted panicle. Seed-valves round-ovate, all grain-bearing.

1907. *R. SALICIFOLIUS*, Weinmann. (White Dock.)

Introduced here from the west. Waste lot on Albert street. Several plants. July—2. This dwarf species is easily recognised by its pale, almost glaucous, narrow leaves and copious yellowish fruit. Seed-valves deltoid-ovate, with one, two, or sometimes all three, bearing a large grain.

1908. *R. VERTICILLATUS*, L. (Swamp Dock.)

River sides and ditches. Rather uncommon. Billings Bridge. Skead's Mill. Hull. Templeton. June.—3. (B) The lower whorls of flowers distant. Fruit-bearing pedicels elongated, three to four times longer than the calyx, abruptly reflexed. Seed valves each bearing a large grain.

1909. *R. crispus*, L. (Curled Dock.)

Introduced. Common by roadsides and in cultivated ground. June—3. (B) Easily recognised by the wavy margin of the leaves. Seed-valves round-heart-shaped, mostly grain-bearing. Much used as a pot herb.

1910. *R. obtusifolius*, L. (Bitter Dock. Dairymaids' Dock.)

Introduced. Much rarer than the last. Rife Range. Billings Bridge. Gatineau Point. July—2. Seed-valves ovate-halberd-shaped, with three to five large lateral teeth towards the base. This is the best dock for removing the pain of nettle stings.

1912. *R. MARITIMUS*, L. (Golden Dock.)

River bank. Rare. Green's Creek (*A. H. Moore*). New Edinburgh (*H. M. Ami*). Hull (*Prof. Macoun*). Aug.—2. A low plant, with crowded, leafy, compact spikes of yellow fruit. Seed-valves spear-shaped, with two long teeth on each side and a large grain on the back.

1913. *R. Acetosus*, L. (Common Sorrel.)

Occasionally introduced with grass seed; but not persistent. Billings Bridge. Hintonburgh. July—2. Diœcious. Seed-valves grain-bearing, enlarging as the fruit ripens.

1915. *R. ACETOSELLA*, L. (Sheep Sorrel.)

Abundant in sandy soil and exhausted fields. July—1. Diœcious. Seed-valves ovate, scarcely enlarging in fruit, not grain-bearing.

ARISTOLOCHIACEÆ.

ASARUM, L. Asarabacca.

1916. *A. CANADENSE*, L. (Wild Ginger.)

Rich woods. Common. May—4. (B) A charming plant, with its rich purplish brown, three-cleft flower, borne low on the ground beneath the leaves, in the axil of the two delicate green, pubescent, kidney-shaped leaves. The fleshy root is aromatic, when broken smelling like ginger.

PIPERACEÆ.—Pepper Family.

SAURURUS, L. Lizard's Tail.

1918. *S. CERNUUS*, L.

In shallow water. In great abundance along the Nation River at Casselman. July—3. This is the only station so far recorded in this part of Canada.

THYMELEACEÆ. Mezereon Family.

DAPHNE, L.

1921. *D. Mezereum*, L. (Mezereon.)

Rocky woods. Near Hemlock Lake, Beechwood. (Mrs. Chamberlin.) Ap.—4. Introduced, but well established. The beautiful pink or white fragrant flowers opening before the leaves. Followed by scarlet berries.

DIRCA, L. (Leather wood. Moose-wood.)

1922. D. PALUSTRIS, L.

Rich woods. Ap.—4. (B) The small yellow tubular flowers, 3 or 4 in number, produced early in spring from buds enclosed in dark brown hairy scales. Leaves oval, short-petioled, pale green. Bark fibrous and very tough, much used in the woods instead of twine.

ELÆAGNACEÆ. Oleaster Family.

SHEPHERDIA, Nutt.

1924. S. CANADENSIS, Nutt.

Rocky woods. May—1. (B) A straggling dioecious shrub with yellow flowers opening before the leaves. The leaves and young shoots covered with brown peltate and white stellate hairs.

SANTALACEÆ. Sandal-wood Family.

COMANDRA, Nutt. Bastard Toad-Flax.

1928. C. UMBELLATA, Nutt.

Dry rocky woods. Rockcliffe. Hull. King's Mountain. May —4. (B) A low herb with pale green oblong leaves and a terminal corymbose cluster of white flowers. Parasitic on the roots of shrubs. I have traced the connection of the roots with those of *Prunus Virginiana* and *Viburnum pubescens* to which they were attached by an enlarged cone-shaped disk.

EUPHORBIACEÆ. Spurge Family.

EUPHORBIA, L.

1935. E. MACULATA, L.

Sandy fields. Common. July—2. (B) Annual.

1939. E. *Helioscopia*, L. (Sun Spurge.)

Introduced. Roadsides and gardens. July—3. (B) The centres of the flower-clusters yellow. Pods smooth. Annual.

1940. E. *Cyparissius*, L.

Perennial. A garden escape. July—1. Stems densely clustered. Stem-leaves linear crowded.

1941. *E. Peplus*, L. (Horned Garden Spurge.)

Introduced. Border of field, Green's Creek. Parliament Hill.

Aug.—2. Annual. Horns of the 4-lobed involucrem long.

Lobes of the pod 2-wing-crested on the back.

ACALYPHA, L. Three-seeded Mercury.

1945. *A. VIRGINICA*, L.

Low ground in shade. July—4. (B) An inconspicuous weedy plant with green flowers and long-petioled leaves.

URTICACEÆ. Nettle Family.

ULMUS, L. Elm.

1946. *U. FULVA*, Mx. (Red Elm. Slippery Elm.)

Rocky woods. Ap.—4. (B) Flowers almost sessile. Branches wide-spreading, with the leaves towards the tips of the branchlets. Buds and branchlets downy.

1947. *U. AMERICANA*, L. (White Elm. Swamp Elm.)

Low woods. Ap.—4. (B) Our most beautiful forest tree.

Flowers on drooping pedicels. Buds and branchlets glabrous.

1948. *U. RACEMOSA*, Thomas. (Rock Elm. Corky White Elm.)

Rocky woods. May—1. (B) A small tree in this district; but very large in Western Ontario. Easily distinguished by the corky ridges on the branches and the racemed flowers.

These three are the only elms we have in Canada, notwithstanding the various local names.

CELTIS, L. Nettle Tree.

1949. *C. OCCIDENTALIS*, L. (Sugar-berry. Hackberry.)

River banks. Rare. Billings Bridge. Malloch's Bay. Britannia. May—1.

A rather small forest tree with the appearance of an Elm. Leaves sharply-serrate, reticulated, ovate-lanceolate taper-pointed oblique at base and asymmetrical. Flowers green, axillary, peduncled. The fertile flowers solitary or in pairs; the staminate flowers fasciated along the base of the branchlets.

HUMULUS, L. Hop.

1950. *H. LUPULUS*, L. Wild Hop.

Not indigenous in this locality. River side. Hull. Billings Bridge. June—4.

CANNABIS, L. Hemp.1951. *C. Sativa*, L. (Hemp.)

Introduced into Canada as a fibre-plant. Very common in waste places. July—1. (B)

TRICHA, L. Nettle.1954. *U. GRACILIS*, Ait. (Common Nettle.)

Low ground. July—1. A tall slender species sometimes growing 10 feet in height. Stinging hairs few. (B)

LAPORTEA, Gaudich. Wood Nettle.1959. *L. CANADENSIS*, Gaudich.

Low woods. Common. July—1. A graceful plant with large pale, alternate, serrate leaves and conspicuous dioecious flowers. Whole plant covered with rigid stinging hairs.

PILEA, Lindl. Clearweed.1960. *P. PUMILA*. Gray. (Richweed.)

Low cool woods and around springs. July—1. (B) A small, smooth and pellucid annual, without stinging hairs.

BCEHMERIA, Jacq. False Nettle.1961. *B. CYLINDRICA*, Willd.

Low woods and thickets. July—1. A taller plant than the last with more of the appearance of a nettle; but stringless. (B)

JUGLANDACEÆ. Walnut Family.**CARYA, Nutt. Hickory.**1964. *C. ALBA*, Nutt. (Shell-bark Hickory.)

River side. Rare. A few trees at Casselman and at Deschenes Rapids. June.

1967. *C. AMARA*, Nutt. (Bitter-nut Hickory.)

Rocky woods. Hull. Billings Bridge. June.

JUGLANS, L. Walnut.1968. *J. CINEREA*, L. Butternut.

Rocky woods. Common. June—1. One of the grandest of our forest trees. (B)

MYRICACEÆ. Sweet-gale Family.**MYRICA, L. Wax Myrtle.**1970. *M. GALE*, L. (Sweet Gale.)

In Peat-bogs, along the borders of lakes. Common in its proper habitat. The diœcious flowers precede the leaves. Whole plant strongly aromatic. May—2.

1973. *M. ASPLENIFOLIA*, Endl. (Sweet Fern.)

Comptonia asplenifolia, Ait. Gray's Man. 458.

Sandy and clayey woods. Ironsides. Aylmer. Ap.—4. Local. A pretty aromatic shrub, 1—2 feet high, with fern-like linear-lanceolate leaves six inches in length, which are pinnatifid with many rounded lobes.

CUPULIFERÆ. The Oak Family.

BETULÆ, L. Birch.

1974. *B. LENTA*, L. (Cherry Birch. "Black Birch.")

B. excelsa of Aiton.

Rich woods. May—1. (B) A large forest tree with thick bark, which is smooth and dark brown, like that of the cherry, when the tree is young. Fruiting catkins oblong-cylindrical, over an inch in length, the scales short with divergent lobes.

1975. *B. LUTEA*, Michx. f. (Yellow Birch. Gray Birch.)

B. excelsa of Pursh.

Low rich woods. May—1. Bark of trunk yellowish or silvery-gray, hanging in thin filmy layers. Fruiting catkins oblong-ovoid, under an inch in length, the scales thinner than in No. 1974, twice as large with narrower, barely spreading, lobes.

1977. *B. PAPHYRIFERA*, Mx. (Paper Birch, Canoe Birch.)

B. papyracea, Ait. Gray's Man. 459.

Woods and river banks. May—1. (B) Leaves ovate.

1979. *B. PUMILA*, L. (Low Birch. Swamp Birch.)

Peat bog. Mer Bleue. Rare. May—4. A small shrub, with erect branches, not glandular; young branches and roundish leaves soft-downy when young.

ALNUS, Gærtn. Alder.

1985. *A. INCANA*, Willd. (Common Swamp Alder.)

Borders of streams and swamps. Ap.—2. (B) Usually our first plant to flower. This and *Acer dasycarpum* always preceding all others. The catkins which (of both sorts) were formed the previous summer, flowering long before the leaves expand.

