

ART. VIII.—ADDITIONS TO THE LIST OF NOVA SCOTIAN PLANTS.  
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THE following notes are intended to supplement the "Catalogue of the Flora of Nova Scotia" in the Proceedings and Transactions of the Nova Scotia Institute, 1875-76, by Dr. A. W. H. Lindsay, to whom botanists are much indebted for the first labour of its kind. The names of plants and stations below are either not given in the "Catalogue," or not on the responsibility now advanced. Some of the plants have been known to me as Nova Scotian as long as others in the Herbarium of my formation referred to by Dr. Lindsay, but not being represented in that collection, nor named in some short notes of mine published in the Transactions of the Nova Scotia Institute, 1871-72, of course are not placed in the "Catalogue" on my authority. The majority have been, however, I think, found since that Herbarium left my hands, (1876), either by myself or others, to whom credit is given, and some have been met with quite recently. In a few cases I have added a word or two, relating to local or Indian names, and other points, which may be found acceptable. I have also corrected a few errors.

For some particulars, I am indebted to Mr. G. A. Thompson, of Massachusetts. This gentleman came here chiefly for minerals, in 1873, having been directed to me. He was kind enough to give me a few botanical notes in return for showing him specimens, and advising him as to localities of minerals. The following observations of his will be found interesting.

"I was quite surprised to see the *Liriodendron tulipifera* successfully cultivated so far North. I had only seen one or two specimens in Massachusetts. The *Monotropa uniflora*, found at Scot's Bay, is somewhat rare near Boston, I think; at least, I have not seen it. Among other Heaths (Gray) I noticed that there seemed to be a total absence of *Gaultheria procumbens*, so common with us in Woburn, at Scot's Bay; it seems to be supplanted by the *Chiogenes*. I did not notice the *Kalmia latifolia*, *Azalea viscosa*, *A. nudiflora*, and *Rhodora Canadensis*, all of which are

very common Heathworts with us in Woburn or Amherst, Mass. *Mitchella repens* was far less abundant than *Cornus Canadensis*, just as the reverse is true with us in Woburn. *Juglans Carya*, *Quercus*, and *Castanea*, sparingly represented. *Fagus* very common; *Abies* also, and *Larix*. *Juniperus Virginiana* not found at all. *J. communis* by no means abundant. Of course, the above notes are very imperfect, and are confined mainly to Scot's Bay, where I was obliged to pass through more or less woodland, etc., on my way to the shores of the Bay of Fundy."

The list of plants is made out to correspond with Dr. Lindsay's "catalogue":—

## RANUNCULACEÆ.

<i>Clematis Virginiana</i> , L.	n. N. Glasgow, Pictou.
<i>Hepatica triloba</i> , Chaix.	Nesbit's Island, Windsor, Hants.
<i>Thalictrum Cornuti</i> , L.	Digby Gut, Digby. (7 ft. high; 8 ft. at Windsor Falls.)
<i>Ranunculus cymbalaria</i> , Pursh.	Falmouth, Hants.
<i>R. repens</i> , L.	Windsor, "
<i>R. acris</i> , L.	Windsor, "

## MAGNOLIACEÆ.

<i>Liriodendron tulipifera</i> , L.	Waverley House, Canning, King's, ("a small tree, cultivated,") E. A. Thompson.
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## BERBERIDACEÆ.

<i>Berberis Vulgaris</i> , L.	Windsor, Hants, (cultivated.)
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## NYMPHÆACEÆ.

<i>Nuphar advena</i> , Ait.	Windsor, Hants.
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## PAPAVERACEÆ.

<i>Papaver somniferum</i> , L.	Windsor, Hants, (introduced.)
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## FUMARIACEÆ.

<i>Corydalis glauca</i> , Willd.	St. Croix, Hants.
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## CRUCIFERÆ.

<i>Cakile Americana</i> , Nutt.	Halifax Harbour.
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## DROSERACEÆ.

<i>Drosera rotundifolia</i> , L.	Scots' Bay, Kings; E. A. Thompson.
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## CARYOPHYLLACEÆ.

<i>Saponaria officinalis</i> , L.	Windsor, Hants, (escaped.)
<i>Lychnis githago</i> , Lam.	New Glasgow, Pictou, (introd.)

- Honkenya peploides*, D. C. Halifax Harbour.  
*Cerastium viscosum*, L. Windsor, Hants.  
*Sagina procumbens*, L. Windsor, Hants.  
*Spergularia rubra*, Pers. Windsor, Hants; Halifax Harbour.  
 Var. *Marina*.
- TILIACEÆ.**  
*Tilia Europæa*. Windsor, Hants, (planted.)
- GERANIACEÆ.**  
*Oxalis acetosella*, L. Windsor, Hants; H.; Scots' Bay, Kings; E. A. Thompson.  
*Geranium Carolinianum*, L. Windsor, Hants; Rev. J. B. Uniacke.  
*G. Robertianum*, L. Spencer's Isl., Cumb.; Marble Mt., C.B.  
*Impatiens fulva*, L. n. Digby, Moose River, Digby.
- VITACEÆ.**  
*Ampelopsis quinquefolia*. Windsor, Hants, (cultivated.)
- CELASTRACEÆ.**  
*Enonymus Americanus*, L. Windsor, Hants, (cultivated.)
- STAPHYLEACEÆ.**  
*Staphylea primata*. Windsor, Hants, (cultivated.)
- SAPINDACEÆ.**  
*A. Esculus Hippocastanum*, L. Windsor, Hants, (planted.)  
*Acer. pseudo-platanus*, L. Canning, King's; E. A. Thompson; (cultivated—"fine tree.")
- LEGUMINOSEÆ.**  
*Vicia tetraspermum*, L. not Windsor, Hants, as in "Catalogue."  
*V. cracca*, L. Granville, Annap.; E. A. Thompson.  
*Lathyrus maritimus*, Bigelow. Parrsboro', Cumb.; Long Isl., C. B.; Halifax Harbour.  
*Apios tuberosa*. Windsor, Hants, (brought from Little Harbour, Pictou; Indian name is Sagaban.)
- ROSACEÆ.**  
*Cratægus oxyacantha*, L. Windsor, Hants.  
*Amelanchier Canadensis*. Windsor, Hants. (Indian Pear, Mulberry.)  
 Var. *Botryapium*, Gray.  
*Dalibarda repens*, L. Bloomfield, Digby.  
*Rosa lucida*, Ehrhart. Windsor, Hants.  
*R. Carolina*. not Windsor, Hants, as in "Cat."
- ONAGRACEÆ.**  
*Epilobium angustifolium*, L. Pictou; Colchester.

## CRASSULACEÆ.

*Sedum rhodiola*, D. C. n. Margaretville, Annap. ? (intr.)

## HAMAMELACEÆ.

*Hamamelis Virginica*, L. n. Windsor; Chester Road; Windsor Falls; Windsor, Hants.

## UMBELLIFERÆ.

*Heracleum lanatum*, Michx. Marble Mt., C. B.

*Conium maculatum*, L. Chester, Lunenburg. ?

## CORNACEÆ.

*Cornus Canadensis*, L. Scots' Bay, Kings; E. A. Thompson.

*C. alternifolia*, L. Mt. Uniacke, Hants, (Herb. J. B. U.)

## CAPRIFOLIACEÆ.

*Symphoricarpus racemosus*, Michx. Windsor, (cultivated.)

*Sambucus pubens*, Michx. N. Mt., Annapolis. "White Elder,"  
"Poison Elder."

*Viburnum nudum*, L. Kentville, King's.

*Lonicera periclymenum*. Granville, Annapolis; E. A. T.

## RUBIACEÆ.

*Galium trifidum*, L. Marble Mt., C. B.

Var. *Tinctorium*.

*Mitchella ripens*, L. Scots' Bay, King's; E. A. T.

*Houstonia cærulea*, L. Windsor, Hants; Horton Bluff, King's,  
Halifax Common.

## COMPOSITÆ.

*Eupatorium perfoliatum*, L. Mt. Uniacke, Hants; Gates' Mt'n.,  
Annapolis.

*Tussilago farfara*, L. Horton Bluff, King's.

*Tanacetum vulgare*, L. Windsor.

*Graphalium polycephalum*, Michx. Coldbrook, King's.

*Ambrosia artemisiæfolia*, L. Kentville, King's.

*Achillea millefolium*, L. Wilmot, Annapolis (rose-colour.)

*Lappa major*, Gærtn. Windsor.

*Taraxacum Dens-leonis*, Derf. Windsor.

*Sonchus arvensis*. Halifax Harbour.

## CAMPANULACEÆ.

*Campanula rotundifolia*, L. D. Gut, Gulliver's Hole, Digby.

## ERICACEÆ.

*Gaylussacia resinosa*, Torr. & Gr. Gold R., Chester, Lunenburg; General's Bridge, Annapolis.

*Vaccinium macrocarpon*, Ait. Falmouth, Hants; Dr. Harding.

- Chiogenes hispidula*, Torr. & Gr. Digby Neck, H. ; Hantsport, Hants ;  
 Scots' Bay, King's ; E. A. T.
- Arctostaphylos Uva-ursi*, Spreng. Wilmot, Annapolis ; G. Robertson.
- Cassandra calyculata*, Don. Mt. Uniacke ; Rev. J. B. Uniacke.
- Andromeda polifolia*, L. do. do.
- Moneses uniflora*. Scots' Bay, Kings ; E. A. T.
- Chimaphila umbellata*. Pembroke, Hants.
- Monotropa uniflora*, L. n. Digby.
- M. Hypopitys*, L. Collee Woods, Windsor, Hants,  
 (under *spruce*, not *pine*.)
- Hex glabra*, Gray. N. W. Arm, Halifax ; Capt. Hardy.
- PLANTAGINACEÆ.**
- Plantago major*, L. Windsor.
- P. lanceolata*, L. Windsor.
- PLUMBAGINACEÆ:**
- Staticé Limonium*, L. Racket, Digby ; Hantsport, Hants.
- PRINULACEÆ.**
- Anagallis arvensis*, L. Granville, Annapolis ; E. A. T.
- SCROPHULARIACEÆ.**
- Veronica scutellata*, L. Wilmot, Annapolis, (not Windsor,  
 as in "Cat.")
- Gerardia purpurea*, L. Gulliver's Hole, Sea Wall, etc., Digby.
- Euphrasia officinalis*, L. Scots' Bay, King's ; E. A. T.
- Rhinanthus crista-galli*, L. Windsor, Falmouth, Hants ; H.  
 Granville, Annapolis ; E. A. T.
- VERBENACEÆ.**
- Verbena hastata*, L. Nictaux Mines, Annapolis.
- LABIATEÆ.**
- Monarda didyma*, L. Windsor, (cultivated.)
- Nepeta Cataria*, L. Windsor, (cultivated.)
- N. Glechoma*, Benth. Windsor, (escaped.)
- Galeopsis Tetrahit*, L. Scots' Bay, Kings ; E. A. T.
- Leonurus cardiaca*, L. Windsor.
- Calamintha clinopodium*, Benth. St. Croix, Hants. ?
- BORRAGINACEÆ.**
- Mertensia maritima*, Don. Beach, Gulliver's Hole, Digby.
- CONVOLVULACEÆ.**
- Convolvulus arvensis*, L. Windsor.
- Calystegia sepurm*, R. Bronn. Windsor, (H.) ; Canning, King's ;  
 E. A. T.

## SOLANACEÆ.

- Nicandra physaloides*, Gærtn. Windsor, (escaped.)  
*Datura Stramonium*, L. Windsor, (escaped.)

## GENTIANACEÆ.

- Limnanthemum lacunosum*, Griseb. Lakes between Windsor and Halifax ;  
 Rev. J. B. Uniacke.

## OLEACEÆ.

- Ligustrum Vulgare*, L. Windsor, (planted.)

## CHENOPODIACEÆ.

- Chenopodium album*, L. Windsor.  
*Suaeda maritima*, Dumortier, Windsor.

## POLYGONACEÆ.

- Polygonum arifolium*, L. Windsor Road, 15 miles from Halifax.  
*P. cilinode*, Michx. N. Mt., Granville, Annap. ; E. A. T.  
*Rumex crispus*, L. Windsor.

## EUPHORBIACEÆ.

- Euphorbia nelioscopia*, L. Windsor.  
*E. cyparissias*. Windsor, (escaped.)

## CUPULIFERÆ.

- Fagus ferruginea*, Ait. Marble Mt., C. B.  
*Corylus Americana*, Walt. Ponbook Lake, Windsor ; E. Mt'n.,  
 Onslow, Col.  
*Ostrya Virginica*. Hautsport, Hants ; E. A. T.

## CONIFERÆ.

- Pinus strobus*, L. Windsor.  
*Abies balsamea*, Marshall. Windsor.  
*A. nigra*, Poir. Windsor, ("back in the woods.")  
*A. alba*, Michx. Windsor, ("the common spruce.")  
*A. Canadensis*, Michx. Windsor.  
*Larix Americana*, Michx. Windsor, H. ; Scots' Bay ; E. A. T.  
*Thuja occidentalis*, L. Windsor, (planted, does not flourish.)  
*Juniperus communis*, L. Mt. Uniacke, Hants ; Part. Isl., Cum. ;  
 H. ; Scots' Bay, King's ; E. A. T.

## TYPHACEÆ.

- Typha lalifolia*, L. Windsor.

## NAIADACEÆ.

- Potamogeton lucens*, L. Windsor Junction. ?  
 Var. *rufescens*, Schreber.  
*P. heterophyllus*, Schreber. Welsford, Halifax. ?

## ORCHIDACEÆ.

- Habenaria obtusata*, Richardson. Pine Tree, Merigomish. ?  
*Spiranthes cernua*, Richard. Wilmot, Annap.; Stillwater, Hants. ?  
*Arethusa bulbosa*, L. Mt. Uniacke, Hants; Rev. J. B. U.  
*Calopogon pulchellus*, R. Brown. 3 miles from Springville, Cumb.;  
 H. H. Jan.  
*Microstylis opbioglossoides*, Nutt. Ponthook Road, Windsor. ?  
*Cypripedium arietinum*, R. Brocn. Newport; Rev. J. B. Uniacke.

## IRIDACEÆ.

- Iris versicolor*, L. Windsor.

## SMILACEÆ.

- Trillium cernuum*, L. Windsor; Rev. A. F. Hiltz.

## LILIACEÆ.

- Smilacina Racemosa*, Desf. Uniacke, Hants; Rev. J. B. U.  
*Clintonia borealis*, Raf. Pembroke, Hants.

## JUNCACEÆ.

- Juncus bulbosus*, L. Windsor.

In conclusion, I may direct attention to a list of "83 varieties of various woods grown in the Province," published in the catalogue of the N. S. department, International Exhibition, 1862, by Amos Fales, Jr., Wilmot.

List of the rarer plants collected at Glace Bay, C. B., by Henry Poole, Esq. :—

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| <i>Ranunculus Cymbalaria</i> , Pursh. | <i>Moneses uniflora</i> , Salisb.       |
| <i>Actæa spicata</i> , L.             | <i>Statice limonium</i> , L.            |
| <i>Viola pubescens</i> , Ait.         | <i>Chelone glabra</i> , L.              |
| <i>Lotus corniculatus</i> , L. Eur.   | <i>Veronica scutellata</i> , L.         |
| <i>Lathyrus maritimus</i> , Bigelow.  | <i>V. Americana</i> , Schweinitz.       |
| <i>Comarum palustre</i> , R.          | <i>V. officinalis</i> , L.              |
| ( <i>Potentilla palustris</i> , Ait.) | <i>Euphrasia officinalis</i> , L.       |
| <i>Potentilla anserina</i> , L.       | <i>Echium vulgare</i> , L.              |
| <i>P. tridentata</i> , Ait.           | <i>Mertensia maritima</i> , Don.        |
| <i>Mitella nuda</i> , L.              | <i>Cypripedium spectabile</i> , Swartz. |
| <i>Cotyledon umbilicus</i> ? L.       | <i>Calopogon pulchellus</i> , R. Brown. |
| <i>Nardosomia palmata</i> , Hook.     | <i>Equisetum pratense</i> , Ehrh.       |
| <i>Lobelia Kalmii</i> , L.            | <i>Aspidium (Lastrea) Thelypteris</i> , |
| <i>Campanula rotundifolia</i> , L.    | Swartz.                                 |

*Pyrola rotundifolia*, L.  
*P. elliptica*, Nutt.  
*P. secunda*, L.

*Aspidium Filix-mas*, Swartz.  
*Marchantia polymorpha*, L.

In the notes appended to the list, I omitted to mention *Lobelia Kalmii*, as an addition to the flora, not being observed by any other Provincial collector.

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The object of the foregoing list is no doubt that of presenting an additional location for species already described, since all contained therein, with the exception of seventeen, will be found in the catalogue appended to vol. iv., p. ii., of our Transactions, 1875 and 1876. The major part of them have not been before credited to Hants County, although the species in the present list from other places appear in the catalogue under their respective localities. Of the seventeen additional species denoted by italics, five are cultivated exotics, and two are garden escapes, leaving twelve to be accounted indigenous additions to the Provincial Flora.

I may be excused for remarking here upon the concluding notes of Prof. How's preface, viz., those furnished him by Mr. Thompson, affording as they do, an example of error, to which all are liable by generalizing from a narrow field of observation. In one place, he remarks upon what seemed to him a total absence of *Gaultheria procumbens*, and of its substitution by *chiogenes*. Such a circumstance may be true of Scot's Bay, but it would be wrong to imply that the same held good for the whole Province. A reference to the published catalogue gives as localities, Hants, Halifax, Guysborough. It is very plentiful in Halifax county, and can be found within convenient distance from the city. It is moreover more abundant than *chiogenes*, although yver often they accompany each other. Likewise, he notices the absence of *Rhodora Canadensis*, scarcely excepting the *Vaccinæ*, the most abundant and wide-spread of our Heathworts. The failure was, no doubt, owing to the season at which the locality was under observation. The *Rhodora*, it must be remembered, is an early bloom, putting forth, previous to leafing. It is usually out of blossom by the time that its leaves are fully expanded. It is rare to find a specimen for the Herbarium with perfect flowers and leaves toge-



ther. Those, who in early Spring observe the purpling of our road sides and field borders by its masses of bloom can never separate it from our landscapes. In the catalogue it is denoted in all localities observed. *Mitchella repens*, also referred to, is by no means scarce, as the catalogue shows, though truly less abundant than *Cornus Canadensis*, an observation which obtains for those parts of the New England States which I have visited. As for *Juniperus communis*, the botanist who struggles through uncultivated pastures or pine openings, etc., in quest of plants, is in this locality, (Halifax), at least, unpleasantly reminded of its abundance.

The interest attaching to Mr. Poole's list arises from the presence there of two foreign species, both occurring in the British Flora, but not before described as American, at least we fail to find them in the books on American Botany. These are *Lotus corniculata* Ord. Leguminosæ, and *Cotyledon umbilicus*, Ord. Crassulaceæ. We may conclude with safety that both are importations, derived from Britain, like a host of others, which to all appearance are indigenous; both orders supply us with many introduced plants which have spread themselves either widely or in very few localities. We have in this locality (Halifax) *Medicago*, *Vicia*, etc., of the Leguminous order, now spontaneous. *Sedum*, *acre*, and *S. rhodiola* of the Crassulaceæ in like circumstances. I noticed recently, also, the occurrence *Linaria vulgaris*, in two places near Halifax, viz., the termination of the Coburg Road, and a fallow field on the Chebucto Road.

We cannot attach too much importance to the separation of our indigenous species from those which have been introduced, the latter are annually encroaching upon the former, and are in many instances supplanting them, being aided by the increase of our agricultural area, and the destruction of the forests. Our efforts should be at the present time directed towards collecting and recording the existence of native plants, leaving the others for future effort. To me it seems as unscientific to include introduced plants in our list of aboriginal species, as it would be to enumerate our domestic animals as being members of our native fauna. I am therefore, compelled to confess that the published catalogue to which

I have so often referred, contains many such species presented without explanation as to their origin. The list which formed the basis of this catalogue was prepared by myself, and contained very few species, not indigenous, but in its subsequent compilation the numerous additions from other sources caused the introduction of many species not of native origin, many of which are presented without comment, a circumstance, which was owing to the short time afforded for preparation for the press, along with other exigencies which prevented me from giving it that amount of attention and care which it deserved.

The foregoing explanation is deemed to be requisite for those who cannot avoid observing the errors referred to.

J. SOMMERS,  
*For Editing Com.*

ART. IX.—MOLLUSCA OF NOVA SCOTIA, (CORRECTED TO DATE, 1877.)  
BY J. MATTHEW JONES, F. L. S.

CLASS CONCHIFERA.

Fam. PHOLADIDÆ. Leach.

*Teredo navalis*, L. This species is inserted in Mr. Willis's privately printed list with a query. It was taken from a log in a spar-yard at Dartmouth. Marine Slip timbers at Pictou. (*Whiteaves*.)

*T. dilatata*, St. Very large specimens have been received from Sable Island, taken from wreck timber. (*Willis*.)

*T. Narragica*, Speng. Marine Slip timbers at Pictou. (*Whiteaves*.)

*Zirphora crispata*, Morch. Large specimens have been received from Sable Island. (*Willis*.)

Fam. SOLENIDÆ.

*Eusatella Americana*, Verrill. Sandy shores; whole coast.

*Siliqua squama*, St. Fishing banks; rare. (*Willis*.)