NOTES, REVIEWS AND COMMENTS.

BOTANICAL NOTES.

Sisymbriam Alliaria.—Among some plants sent by Miss Alice Bowen from the vicinity of the Gomin Swamp, Quebec, was a specimen of this European weed. Some years ago a large patch of this plant was observed in the grounds of the Hon. G. W. Allan, at Moss Park, Toronto. It is not a very valuable acquisition to our Flora. The white flowers are small, and the whole plant has a rather disagreeable alliaceous odour, from which it takes its English name, Garlic White Cress.

Cypripedium aristinum.—A splendid clump of this rare Lady's slipper has been presented to the Botanic Garden of the Central Experimental Farm by Mr. R. J. Drummond, of Perth. This beautiful little Orchid is very rare. It has been found in this vicinity in Dow's Swamp, at Alymer and at Buckingham.

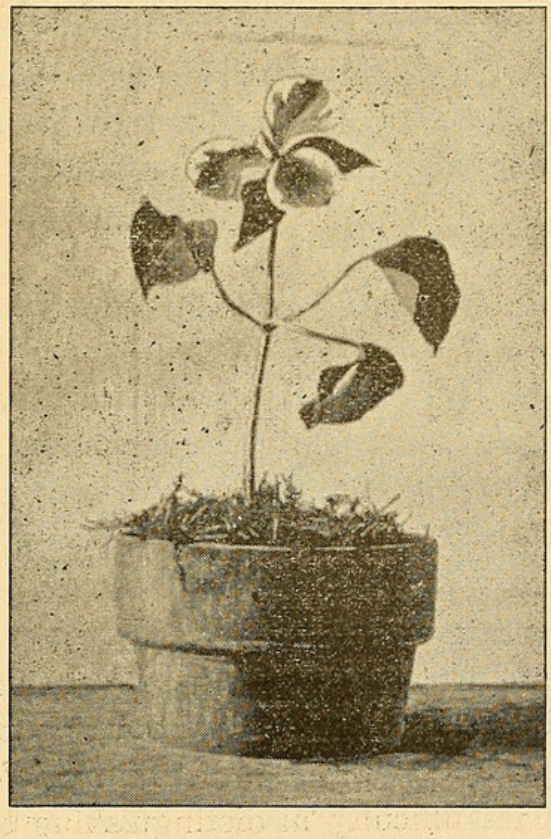
Arethusa bulbosa.—A few specimens of this lovely Orchid were found in full flower in the Mer Bleue by Mr. W. T. Macoun on May the 28th. This is rather earlier than usual for the flowers to be found.

Listera australis.—The bed of this rare but not very showy Orchid was visited on the above named date, and about a dozen specimens were observed in full flower. This locality is the only one so far discovered for *L. australis* in Canada. There is no doubt it is a very rare plant but it is probable that, on account of its dull purplish brown colour, it has been overlooked by collectors.

Habenaria fimbriata, the Large Fringed Orchis.—From time to time specimens of a Fringed Orchis are sent in for confirmation named as above, but in almost all instances the specimens prove to be *H. psycodes*. If full data are kept there is no difficulty in distinguishing between these two species. *H. fimbriata* is not only a larger and handsomer plant in all its

parts, but flowers two or three weeks earlier, the buds are rounder, the spike less crowded and the separate flowers are much larger, deeper in colour, and each one has a rather conspicuous white eye. It has occurred in the vicinity of Ottawa at Eastman's, Buckingham and King's Mere, but is very rare. Mr. J. B. Goode, of Montreal, a well-known and successful collector of our native Orchis, who made an excursion to the Mere Bleue with some members of the Botanical Section, on May 28th found two or three fine plants, although at that time the spike of flowers was only just appearing. The flowers do not expand until the end of June.

Trillium Grandiflorum.—We give herewith a figure of a very beautiful *Trillium* which was received from our esteemed member Mrs. Chamberlin, now of Lakefield, Ont. The specimen was found on May the 1st, under a hawthorn tree in leaf mould with another young specimen The parcel also contained a specimen of undoubted *Trillium grandiflorum*, of which the inner lobes of the perianth ("petals") were beautifully striped with green. I am inclined to think that the present specimen is a variation of *Trillium erythrocarpum*, the Painted *Trillium*, although there are some characters which tend to make this doubtful. *Trillium erythrocarpum* with both whorls of the perianth green are found from time to time in different parts of Canada and are quite abundant in some localities, particularly along the shore of Lake Erie. I have never felt quite



satisfied, however, that the specimens are correctly identified as *T. erythrocarpum*, and any one who finds this form might compare it with *T. nivale*. To show the remarkable *monstrosity* of the beautiful specimen figured, I give herewith the measurements: Height of plant from ground, 9 inches; stem up to base of leaves, 4 inches; peduncle, 3½ inches; petioles, 2¾ inches; blade of leaf, 2½ inches long by 3 in width; "sepals," 2¼ by 1⅛ inches, leaf like; "petals," 1⅛ by 1¼ inches wide, green and leaf-like, each borne on a petiole half an inch long. When young this inner whorl of the perianth had a white margin on each petal from ⅛ to ¼ inch wide. As the flower grew older this white part turned magenta as in *T. grandiflorum* and ultimately faded whilst the green parts expanded and grew larger and assumed a purplish tinge similar to that of the stem. Pistil with three long slender beaks ¾ inch long; capsule ⅜ by ⅛ inch, spindle-shaped rounded, with the angles flattened slightly towards the apex. I fear that the fruit will not bear seed although it is perfectly green and healthy looking.

The photograph from which the figure is made was kindly taken by our President, Mr. F. T. Shutt, on May the 5th. The above given measurements were made on June the 5th.

Camelina sativa, False flags.—Among European weeds which have been introduced into Canada and which are gradually becoming more conspicuous and aggressive, mention may be made of this plant. As a rule, it is an annual, springing up in the summer particularly in the fields of flax with the seeds of which it is frequently imported, and ripening its seeds the same season. Specimens, however, have lately been received which were found by Dr. F. Johnson, near Delaware, Ont. which had made part of their growth last autumn and were flowering early this spring. This has not been previously observed with regard to this species; but is not at all an unusual habit among several other annual crucifers. It may be seen every year with *Capsella bursa pastoris* and in this district with

the newly introduced and pernicious weeds of the prairie province, Ball Mustard, *Neslia paniculata* and Tumble Mustard, *Tisymbrium altissimum, L.* (= *S. Sinapiotrum*, Crantz). In the west owing to the severity of the winter both of these plants are true annuals the seeds germinating in spring and ripening their seeds the same season.

Mr. W. T. Macoun, who is in charge of the work being carried on at the Experimental Farm with introduced ornamental shrubs and trees, reports that, notwithstanding the past unfavorable winter at Ottawa, which began with a long period of very cold weather without any snow on the ground until January 20th and which on the whole has been more disastrous than for some years there was not, however, as great a loss among the trees and shrubs in the Arboretum, Botanic Garden and ornamental grounds at the Experimental Farm, as was at first supposed, many varieties having recovered to a large extent ; and at the present date, June 9th, most are looking well. The show of bloom on most of the shrubs has been better so far than it was last year. In the early part of May the trees and shrubs were about a week earlier in blooming than last year, and vegetation is now from two to four days earlier.

J. F.

REVIEWS OF RECENT GEOLOGICAL AND PHYSICAL WORKS.

MCGILL, ANTHONY, B.A., B. SC.,—"*Viscosity in Liquids and instruments for its measurement. Trans. Roy. Soc. of Canada, (new series), Vol. I sect. III 1895-1896, pp. 97-103, Montreal, 1895.*

Separates of this paper were distributed by the author in advance of the volume just issued, June, 1896. The paper is illustrated with diagrams and figures.

H. M. A.