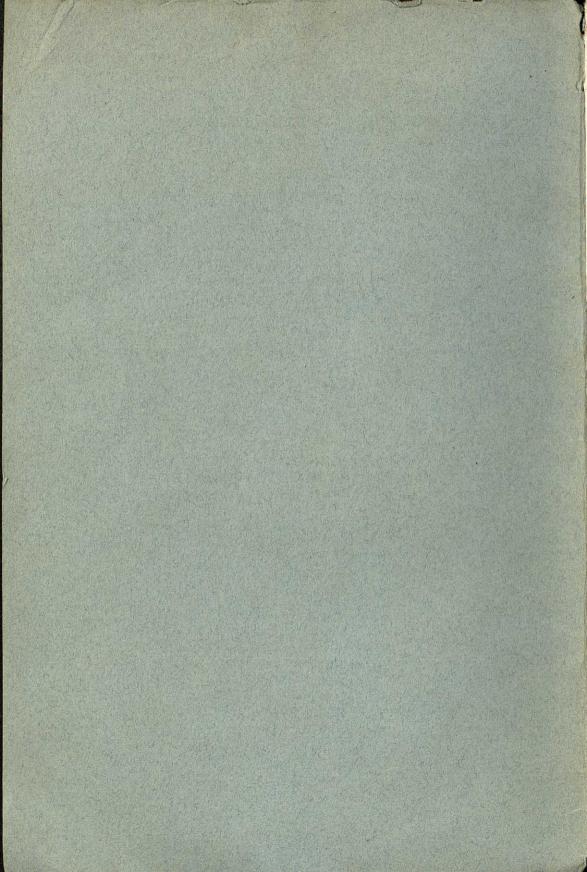


NEW SPECIES AND VARIETIES FROM MICHIGAN

RARE OR INTERESTING PLANTS IN MICHIGAN

By OLIVER ATKINS FARWELL

Reprinted from the 19th Michigan Academy of Science Report, December, 1917



F254

03.649 CB=573563

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CYPERACEÆ.

Scirpus occidentalis (Watson) Chase, variety congestus, N. var.

Spikelets aggregated into a sessile glomerule, or if peduncles are present these are so short that they are hidden by the spikelets. Marl lake, No. 4294, July 9, 1916, and No. 4376, August 13, 1916. Bears the same relation to the species that variety *confertus* does to *S. rubrotinctus*. Not so common as the species.

Carex canescens Lin. var. heterostachya, N. var.

In this form of the species the terminal spike is entirely staminate. Collected on the Keweenaw Peninsula many years ago.

JUNCACEÆ.

Juncus Bufonius Lin. var. ranarius, N. Var.

Juncus ranarius Song. et Perrier in Billot Annot. Fl. France et Allem. 192, 1859 not Nees, 1847. (?)

Sheathes of the lowest leaves dark red, the petals acute not awl pointed, about the length of the capsule and shorter by about a millimeter than the awl pointed sepals. In this plant the flowers are single and remote as in the species, but the petals are shorter than the sepals and not awl pointed, resembling in these characters the var. halophilus. River Rouge, No. 4342, July 21, 1916.

ORCHIDACEÆ.

Corallorhiza maculata Raf. var. intermedia, N. var.

Whole plant purplish yellow; lip white with two or three large, very pale purplish spots; no spots on the other petals or sepals. Copper Harbor, Keweenaw Peninsula, No. 4003, July 8, 1915. Exactly intermediate between the species and the var. flavida (Peck) Cockrl. in color and in spots which are found only on the lip and are fewer, larger, and paler than in the species. The species is common; and the var. flavida also is found at Copper Harbor, No. 4002, July 8, 1915.

^{*19}th Mich. Acad. Sci. Rept., 1917.



CRUCIFERACEÆ.

Arabis Lævigata (Muhl.) Poir. var. Heterophyla, N. var. Arabis heterophylla Nutt.; T. & G. Fl. N. Amer. I, 81, 1838. (?)

Lower part of stem, including leaves, and the rosette leaves pubescent with short, spreading hairs, elsewhere glabrous and glaucous. Rosette leaves and lowermost stem leaves lyrately pinnatifid gradually passing to obovate and lacinate, thence to ovate, ovate-, oblong-, and linear-lanceolate and dentate or entire. The rosette leaves and those on the lower part of the stem are purplish underneath. Flowers erect on erect or slightly spreading pedicels; petals white, six or seven millimeters long, from one-half as long again to twice as long as the sepals; pods spreading or recurved five to seven centimeters long by one and three-quarters to two millimeters wide with a short, stout style not over a millimeter long or sessile stigma. Zoological Park near Royal Oak No. 4210, July 13, 1916.

This plant cannot be typical A. lævigata as that is always described as entirely glabrous and glaucous, while the lower parts of this plant are pubescent. The longest leaves are on the basal part of the stem and are about five centimeters long; the shortest are the uppermost and are six or seven millimeters. It may be the A. heterophylla of Nuttall which was described as with hirsute radical leaves.

SAXIFRAGACEÆ.

Tiarella cordifolia Lin. var. bracteata, N. var.

Scape bearing on the middle section a petioled leaf somewhat similar to the basal but much reduced in size; petiole three millimeters to two centimeters long and the ovate, three-lobed blade from one-half to two centimeters in length and breadth. Near Disco, Macomb Co., No. 4153, May 25, 1916.

CALCARATACEÆ.

VIOLA CANADENSIS Lin. var. pubens, N. var.

More or less densely and almost canescently pubescent throughout with short, spreading hairs. Otherwise like the specific type which is here considered to be the common glabrous form. Near Disco in Macomb Co., No. 4155, May 25, 1916.

VIOLA CONSPERSA Reichb. var. Masonii, N. var.

Flowers pure white. Has the appearance of V. striata but can be readily distinguished by the entire sepals. Near Utica, No. 4163, June 6, 1916. Named for Mr. E. W. Mason of Lapeer, who first observed it near Utica and who called my attention to it.

VIOLA ROSTRATA Ait. var. ELONGATA, N. var.

Spur 15 to 18 millimeters long; sepals narrow, one millimeter or less wide. Near Utica, No. 4166, June 16, 1916. Differs from the species in having a much longer spur and much narrower sepals.

LABIATACEÆ.

Scutellaria Lateriflora Lin. var. albiflora, N. var. Flowers white. Grosse Isle, No. 4385, August 20, 1916.

RINGENTACEÆ.

MIMULUS ALATUS Ait. var. CHANDLERI, N. var.

Flowers pale lavender to white. Collected by Mr. B. F. Chandler of Detroit, at Gawkler's Point in August, 1916.

Mimulus ringens Lin. var. congesta, N. var.

Peduncles shorter than their subtending leaves, Grosse Isle, No. 4391, August 20, 1916. In the specific type the peduncles are longer than their subtending leaves on the upper parts of the plant, forming a broad and open inflorescence. In this variety the peduncles are much shorter, forming a narrow, close inflorescence.

VERONICA ANAGALLIS-AQUATICA Lin. var. GLANDULOSA, N. var.

Stem more or less glandular pubescent. Whole plant smaller and less succulent than in the specific type. Zoo Park, near Royal Oak, No. 4323, July 13, 1916.

Pedicularis lanceolata Mx. var. hirsuta, N. var.

Stems and branches hirsute. In the typical plant the stems and branches are glabrous. On Parkedale Farm, No. 4418½, September 3, 1916; No. 4016, September 3, 1915; No. 4134, October 15, 1915, from Detroit.

COMPOSITACEÆ.

ASTER NOVÆ-ANGLIÆ Lin. var. MONOCEPHALA, N. var.

Stem, simple, strict, ending in a single head. Belle Isle and other places in Detroit.

Heliopsis scabra Dun. var. intermedia, N. var.

Stems glabrous; leaves firm and harshly scabrous as in the species. Near Rochester, No. 4330, July 15, 1916, and No. 4349, August 12, 1916, near Farmington. The species has a very scabrous stem as well as leaves.

LACTUCA CANADENSIS Lin. var. ALBOCÆRULEA, N. var.

Flowers pale blue to white. Bloomfield, No. 4394, August 22, 1916.

RARE OR INTERESTING PLANTS IN MICHIGAN.*

By O. A. FARWELL.

POLYPODIACEÆ.

FILIX CRISTATA (Lin.) Farwell var. CLINTONIANA (D. C. E.) Farwell.

A rare fern. Only three stations are given for it by Beal in the Michigan Flora. It is to be found in cool, moist woods near Utica. No. 4179, June 6, 1916.

SPARGANIACEÆ.

SPARGANIUM SIMPLEX Hudson.

Several species have been segregated from the S. simplex of our earlier manuals. I have not seen anything answering to the S. simplex Hudson as now understood. S. Americanum Nutt. and S. diversifolium Græbner should replace the S. simplex of Beal's Michigan Flora.

Sparganium Americanum, Nutt.

4248, June 29, '16, Cass Lake; 812, Aug. 25, '90, Keweenaw County; 812a, July 24, '10, Rochester.

Sparganium diversifolium Græbner.

Keweenaw County, No. 219, June 16, 1885; Borders of Cass Lake, No. 4249, June 29, 1916.

Sparganium diversifolium var. Acaule (Beebe) F. & E.

2106, Aug. 15, '09, Rochester; 219a, June 16, '85, Keweenaw County.

FLUVIALACEÆ.

POTAMOGETON AMERICANUS C. & S.

Said to be a rare species in Michigan. It is to be found in a slip at the Great Engineering Works, at River Rouge. No. 4340, July 21, 1916.

^{*19}th Mich. Acad. Sci. Rept., 1917.

JUNCAGINACEÆ.

TRIGLOCHIN MARITIMUM Lin. Sp. Pl. I, 339, 1753.

Triglochin maritimum Lin. var. exangulare Reichenb. Ic. Fl. Germ. VII, 28, t. LII fig. 93, 1845.

TRIGLOCHIN MARITIMUM Lin. var. SEXANGULARE Reichenb. 1.c. fig. 92.

Triglochin elatum Nutt. Gen. I, 237, 1818.

Triglochin maritimum Lin. var. elatum (Nutt.) A. Gr. Man. 437, 1856.

There are two forms of the Spike Grass; one with ovoid fruit without a neck at the apex and with rounded carpels; the other has oblong fruit contracted into a neck at the apex and the carpels have depressed backs. The former is typical of the species and the edges of the carpels are not sharply acute; in the latter which is characteristic of the variety the carpels are sharply acute or winged. Reichenbach's varietal name is older by seven years than that of Gray and should be adopted. Both the species and the variety were accredited to Michigan (Great Lakes region), but all the Michigan material which has passed under my observation is of the variety. The cross section of the fruit of the species is circular in outline, while that of the variety is strongly and regularly angular with concave edges between the angles. Marl Lake, No. 4292, July 9, 1916.

ALISMATACEÆ.

SAGITTARIA LATIFOLIA Willd.

In most of its forms this species is common throughout the state. At Marl Lake a form was found that had narrowly linear blades and lobes which unquestionably is the *forma gracilis* (Ph.) Robinson. Not before reported from the State. No. 4362, Aug. 13, 1916.

GRAMINACEÆ.

ZIZANIA AQUATICA Lin.

There are two species of Water Oats or Indian Rice in Michigan. One is a tall, coarse plant with broad leaves and is the Z. palustris Lin. The other is a slender, small plant with very narrow leaves and is the Z. aquatica Lin. They are seldom

found growing together, but when they are so found they are readily distinguished, and do not seem to intergrade. Marl Lake, No. 4372, Aug. 13, 1916, and No. 2115 from Huron River near Geddes, Aug. 21, 1909, are *Z. aquatica* Lin.; No. 1297, August 12, 1892, from Belle Isle; No. 1297a, August 14, 1909, from Grosse Isle; and No. 1297b, from Huron River near Geddes are *Z. palustris* Lin.

Spartina patens (Ait.) Muhl. var. Juncea (Mx.) A. S. H.

An Atlantic salt-water-marsh plant that has become established in the salt marshes at Oakwood. No. 4111, Sept. 23, 1915.

CYPERACEÆ.

TRICHOPHYLLUM ROSTELLATUM (Torr.) Farwell.

Said to be rare in Michigan. The tough, sterile stems recline upon the earth, and when well rooted at the proliferous apex are very liable to trip up the unwary traveler. Marl Lake, No. 4302, July 9, 1916.

Eriophorum cyperinum Lin. var. pelium (Fernald), N. Comb. Scirpus cyperinus (Lin.) Kunth var. pelius Fernald, Rhodora VIII, 164, 1906.

In swamps throughout the State; infrequent in southern Michigan but common in the Upper Peninsula. Marl Lake, No. 4358, August 13, 1916.

TRIODON ALBUS (Lin.), N. comb.

Schænus albus Lin. Sp. Pl. 44, 1753.

TRIODON ALBUS (Lin.) Farwell var. MACER (Clarke), N. comb.

Rhynchospora alba (Lin.) Vahl. var. macra Clarke in Britt. Trans. N. Y. Acad. Sci. XI, 88, 1892.

The variety *macer* has not heretofore been reported from Michigan, in so far as I am aware. It is a tall, coarse plant with a corymb 2-4 cm. broad. Marl Lake, No. 4375, August 13, 1916. Bloomfield Center, No. 4399, August 22, 1916.

Mariscus mariscoides (Torrey) O. K. Said to be infrequent. Marl Lake, No. 4303, July 9, 1916, and No. 4364, August 13, 1916.

SCLERIA VERTICILLATA Muhl.

A rare species in Michigan. I have seen it only on marl beds. Marl Lake, No. 4367, August 13, 1916.

CAREX DIANDRA Schrank var. RAMOSA (Boott) Fernald.

Apparently this form is more common in Michigan than the species, at least in the southeastern section. Marl Lake, No. 4312, July 9, 1916.

CAREX CHORDORHIZA Lin. f.

This species, recorded as rare in Michigan, is quite common in an extensive peat bog in the vicinity of Pontiac. No. 4223, June 18, 1916.

CAREX POLYGAMA Schk. var. HETEROSTACHYA (Anderss.), N. Comb.

Carex Buxbaumii Wahl. var. heterostachya Anderss. Cyper. Scand. 39, 1849.

In this form the terminal spike is entirely staminate. Quite common in places. Algonac, No. 4230, June 22, 1916; Detroit, No. 2034, July 14, 1907.

CAREX DEFLEXA Hornem.

While on a botanical excursion through the fields in the vicinity of Algonac on June 22, 1916, in search of some early flowering Bartonia Virginica that had been found there the preceding autumn, a small area of ground was discovered which was fairly well covered with a small, dark green Carex that on close examination proved to my great surprise and delight to be the rare Carex deflexa. It was more than a score of years since I had discovered this species on the Keweenaw Peninsula and it had not been seen in the interim, and, so far as I am aware, it had not been reported by others, so that these two places are the only known localities for the species in Michigan. The field was low, moist ground only a few feet above the level of Lake St. Clair. The Carex was growing in moss that covered the low knolls or elevations as well as the hollows. The typical form, No. 4226½, is a low plant with leaves not over 20 cm. long and erect, the culms being not over one-half that length and strongly curved. Another and more common form, No. 4226, is the variety Deanei Bailey, which is more lax and has much longer leaves equaled or exceeded by the culms, which are more slender and less curved than in the species. The station near Algonac is close to the southern limits of the range of the species.

CAREX LIMOSA Lin.

This is a very slender sedge that may be looked for in peat bogs. I have not found it in other habitats. It cannot be classed as a common plant in Michigan. Bloomfield, No. 4193, June 15, 1916.

CAREX LAXICULMIS Schw.

A rare sedge in moist woods. The large patches of broad, glaucous, basal leaves at once suggest *C. granularis* or its variety *Haleana*, but the culms and spikes readily show it to be not that species. Vicinity of Palmer Park, No. 4279, July 2, 1916.

CAREX PSEUDO-CYPERUS Lin.

A rare sedge in Michigan. I first made its acquaintance last year, 1916, at Cass Lake, where it was not at all plentiful. No. 4247, June 19.

CAREX PSEUDO-CYPERUS Lin. var. comosa Boott.

Larger and coarser than the species with thicker spikes more loosely flowered and perigynia with a longer beak, the teeth of which are more spreading; the perigynia usually are horizontally spreading. Generally considered as a distinct species under the name of *Carex comosa* Boott. There are intermediate forms, however, with the perigynia strongly reflexed, and it might better be considered as a variety of *C. Pseudo-Cyperus* than as a separate species. Cass Lake, No. 4246, July 29, 1916; Tacoma, No. 4266, July 2, 1916.

JUNCACEÆ.

Juncus Pelocarpus, E. Meyer.

One of the rarer species in Michigan. May be proliferous. Marl Lake, No. 4365, August 13, 1916.

LILIACEÆ.

Quamasia esculenta (Nutt.) Raf.

Frequent on the banks of the Huron near Rockwood, No. 4149, May 21, 1916. Nuttall was the first to discover and name this species. The original habitat or type locality is "near the

confluence of Huron River and Lake Erie;" the station at Rockwood, the only one at present known which might come within the limits of the type locality, may be the identical place where Nuttall originally found the species. Rafinesque established the genus Quamasia in 1818, naming one species, Q. esculenta, which by many present-day botanists is considered to be the western O. Ouamash (Pursh.) Coville. I have not seen Rafinesque's publication, but in his Medical Flora II, 255, 1830, his concept of his Ouamasia esculenta is exactly that of Nuttall's, i.e., it includes both the eastern Camassia Fraseri Torr, and the western C. esculenta Lindley. If the above is the proper interpretation to be applied to Rafinesque's Q. esculenta, then it has been erroneously referred to the western species. Nuttall's species (Fraser's Catalogue, 1813, and Genera I, 219, 1818) was based on plants collected by Nuttall himself in 1810 at the type locality above cited; he also included the western plant under the impression that it was the same species. Rafinesque's name, if based upon Nuttall's. as is probably the case, must of course belong to the eastern species.

ALETRIS FARINOSA Lin.

A rare plant in Michigan. Prefers dry, sandy soil. Vicinity of Marl Lake, No. 4309, July 9, 1916.

Smilax rotundifolia Lin. var. caduca (Lin.) A. Gr. in Darl. Fl. Cest. 319, 1853.

- S. caduca Lin. Sp. 1030, 1753.
- S. quadrangularis Muhl. in Willd. Sp. Pl. IV 775, 1806.
- S. rotundifolia Lin. var. quadrangularis (Muhl.) Darby, Bot. So. States 518, 1855.

Usually rather low and often with very stout, flat spines, colored at the tips, Algonac, No. 3156, June 22, 1916.

SALICACEÆ.

SALIX FRAGILIS Lin.

River banks at Stoney Creek. An escape from cultivation. Seems to have taken the place of S. alba in this vicinity. No. 4152½, May 25, 1916.

SALIX PEDICELLARIS Pursh. var. HYPERGLAUCA Fernald.

A very attractive bog willow. Frequent in bogs and wet meadows. Has passed in our manuals for the European S. myrtilloides. Bloomfield, No. 4198, June 15, 1916.

ARISTOLOCHIACEÆ.

ASARUM REFLEXUM Bicknell var. AMBIGUUM Bicknell.

Woods in Macomb Co., near Disco, No. 4156, May 25, 1916. A. Canadense Lin. is credited to Michigan, but such plants as I have seen are referable to this species or to A. acuminatum (Ash) Bicknell.

PERSICARIACEÆ.

POLYGONUM DUMETORUM Lin.

This species probably has been confused with *P. scandens* Lin. and is more frequent in the state than has been supposed. Rochester, No. 4417, Sept. 3, 1916.

ALSINACEÆ.

Scleranthus annuus Lin.

Fields at Detroit and Wyandotte. Reported by Dr. McCall of the latter place as overrunning cultivated fields. No. 4314, July 11, 1916.

CRUCIFERACEÆ.

BERTEROA INCANA (Lin.) DC.

A hoary pubescent, branching herb that is rapidly spreading and bids fair to rival the Wild Mustard as a pernicious weed. Bloomfield, No. 4188, June 15, 1916.

Arabis Lyrata Lin. var. intermedia (DC), N. Comb.

Arabis ambigua DC. var. intermedia DC. Syst. II, 231, 1821.Arabis lyrata Lin. var. occidentalis Wats. in A. Gray Syn. Fl. N. Amer. I, 159, 1895.

Stigma together with very short and thick style about one-third of a millimeter or less; lower one-third of stem with its leaves more or less hirsute. Has been recorded from three places, Bower's Harbor, Grand Traverse Bay and Alpena in Beal's Michigan Flora. I have collected it from Rochester, No. 1533½, July 4, 1896, and from Macomb Co. in vicinity of Disco, No. 4158, May 25, 1916.

HAMAMELIDACEÆ.

A few years ago Dr. Sargent described a new species of Hamamelis, *H. vernalis*, flowering, as the specific name indicates, in the spring. A search for this species in Michigan has not disclosed its presence here. But unlooked for conditions con-

cerning H. Virginiana were discovered which may be of sufficient interest to others to have them placed upon record. One of the characters of H. vernalis is the red inner surface of the calyx lobes. In H. Virginiana the inner surfaces of the calyx lobes are yellow at the beginning of the flowering season, usually in September in this locality, but gradually grow darker until, at the end of the flowering period, which is about the close of the year, most of them are red; all of them are red when vegetation begins in the spring; at least no calyx lobe has been discovered that was yellow on the inner surface at this time. Individual shrubs were found that had red calyx lobes from the beginning and some even had petals with the lower portion red. The particolored petals, however, were not numerous, nor, in all cases, were all the petals of the one flower bicolored.

POMACEÆ.

Pyrus Melanocarpa (Mx.) Willd.

Said to be frequent throughout the State. Bloomfield, No. 4201, June 15, 1916; Vic. Palmer Park, No. 4403, August 27, 1916. Pyrus Melanocarpa (Mx.) Willd. var. Atropurpurea (Britton), N. Comb.

Aronia atropurpurea Britton, Man. 517, 1901.

Pyrus arbutifolia var. atropurpurea Robinson, Rhodora X, 33, 1908.

Pyrus arbutifolia is credited to Michigan in Beal's Michigan Flora. One of the localities given is St. Clair Co., C. K. Dodge. Dodge's specimens in the Herbarium of Parke, Davis & Co., although distributed as P, arbutifolia are of this variety. It is probable that all so-called P. arbutifolia collected in Michigan is of this variety and the species should be excluded from the Michigan Flora. In P. arbutifolia the calyx lobes are very glandular and the small, ripe fruit is bright red; in P. atropurpurea the calvx lobes are glandless or nearly so and the fruit is much larger and purple or black. I have not seen P. arbutifolia from Michigan, which is outside of the generally accepted range of the species. The two varieties or species have come under my observation here where they often grow together and it seems to me that P. atropurpurea is but a pubescent form of P. melanocarpa: the size and form of the leaves and the color of the fruit are essentially the same in both; the berries of the variety are larger than those of the type, globose or occasionally oval. In the species the leaves and inflorescences are glabrous; in the variety more or less tomentose; but there are intermediate forms, and individual shrubs have some of the leaves and inflorescences tomentose while others are glabrous. It seems best, on the whole, to consider *P. atropurpurea* as not specifically distinct from *P. melanocarpa*. Bloomfield, No. 4200, June 15, 1916, and No. 4396, August 22, 1916; Vic. Palmer Park, No. 4276, July 2, 1916, and No. 4406, August 27, 1916 (some parts pubescent and others glabrous).

GERANIACEÆ.

GERANIUM PUSILLUM, Burm. f.

Banks of Detroit River in Detroit. Considered to be adventive but apparently spreading. No. 4317, July 13, 1916.

TITHYMALACEÆ.

EUPHORBIA GLYPTOSPERMA Engelm.

Along the railroad tracks at Farmington, where it is quite frequent. No. 4350, August 12, 1916.

ZIZYPHACEÆ.

RHAMNUS CATHARTIC Lin.

A few shrubs are found scattered along a rail fence dividing pasture meadows. Probably from seed dropped by birds. No. 4392, August 22, 1916.

SALICARIACEÆ.

LYTHRUM SALICARIA Lin.

In vicinity of Detroit. No. 4404, August 24, 1916. Probably an escape from cultivation.

CORNICULATACEÆ.

ENOTHERA MURICATA Lin. var. PARVIFLORA Gates.

A narrow leaved, small flowered form of *OE. muricata*. Frequent along banks and in fields at Rochester. No. 4415½, Sept. 3, 1916; Belle Isle, Detroit, 195a, August 4, 1912; in a marl bed on Parkedale Farm, No. 3829, August 9, 1914.

ENOTHERA FRUTICOSA Lin. var. PHYLLOPUS Hooker.

This is a form in which there is no distinction between stem and peduncle; the floral leaves are like those of the stem, giving

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to the flowers the appearance of being solitary and axillary. Freely branched. Detroit, No. 4261, June 30, 1916. Occasional and perhaps an escape from cultivation.

CALCARATACEÆ.

VIOLA PAPILIONACEA Pursh. var. ALBA (T. & G.), N. comb.

Viola cucullata Ait. var. alba T. & G. Fl. N. Amer. I. 137, 1838. Smooth; flowers white. Frequent in places. Near Rochester. No. 3628, May 10, 1914, and near Rockwood, No. 4144, May 21, 1916.

VIOLA ROSTRATA, Ait. var. PHELPSIÆ (Fernald), N. comb.

Viola rostrata Ait. forma Phelpsia Fernald, Rhodora XVII, 180, 1915.

Flowers white. Near Rockwood. No. 4146, May 21, 1916. VIOLA PEDATIFIDA, Don.

I have seen living plants of a violet collected by Mr. E. W. Mason of Lapeer, which had palmately many divided leaves, the divisions of which were very long and narrowly linear or filiform. It probably belongs here, where it may be placed until further study will determine its proper disposition. This species has not before been reported from Michigan.

MONOTROPACEÆ.

Pyrola Asarifolia Mx. var. incarnata (Fisch.) Fernald.

Leaves orbicular to ovate, rounded, truncate or subcordate at base, dull, smaller than in the specific type which are of a different form also. Common in swamps at Marl Lake, No. 4184, June 11, 1916, and Nos. 4218 and 4219, June 18, 1916, from near Pontiac. Pyrola Asarifolia Mx. var. uliginosa (Torr. et Gray), N. Comb.

Pyrola uliginosa Torr. et Gray; Torr. Fl. N. Y. I, 453, pl. 69, 1843.

Leaves sub-orbicular to obovate, narrowed to an acute base; smaller than in the preceding variety; not common. Swamps at Marl Lake, No. 4185, July 9, 1916.

POLEMONIACEÆ.

GILIA RUBRA (Lin.) Heller.

Near Farmington, No. 4357, August 12, 1916. Probably an

escape from cultivation, but seems to be well established. First discovered, I believe, by Mr. Gladewitz.

LABIATACEÆ.

OCIMUM BASILICUM Lin. var. GLABRATUM Benth.

Collected near Cass Lake by Mr. C. Billington. Probably an escape from cultivation.

Lycopus asper Greene.

Banks of Detroit River at Wyandotte. No. 4384, August 20, 1917. Has been reported as *L. lucidus* from Port Huron by C. K. Dodge. Lower part of stems prostrate and rooting at the joints.

RINGENTACEÆ.

PENSTEMON DIGITALIS (Sweet) Nutt.

Reported from Adrian in Beal's Michigan Flora. I have collected it on Belle Isle, No. 1916, June 20, 1905, and No. 4229 from Algonac, June 22, 1916.

APARINACEÆ.

Gallium Aparine Lin. var. eschinospermum (Wallr.), N. Comb.

Galium Vaillantii D. C. Fl. France IV, 263, 1805.

Galium agreste Wallr. Var. echinospermum Wallr. Sched. Crit. 59, 1822.

Galium Aparine Lin. var. Vaillantii (D. C.) Koch. Fl. Germ. 330, 1837.

A smaller plant than the type with smaller leaves and fruit. On Parkedale Farm, May 30, 1914, No. 3652; and No. 3964 from Detroit, June 12, 1915.

GALIUM TRIFLORUM Mx. var. VIRIDIFLORUM D. C.

Stems smooth. Near Marl Lake, No. 4305, July 9, 1916.

GALIUM LABRADORICUM, Wiegand.

Probably has been confused with *G. tinctorium*. It is a smaller plant with narrower and shorter, soon reflexed leaves and smaller fruit. Marl Lake, No. 4187, June 11, 1916; Bloomfield, No. 4197, June 15, 1916, and No. 4267 and 4271 at Tacoma, July 2, 1916.

COMPOSITACEÆ.

HELIOPIS HELIANTHOIDES (Lin.) B. S. P. var. MINOR (Hook), N. Comb.

Heliopsis lævis Pers. var. minor Hook, Comp. Bot. Mag. I, 98, 1835.

Heliopsis lævis Pers. var. gracilis T. and G. Fl. N. Amer. II, 303, 1842.

Stem simple, strict, ending in a single head; leaves very thin, very slightly scabrous. Near Rochester, No. 4416, Sept. 3, 1916.

RUDBECKIA MONTICOLA Small.

A form with the lower leaves of an ovate outline and the upper leaves with a very broad clasping base. Near Rochester, No. 4331, July 15, 1916.

HELIANTHUS SCABERRIMUS Ell.

Found at River Rouge by Billington, Chandler & Gladewitz, who reported it as *H. subrhomboideus* Rydb. The involucral scales, however, are mainly obtuse, which would place it here. No. 4380, August 17, 1916. I have also collected it in Houghton Co., No. 3087, August 24, 1912.

Artemisia longifolia Nutt.

Found in considerable quantities near River Rouge. Farwell and Chandler, No. 4379, August 17, 1916.

HIERACIUM AURANTIACUM Lin.

Balast grounds at Detroit, rare, No. 4315, July 11, 1916. Has been found also by Billington, Chandler and Gladewitz.

HIERACIUM VENOSUM Lin. var. subcaulescens, T. and G.

Near Tacoma, No. 4264, July 2, 1916.

ADDENDA.

The plant mentioned above under *Viola pedatifida* proves to be the *V. pedata* var. *lineariloba*, DC. with very narrow or almost filiform lobes to the leaves.

Pyrola Asarifolia, Mx. var. ovata, N. name.

Since the *Pyrola incarnata* Fisch. is an Asiatic plant and a variety of the European *P. rotundifolia* Lin., the plant listed above as *P. Asarifolia* Mx. var. *incarnata* should receive a new name and I propose for it the varietal name ovata.

Parke, Davis Co., Detroit, Mich.

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