

## SOME NEW OR NOTEWORTHY SPECIES REPORTED FOR OHIO IN RECENT BOTANICAL LITERATURE.

OTTO E. JENNINGS.

Having in mind the considerable extent of the current botanical literature relating to the flora of the northeastern United States one is justified, perhaps, in assuming that very few of the botanical readers of the NATURALIST have access to more than a small part of such literature as might occasionally contain references to the flora of Ohio. For this reason it has seemed desirable to call attention to some new or otherwise interesting species which have more or less recently been accredited to Ohio, in order that Ohio botanists may be placed on the look-out for such species and further desirable information thus be brought to light concerning their distribution and occurrence.<sup>1</sup>

1. *Eriophorum viridi-carinatum* (Engelm.) Fernald.

Mr. Fernald distinguishes this species from *E. polystachyon* L., with which it appears to have been variously included by many American botanists, as follows:

"Midrib of the scale prominent only below the membranaceous tip; leaves triangular-channeled above the middle; the upper sheaths dark-girdled at the summit." *E. polystachyon* L.

"Midrib of the scale prominent, extending to the tip; leaves flat, except at the very tip; the sheaths and bracts not dark-girdled." *E. viridi-carinatum* (Engelm.) Fernald.

For the range of his new species Mr. Fernald gives "Bogs and wet meadows, Newfoundland to Saskatchewan and British Columbia, south to Connecticut, New York, Ohio, Michigan, Wisconsin, and said to follow the mountains to Georgia." Among the many specimens designated as typical there is one, without a definite locality, for Ohio, "Ohio (Sullivan)." It is highly probable that other specimens of this species are to be found in Ohio collections.

In his interesting article on Certain Polygonaceous Genera,<sup>2</sup> Prof. Greene says: "A diligent study of much material from almost all parts of the United States, occurring in the herbaria under the name of *Polygonum Muhlenbergii*, more recently denominated *P. emersum*, has shown that this also is an aggregate of species; some of them strongly marked, others less so. They differ one from another markedly as to leaf outline and also as to the attitude of the foliage, the leaves in some spreading

1. Fernald, M. L. The North American Species of *Eriophorum*. Part I. Synopsis of American Species. *Rhodora*, 7: 81-92. May, 1905.

2. Greene, Edward L. Certain Polygonaceous Genera. Leaflets, I: 17-50. January 5 and March 12, 1904.

away from the stem almost divaricately, but in the greater number being ascending or suberect. As to the pubescence they exhibit not only different degrees but different kinds of hairiness; and that of the midvein beneath invariably differs from that of the superficies of the leaf. In both the form and the indument of the bracts of the spikes one finds also another set of specific characters."

Among the new species named in this connection are several which from the localities reported are likely to occur in Ohio but only one is definitely accredited to the State, as follows:

2. *Persicaria laurina* Greene.<sup>2</sup>

"Of the size and the slender decumbent habit of *P. remota*, (which see below) but leaves elliptic-lanceolate and about seven inches long including the one-half inch petiole, thin, sparsely and minutely strigose on both faces, more pronouncedly and densely so on the midvein, especially beneath; ocreae, as also the lower internodes of the stem, sparsely appressed-hairy; spikes very slender, 1 to 2 inches long, on slender glandular-hirtellous peduncles; bracts rhombic-ovate, hairy, not ciliate."

"Catawba Island, in Lake Erie, northern Ohio, 5 Sept., 1897, E. L. Moseley; the type specimens in the U. S. Herb. Leaves with the outline and venation of those of *Laurus nobilis*."

*P. remota* Greene, referred to in the above description, was described from Maine in the same article, partly as follows: "Stem rather slender, 1 to 2 feet long, decumbent, the nodes enlarged, internodes 1 to 2 inches long, glabrous, many angled."

As the writer knows from past experience, Ohio is particularly rich in forms usually designated as *Polygonum emersum* (Mx.) Britt., or closely allied species, and in the abundant material available in and about the many ponds, reservoirs, streams, canals, swamps, marshes, and along Lake Erie, there is a fine opportunity for some Ohio botanist to do some excellent systematic work.

3. *Sisymbrium officinale leiocarpum* DC.<sup>3</sup>

Dr. B. L. Robinson calls attention to the fact that the eldest DeCandolle recognized two distinct forms of *Sisymbrium officinale* and that these two forms are present in the United States.

*Sisymbrium officinale* Scop. "Rather copiously pubescent on stem and leaves; the inflorescence and pods even at full maturity subtomentulose; whole plant bluish or grayish green."

*S. officinale leiocarpum* DC. "Springly pubescent with stiffish slightly retrorse hairs; the inflorescence nearly smooth;

2. Greene, Edward L. Certain Polygonaceous Genera. Leaflets, I: 17-50. January 5 and March 12, 1904.

3. Robinson, B. L. Two varieties of *Sisymbrium Officinale* in America. *Rhodora*, 7: 101-103. June, 1905.

Pods glabrous or with a few scattered hairs; plant inclining to yellowish-green."

Dr. Robinson notes that the variety is the common American form, the opposite being true in Europe, and that the true species is as yet chiefly established in the United States in California, although it has now been found in Maine. The writer would here report having collected specimens of the true species along Mill Creek, Sandusky, Ohio, July, 1905.

4. *Ribes Cynosbati glabratum* Fernald.<sup>4</sup>

"Leaves pubescent only with scattered hairs, becoming glabrate in age." \* \* \* "Ohio Painesville, 1871 (H. C. Beardslee); Oberlin, June, 1894 (Hicks)."

Mr. Fernald points out that *Ribes oxycanthoides* L. has distinct characters of pubescence on certain calcareous soils which he designates as *R. oxycanthoides calcicola* Fernald, and further states that "A striking difference in the degree of pubescence, suggesting that shown in *Ribes oxycanthoides* is found also in *Ribes Cynosbati*." The "typical form of *R. Cynosbati*, with soft-pubescent leaves extends through the St. Lawrence basin to the Great Lakes and beyond, and southward in the Eastern States. An extreme with leaves quite as glabrate as in the true *R. oxycanthoides* is found on the south shore of Lake Erie and on the slopes of some of the higher Alleghanies. Whether this smooth-leaved extreme is, like the typical smooth-leaved *R. oxycanthoides*, confined primarily to the less calcareous soils, the data at hand do not clearly show; but the very glabrate phase of the plant seems worthy of distinction."

While at O. S. U. the writer recalls having on several occasions, although with inward misgivings, designated certain very glabrous specimens as *R. Cynosbati* L., particularly specimens collected by himself along the Huron River in the western part of Huron County and also along the Big Darby between Franklin and Madison Counties. It will be noticed that both these localities are practically in the Devonian limestone outcrop and as nearly as the writer can recall the specimens, which are probably to be found in the State Herbarium at O. S. U., correspond exactly to Fernald's description of *R. Cynosbati glabratum*.

5. *Aloites farinosa* Greene.<sup>5</sup>

Prof. Greene would accept the genus *Aloites* of Rafinesque for certain of the North American species usually placed in the genus *Gentiana* in our present manuals. He describes among others a new species as follows:

4. Fernald, M. L. Some Lithological Varieties of *Ribes*. *Rhodora*, 7: 153-156. Aug., 1905.

5. Greene, Edward L. On certain Gentianaceae. *Leaflets*, I: 91-95. Dec. 31, 1904.

*Aloites foliosa* Greene. "Habit of the last, (*A. mesochora* Greene, which see below) with very ample foliage; leaves  $2\frac{1}{2}$  inches long, half as broad; umbellate flower clusters all subtended by a pair of well developed leaves like an involucre; flowers smaller than in the last; calyx-tube broader, segments partly subulate, partly exactly lanceolate, all very acute, the longest half as long as the corolla, sinuses open, rather obtuse; segments of corolla with short setaceous point."

"Known only from along Vermillion River, northern Ohio; E. L. Moseley, 1898."

Partly as a further explanation to the last species and partly because from its distribution it might possibly be expected to occur in Ohio it may be well to note also:

*Aloites mesochora* Greene.

"Larger plant than the last (*A. occidentalis* (Gray) Greene—*Gentiana quinquefolia occidentalis* (Gray) Hitchcock) with larger foliage and larger flowers but of less branching habit, large plants often simple save as to the axillary pedunculiform branches; calyx with extremely narrow tube, the unequal segments partly linear, partly lanceolate, all setaceously acuminate, the longest of notably less than half the length of the corolla, the sinuses not closed, acute; corolla lobes with unusually long and slender acumination."

"Northern Indiana, also adjacent Michigan and westward to Illinois and Dakota."

The plant here referred to as *Aloites foliosa* Greene is evidently the same as the one referred to by Prof. Moseley in his Sandusky Flora as "*Gentiana quinqueflora* Lam. Vermillion River; frequent on the east fork. Margaretta Ridge; rare," and in this connection one is led to think that perhaps some of the specimens in the State Herbarium at O. S. U. and reported in the Fourth State Catalogue of Ohio Plants as *Gentiana quinquefolia* L. may also be Prof. Greene's new *Aloites foliosa*.

Carnegie Museum, Dec. 26, 1905.