## PLANTS NEW OR RARE TO INDIANA, XVI

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Specimens of all of the species reported in this paper are in the Deam Herbarium and duplicates of some are in other herbaria. Most of the species reported have been checked by specialists.

Triplasis purpurea (Walt.) Chap. Porter County, Sept. 16, 1930, No. 49,839. Low open dune near the highway entrance to Ogden Dunes. Only one clump was collected and this was divided with the National Grass Herbarium.

Panicum dishotomiforum var. puritanorum Svenson. Jasper County, Sept. 18, 1930, No. 49,884. In the lowest place of a dried up marsh about 3 miles southwest of Tefft. Closely associated with Panicum verrucosum and Panicum spretum. Kosciusko County, Sept. 20, 1930, No. 49,942. In mucky soil among cattails on the northeast border of Center Lake, just north of Warsaw.

Lemna minima Phillipi. Cass County, Sept. 11, 1928, No. 46,259. In a buttonbush swamp in the Peabody woods about 3 miles northwest of Hoover. Sullivan County, July 4, 1918, No. 25,718. Roadside ditch 1 mile west of Grayville. Determined by Lawrence E. Hicks.

The genus Chenopodium is now being monographed by Paul Aellen of Basle, Switzerland and no doubt his work will be accepted by American botanists. I sent him my 1929 and 1930 collections and his reports show some new forms for Indiana and two changes in nomenclature. The forms not heretofore reported are as follows:

Chenopodium Bushianum Aellen. I have this species from Carroll, Franklin, Greene, Jefferson, Kosciusko, Lake, Porter, Pulaski, and Whitley counties.

Chenopodium Bushianum forma acutidentatum Aellen. Wells County (Fedde, Rept. 26:119. 1929).

 $\begin{tabular}{ll} \it Chenopodium & \it hybridum & \it of Authors & \it not Linnaeus & \it becomes & \it Chenopodium \\ \it gigantospermum & \it Aellen. \\ \end{tabular}$ 

Chenopodium gigantospermum forma Griffithii Aellen was reported by Aellen for St. Joseph County for Nieuwland (Fredde, Rept.26:147, 1929).

Chenopodium leptophyllum Nutt. Reported by Aellen for Marshall County for Everman (Fedde, Rept.26:147. 1929). I have it from Porter County.

Chenopodium missouriensis var. Bushianum Aellen. Spencer County, Sept. 29, 1929, No. 47,983. Bank of the Ohio River just below the ferry at Rockport.

Chenopodium urbicum var. intermedium (Mert. and Koch) Koch. Pulaski County, Sept. 18, 1929, No. 47,835. In a barn lot near the Werner woods about 3 miles northeast of Winamac.

 $\label{lem:change} {\it Chenopodium\ Boscianum\ Moq.\ ex\ parte\ becomes\ Chenopodium\ Standleuanum\ Aellen.}$ 

Froelichia gracilis (Hook.) Moq. Knox County, June 6, 1930, No. 48,756. Common for about 150 feet in very sandy soil at a siding of the Chicago and Eastern Ill. Ry. about 4 miles south of Vincennes.

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Plants reported as *Cerastium vulgatum* L. (Fernald & Wiegand: Cerastiums of Section Orthodon. Rhodora **22**: 178. 1920) should be referred to the following two forms of which I have as follows:

Cerastium vulgatum var. hirsutum Fries. I have this form from Daviess, Decatur, Hancock (Mrs. Chas. C. Deam), Huntington, Jackson, Jennings, Lagrange, Laporte, Owen, Putnam, Randolph, St. Joseph, Shelby (Mrs. Chas. C. Deam), Steuben, Tipton (Mrs. Chas. C. Deam), and Wells counties.

Cerastium vulgatum var. hirsutum forma glandulosum (Boenn.) Druce. I have this form from Brown, Crawford, Hendricks (Mrs. Chas. C. Deam), Noble, Owen. Porter, Ripley, Scott, Starke, and Tippecanoe counties.

Linum floridanum var. intercursum (Bickn.) Weatherby. Jasper County, Aug. 19, 1925, No. 42,207. In sandy soil on the low border of a marsh about 3 miles southeast of Tefft. Also noted in several other nearby marshes. Starke County, Aug. 2, 1916, No. 21,040. In moist sandy soil on the border of a marsh on the southeast side of Bass Lake.

K. M. Wiegand who has recently revised the species of Oxalis that occur in Indiana has gone over my collection and I have the following forms and species to report as new to Indiana.

Oxalis europea forma villicaulis Wiegand. I have it from Adams, Blackford, Boone, Cass, Dearborn, DeKalb, Franklin, Gibson, Greene, Harrison, Hendricks (Mrs. Chas. C. Deam), Huntington, Jennings, Kosciusko, Lake, Laporte, Marion, Monroe, Morgan, Noble, Owen, Parke, Porter, Posey, Randolph, Scott, Shelby (Mrs. Chas. C. Deam), Spencer, Steuben, Sullivan, Vermillion, and Wayne counties.

Oxalis europea var. Bushii forma subglabrata Wiegand. Daviess County, June 12, 1929, No. 46,840. In a rather low woods on the Wilson farm about 5 miles northwest of Montgomery.

Oxalis europea var. Bushii forma vestuta Wiegand. I have this form from Benton, Blackford, Clark, Crawford, Delaware, Dubois, Jackson, Madison, Orange, Posey, Spencer, Warrick, and White counties.

Oxalis florida Salisb. (Oxalis Filipes of Gray's Man. ed. 7.) Perry County, May 20, 1918. Wooded bluff of the Ohio River about 6 miles east of Cannelton.

Oxalis stricta var. piletocarpa Wiegand. Bartholomew County, May 21, 1911, No. 8,226. In sandy field about 3 miles west of Columbus. Fountain County, June 4, 1905. Along the railroad a fourth mile south of Veedersburg.

 $\it Malvia\,borealis$  Wallm. Fountain County, July 8, 1918, No. 25,837. In á barn yard at Fountain.

Hypericum longifolium Small. This species is an inhabitant of low places, usually in low flat woods. I have it from Clark, Jackson, Knox, Spencer, and Warrick counties.

Ligusticum canadense (L.) Britton. This species was reported for Hamilton County in Coulter's Catalogue for Wilson. Thaspium barbinode, which closely resembles this species, occurs in this county but Wilson did not report it. Since the habitat of Ligusticum canadense is not found in Hamilton County there is little doubt but that Wilson made a wrong determination. I have a fine specimen of this species from a rocky wooded slope in Harrison County, June 11, 1919, No. 27,287. I found it in a moist place near the top of the hill along the road which leads up the high bluff of the Ohio River from Stewart's Landing, about 3 miles east of Elizabeth.

Tomanthera auriculata (Michx.) Raf. (Gerardia auriculata Michx. of Gray's Man. ed. 7 and Otophylla auriculata (Michx.) Small of Britton and Brown's Illus. Flora ed. 2.) This species has been reported for Indiana for Jefferson County by Young, for the lower Wabash Valley by Schneck, for Lake County by Ball and by Hill, and for Tippecanoe County by Cunningham. So far as I know these authors have left no specimens. The species is no doubt very rare in Indiana so I make record of my finding it this summer. Elmore Barce of Fowler found it in a marsh about one mile south of Fowler, Benton County and last year he showed me the location. This year I found three specimens there. One has been deposited in the Gray Herbarium, one in the herbarium of the Philadelphia Academy of Sciences, and one I have. The marsh in which these were found has been recently drained and probably will be farmed next year, exterminating it in that place.

