

## PLANTS NEW TO INDIANA—IX.

CHAS. C. DEAM, Bluffton, Indiana.

Specimens of the plants reported are deposited in my herbarium under the numbers given. The Gramineae were determined at the U. S. Dept. of Agriculture; the Carices by K. K. Mackenzie; and the determination of the remainder, unless otherwise mentioned, were verified at the Gray Herbarium.

*Elodea Planchonii* Caspary.

Knox County, August 18, 1919. No. 29,224. About six miles northwest of Decker, floating in rather swift running water in the upper course of the Deshee River which at this point is a dredged ditch. Determination made by Harold St. John of the Gray Herbarium.

*Paspalum laeviglume* Scribner.

Knox County, Sept. 21, 1920. No. 32,940. Right of way of the railroad at Vollmer Siding, two miles north of Decker.

*Muhlenbergia cuspidata* (Torr.) Rydb.

Tippecanoe County, Oct. 20, 1920. Collected by H. S. Jackson along Big Wea Creek, about three miles southwest of Lafayette.

*Leptochloa filiformis* (Lam.) Beauv.

Perry County, August 13, 1919. No. 28,949. Abundant in a small corn field just south of Tell City, and near the U. S. Hame Works.

*Poa paludigena* Fernald.

Lagrange County, June 21, 1920. No. 31,117. Noted in one place growing in sphagnum in an old tamarack swamp five miles east of Lagrange. Associated with *Geum rivale*, *Rhamnus alnifolia*, etc.

*Panicularia acutiflora* (Torr.) Kuntze.

Harrison County, June 10, 1919. No. 27,855. In a small pool on the north side of the Corydon and Milltown pike, on the crest of a ridge about four miles northwest of Corydon.

*Bromus purgans* variety *latiglumis* (Scribn.) Shear.

Allen County, Sept. 16, 1906. No. 1,707. Alluvial bank of the St. Mary's River on the south side of Ft. Wayne. Huntington County, Sept. 30, 1920. No. 32,606. Bank of the Salamonie River three miles northwest of Warren. Parke County, Sept. 17, 1920. No. 32,832. Wooded bank of Sugar Creek just east of Turkey Run State Park. Steuben County, Aug. 18, 1916. No. 20,878. Moist sandy shore of the east side of Clear Lake.

*Elymus virginicus* variety *hirsutiglumis* (Scribn.) Hitchc.

Cass County, Aug. 21, 1920. No. 32,098. Low bank of the Wabash River opposite Georgetown. Huntington County, Sept. 13, 1920. No. 32,608. Bank of the Salamonie River three miles northwest of Warren. Marion County, Aug. 24, 1913. No. 14,073. Bank of White River, eight miles above Indianapolis. Warren County, Sept. 15, 1920. No. 32,734. Low bank of Pine Creek one and a half miles south of Rainsville.

*Cyperus acuminatus* Torr. & Hook.

Greene County, October 2, 1917. No. 24,088. In the bottom of a dredged ditch about two miles northwest of Lyons.

Crawford County, May 28, 1919. No. 27,710. Low wet place in a flat woods about three miles northwest of Leavenworth.

*Carex Sprengelii* Dewey.

Miami County, June 8, 1920. No. 31,060. A large colony in blue grass sod along the road bordering Eel River, about one-half mile southwest of Chili. Noble County, May 28, 1920. No. 30,501. Several large clumps in blue grass sod along the roadside about one mile south of Rome City.

*Carex substricta* (Kükcn.) Mackenzie.

Laporte County, June 4, 1920. No. 30,764. In a marsh enclosed by tamarack, one-half mile north of Mill Creek.

*Zygadenus chloranthus* Richards.

Lagrange County, Aug. 28, 1920. No. 32,489. Low sedge opening in a tamarack swamp five miles east of Lagrange. Also found in a sedge opening in the tamarack marsh on the south side of Pigeon River one mile east of Mongo.

*Iris foliosa* Mackenzie & Bush.

Gibson County, June 10, 1913. No. 19,303. Low wooded border of Foote's Pond about nine miles southwest of Owensville. Posey County, May 23, 1911. No. 8,287. Moist woodland about 12 miles southwest of Mt. Vernon. My specimens were determined by E. B. Williamson who for many years has cultivated many species of *Iris*, and who has made a special study of the genus. Live specimens from the localities mentioned were sent to him and have been cultivated by him in his garden ever since. Among the many species of *Iris* he has under cultivation are *Iris foliosa*, *Iris versicolor* and *Iris hexagona*. When the three species are grown side by side it is easy to see that all are quite distinct. It is believed that all references to *Iris hexagona* in Indiana should be referred to *Iris foliosa*.

*Berteroa incana* (L.) DC.

Elkhart County, July 7, 1920. No. 31,322. Common along the sandy roadside two miles northeast of Bristol. Noted also in two other places in sandy soil along the roadside and adjacent fallow fields in the same county.

*Erysimum repandum* L.

Jay County, May 18, 1919. No. 27,488. Spread over an area almost a rod square along the roadside on the Portland and Winchester road about six miles south of Portland.

*Heuchera macrorhiza* Small.

Clark County, July 11, 1919. No. 27,998. Common on the wooded limestone cliffs with a north exposure, just east of the mouth of Fourteen-mile Creek. Closely associated with *Sullivantia ohionis* which is common on the wet shaded cliffs.

*Heuchera parviflora* Bartl.

Perry County, July 24, 1920. No. 28,566. In the shade of large trees on a dry sand stone cliff on the farm of John Gleason about two miles southwest of Leopold. Only a few plants found.

*Amelanchier humilis* Wiegand.

Lagrange County, May 27, 1920. No. 30,433. On a cleared sand hill about one and an eighth mile southeast of Mongo. Here it averaged 20-30 inches

in height. In an adjoining black oak woods, it sometimes reached a height of five feet.

*Rubus idaeus variety canadensis Richardson.*

Lagrange County, June 21, 1920. No. 31,116. In a tamarack swamp five miles east of Lagrange. Lake County, July 28, 1907. No. 2,379. In a thicket on the dunes near Pine. Steuben County, July 4, 1904. Among the tamarack on the low border of the west side of Graveyard Lake.

*Prunus cuneata Raf.*

This is an erect shrub which usually is about three to six feet tall. However, it is occasionally somewhat higher, and I found one specimen twelve feet high and about one and a half inches in diameter breast high. It sends up suckers and is usually found in clusters. It prefers a moist habitat, although it is often found in quite dry sandy places among the dunes. Along the beach of Lake Michigan like all other woody plants it is often somewhat scrubby but never decumbent and rooting at the nodes. Its favorite habitat is low places between the dunes, and at a distance from the dune area it is found in low flat *Quercus palustris* woods, usually associated with *Aronia melanocarpa*, species of *Salix*, etc. I have taken it so many times in so many counties that I will give the names of the counties only in which I have taken specimens: Cass, Elkhart, Fulton, Lake, Newton, Porter, Pulaski, St. Joseph and Starke. By other writers this form in our area has been called *Prunus pumila*. There is but one form in our area and I believe it is properly referred to this species.

*Trifolium reflexum variety glabrum Loja.*

Posey County, June 15, 1918. No. 25,431. Common in a flat woods ten miles southwest of Mt. Vernon. Associated with *Quercus stellata*, *Quercus falcata*, *Agave*, *Baptisia leucantha*, etc. For a description of the form see *Muhlenbergia* Vol. 5:38:1909.

*Geranium Bicknellii Britton.*

Lake County, July 12, 1920. No. 31,631. In a burned over area in a *Quercus palustris-Quercus velutina* woods one mile south of Griffith. Associated with *Corydalis sempervirens*, etc., vigorous specimens had a spread of three feet in diameter. Starke County, July 14, 1920. No. 31,855. In a burned over area in a clearing in a *Quercus palustris-Quercus velutina* woods three miles north of Ora. Here it was very closely associated with *Epilobium angustifolium*; and vigorous plants had a spread of three feet.

*Callitriche autumnalis L.*

Lake County, July 12, 1920. No. 31,640. In a dried up marsh one mile south of Griffith, especially frequent among a lot of cat-tails.

*Cornus stricta Lam.*

Knox County, Aug. 19, 1919. No. 29,252. Low place in Little Cypress Swamp about twelve miles southwest of Decker. Also noted in the same county in a very low place in a woods bordering Swan Pond about six miles northwest of Decker. Posey County, April 20, 1919, and Aug. 15, 1919. No. 29,086. A shrub about 6-7 feet tall in a low place in a low woods about ten miles southwest of Mt. Vernon. In this low woods within a radius of 250 feet have been found for the first time in Indiana the following southwestern plants: *Styrax americana*, *Trachelospermum difforme* and *Trifolium reflexum var. glabrum*.

*Vaccinium angustifolium* Ait.

This blueberry is frequent in sandy black oak woods of the northwestern counties, and no doubt has been reported by authors under some other name. I have found it in Elkhart, Lake, Laporte, Newton, Porter and Starke Counties.

*Vaccinium vacillans* variety *crinitum* Fernald.

This form appears to be more robust than the species, and in its distribution seems to follow the distribution of the species. I have specimens from the following counties: Clark, Floyd, Jackson, Pulaski and St. Joseph Counties.

*Gentiana villosa* L.

Harrison County, Oct. 6, 1920. No. 33,443. Found by Mrs. Chas. C. Deam in a black oak woods about two miles southeast of Corydon.

*Vincetoxicum gonocarpos* Walt.

Knox County, Sept. 21, 1920. No. 32,969. On the bank of a small slough near White River and about one mile east of where it empties into the Wabash. This species was reported by Clapp as a very rare plant in the vicinity of New Albany. It was also reported as occurring in Gibson and Posey Counties in Coulter's Catalogue on the authority of Dr. Schneck, but Schneck's herbarium contained no specimen.

*Salvia silvestris* L.

Marshall County, July 15, 1920. No. 31,898. Several large colonies in a closely grazed pasture field on the west side of the road about one-half mile north of Culver. This is a European weed, and judging from the vigor of the colonies, and the fact that it was not touched by horses or cattle, it might become a troublesome weed. In the same pasture were several colonies of *Galium Mollugo*, another European weed.

*Veronica peregrina* var. *xalapensis* (H.B.K.) Pennell.

This is the pubescent form of this species and comes into our area from the northwest. It is the common form in the northwestern counties, especially in sandy fallow fields, etc. I have specimens from Knox, Kosciusko, Lagrange, Laporte, Perry and Steuben Counties.

*Agalinis Gatlingeri* (Small) Small.

Noble County, Aug. 25, 1914. No. 14,608. A single specimen found at the base of a white-black oak ridge on the south side of Deep Lake which about one mile south of Wolf Lake, Perry County, Sept. 24, 1918. No. 26,707. Open woods on top of the Van Buren Ridge near the Harmony school house, about seven miles southeast of Cannelton. This species was determined by Francis W. Pennell, Jan. 17, 1921.

*Galium Mollugo* L.

Marshall County, July 15, 1920. No. 31,899. Several colonies in a closely grazed pasture on the west side of the road about one-half mile north of Culver.

*Galium verum* L.

Noble County, June 21, 1920. No. 31,110. Abundant in dry soil along the roadside about one mile west of Kendallville. Here it grows in large pure stands in blue grass sod.