PLANTS NEW TO INDIANA. VIII.

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Specimens of the species reported are deposited in my herbarium under the numbers given. The Gramineae were determined at the U.S. Department of Agriculture; the Carices by K. K. Mackenzie; the Carya and Crataegus by C. S. Sargent; the Viola and Rubus by Brainerd; the remainder were checked at Gray herbarium.

Paspalum supinum Bosc.

Greene County, August 10, 1918. No. 26,090. Near the base of a wooded beech slope about one and one-half miles west of Stanford. Monroe County, August 9, 1918. No. 26,068. Growing on a slope with Hedeoma pulegioides and Vernonia altissima in a pasture field about three miles northeast of Bloomington. Orange County, August 14, 1918. No. 26,231. In a clover field between Paoli and Mitchell. Perry County, September 24, 1918. No. 26,735. Along a little used wagon road over the crest of a wooded sandstone ridge about eight miles southeast of Cannelton.

Andropogon Elliottii Chapman.

Clark County, October 30, 1918. No. 26,865. On the Forest Reserve in forest tract No. 16, near the border of the tract which borders the wooded slope of the "knobs."

Panicum yadkinense Ashe.

Perry County, June 4, 1918. No. 25,101. In Section 22 of Union Township at the base of a black oak slope, associated with Hydrophyllum macrophyllum, Tradescantia virginiana, etc.

Zizania aquatica L.

Lagrange County, August 30, 1914. No. 15,045. In Pigeon River about two miles east of Ontario. The base of the plant in water. Steuben County, August 19, 1916. No. 20,913. In shallow water on the north side of Lime Lake. This is the Zizania aquatica of Linnaeus, not of Authors.

Muhlenbergia glabriflorus Scribn.

Posey County, September 21, 1918. No. 26,645. Low, flat woods on the south side of Half Moon Pond, which is about ten miles southwest of Mount Vernon.

Sporobolus canovireus Nash.

Elkhart County, September 13, 1918. No. 26,362. On a sandy knoll along the roadside two and a half miles east of Bristol. Associated with Andropogon scoparius, etc.

Agrostis Elliottiana Schultes.

Floyd County, May 31, 1917. No. 23,298. In an alfalfa field along the Ohio River about six miles west of New Albany. Lawrence County, May 16, 1918. No. 24,808. About a quarter mile east of Tunnelton in an open woods pasture on an exposed point of the high bluff of White River. Associated with Sagina decumbens, Rumex Acetosella, Poa pratensis, etc.

Poa autumnalis Muhl.

Clark County, May 11, 1913. No. 12,706. On the Forest Reserve in a wooded ravine just north of forest tract No. 28. Jackson County, May 15, 1918. No. 24,762. Growing in the shade in a flat woods about five miles southwest of Seymour. Associated with Fagus, Liquidamber, Nyssa sylvatica, Quercus Michauxii (Gray's Manual, 7th ed.), etc. Jennings County, May 14, 1918. No. 24,748. In a flat woods about seven miles south of Vernon. In low ground with Fagus, Liquidamber, Impatiens biflora, Podophyllum, etc.

Bromus commutatus Schrad.

Warrick County, June 11, 1918. No. 25,308. Common on the sandy bank of the Ohio River about one and a half miles east of Newburg.

Scleria oligantha Michx.

Perry County, June 3, 1918. No. 25,069. Frequent over a small area on the dry, wooded slope of a spur of the sandstone ridge about eight miles southeast of Cannelton. Associated with Quercus velutina, Fagus, Fraxinus biltmoreana, Acer saccharum, etc.

Carex hormathodes var. Richii Fernald.

Harrison County, June 4, 1917. No. 23,417. In a swampy woods one and a quarter miles east of Palmyra. Associated with Carex Buxbaumii, Carex lanuginosa, etc.

Carex Shriveri Britt.

Whitley County, June 19, 1917. No. 23,704. Moist, sandy shore of the north side of New Lake, about ten miles northwest of Columbia City.

Carya alba subcoriacea Sarg.

Posey County, September 20, 1911. No. 10,182. A large tree on the east bank of the Cypress Swamp, about thirteen miles southwest of Mount Vernon. Carya Buckleyi arkansana Sarg.

Knox County, August 28, 1915. No. 18,232. In the Knox sand on the ridge just east of what was formerly a cypress swamp, at Vollmer, or about two miles north of Decker.

Carya ovalis var. obcordata, forma, vestita Sary.

Knox County, October 5, 1917. No. 24,144. A very large tree in a low woods bordering Dan's Pond, which is 14.3 miles southwest of Decker.

Rynchospora corniculata (Lam.) Gray, var. interior Fernald.

Harrison County, October 13, 1916. No. 22,407. In a swampy woods one and a quarter miles east of Palmyra. Associated with Carex louisianica, etc.

Polygonum exsertum Small.

Greene County, October 2, 1917. No. 24,082. In low ground at the edge of a field where it borders Horseshoe Pond, about three miles southeast of Lyons. Associated with Chamaesyce Preslii, Eupatorium serotinum, Cyperus sp., etc.

Calycocarpum Lyoni (Pursh) Nutt.

Posey County, October 13, 1917. No. 24,323. Wooded border of a slough about twelve miles southwest of Mount Vernon. Also noted as common on the wooded bank of the east side of the cypress swamp about thirteen miles southwest of Mount Vernon. Spencer County, June 8, 1918. No. 25,210. In anthesis at this time. A common vine in a slough about six miles southwest of Rockport, climbing trees and shrubs to a height of eight to twelve feet. Noted also in Perry County about eight miles southeast of Cannelton, but no specimen was preserved.

Barbarea verna (Mill.) Aschers.

Jefferson County, May 1, 1918. No. 24,582. Frequent along the roadside and rocky adjoining bluff of the Ohio River about two miles west of Madison.

Crataegus arduennae Sargent.

Allen County, May 31, 1915. No. 15,834. A large tree on the south bank of the St. Mary's River just south of Fort Wayne.

Crataegus conjuncta Sargent.

Wells County, May 12, 1915. No. 15,625. On the border of a pond in a white oak woods on the south side of the lake in Jackson Township.

Crataegus Dodgei Ashe.

Lagrange County, May 17, 1915. No. 15,662. Roadside, about one mile northwest of Howe. Wells County, May 12, 1915. No. 15,624. A tree ten feet high and one and a quarter inches in diam-

eter breast-high on the border of a pond in a white oak woods on the south side of the lake in Jackson Township.

Rubus Baileyanus x Enslenii.

Vanderburg County, May 10, 1917. No. 22,894. In clay soil on the slope of a roadside cut about one mile west of Darmstadt.

Lathyrus latifolius L.

Lawrence County, August 13, 1918. No. 26,215. In the vicinity of the site of the former dwelling house and in the deep adjoining woods on the Donaldson farm, about three miles southeast of Mitchell. There has been no dwelling here for at least fifteen years, and the plant has spread into the original forest, where several large colonies were noted. It is to be noted that Vinca minor has invaded the original forest here and forms a complete mat over several acres and is fast spreading in the dense forest.

Viola hirsutula x missouriensis.

Clark County, May 30, 1917. No. 23,261. On the slopes of a wooded ridge two miles northwest of Bennettsville. Associated with Quercus Prinus (Gray's Man., 7th ed.), Quercus velutina, Quercus alba, Pinus virginiana, Houstonia caerulea, etc. Prefers to grow in hard clay in exposed places.

Viola missouriensis Greene.

Clark County, May 30, 1917. No. 23,261. On a wooded slope two miles northwest of Bennettsville, associated with the preceding. Daviess County, May 3, 1917. No. 22,667. In a low, flat woods one mile west of Plainville. Also along the roadside six miles southeast of Elnora. Gibson County, May 6, 1917. No. 22,809. In a low, flat woods three miles northwest of Patoka. Greene County, May 2, 1917. No. 22,654. In alluvial soil along a creek four miles northwest of Bloomfield. Knox County, May 6, 1917. No. 22,741. In a low woods on the border of Claypole Pond about eleven miles southwest of Decker. Associated on the border of Claypole Pond with Quercus palustris, Ulmus americana, Liquidamber, Phlox divaricata, etc. Owen County, May 1, 1917. No. 22,622. Alluvial bank of Eel River on the road between Coal City and Worthington. Vigo County, May 12, 1917. No. 22,934. Alluvial soil along the bank of Wabash River, three miles west of Prairieton.

Viola missouriensis x sororia.

Knox County, May 3, 1917. No. 22,681. In a sandy black and white oak woods two miles east of Bicknell. Also taken in a sandy black and white oak woods four miles southeast of Vincennes. Sullivan County, May 11, 1917. No. 22,913. In a wooded creek bottom two miles west of Sullivan. Tippecanoe County, May 16, 1917. No.

23,061. Frequent on the white oak slope of the Wabash River terrace just north of the Soldiers' Home. Vanderburg County, May 10, 1917. No. 22,895. In a black and white oak woods one mile west of Darmstadt.

Viola missouriensis x triloba.

Daviess County, May 3, 1917. No. 22,679. Low woods one mile west of Plainville. Abundant here and associated with Ulmus americana, Betula nigra, Quercus bicolor, Phlox divaricata, Claytonia virginica, Cardamine bulbosa, etc. Greene County, May 2, 1917. No. 22,640. Associated with oak at the top of a beech slope about ten miles southeast of Bloomfield. Also in a sandy woods one mile north of Newberry. Associated with Fagus, Sassafras, Quercus alba, Quercus velutina, Podophyllum, Polygonatum biflorum, etc. Knox County, May 6, 1917. No. 22,733. In a low woods bordering Claypole Pond, about eleven miles southwest of Decker. Lawrence County, June 8, 1917. No. 23,556. In an old fallow field about three miles southeast of Mitchell. Associated with Rubus Enslenii, Panicum commutatum, Sassafras, etc.

Viola viarum Pollard.

Knox County, May 6, 1917. No. 22,719. In moist, sandy soil along the railroad, about four miles south of Vincennes. Closely associated with Viola affinis and Viola sororia.

Decodon verticillatus laevigatus T. & G.

Jackson County, August 16, 1913. No. 14,025. In a bog about a half mile south of Chestnut Ridge. Lagrange County, August 29, 1914. No. 14,979. On the west shore of Twin Lakes. Lake County, August 23, 1915. On the east shore of Cedar Lake. Owen County, September 22, 1917. No. 23,874. On the shore of Stogdill Pond, about four miles southeast of Spencer.

Oenothera triloba Nutt.

Jefferson County, May 1, 1918. No. 24,580. Common on a washed, sterile, sparsely wooded slope of the bluff of the Ohio River just east of Madison. Associated with Opuntia Rafinesque, Plantago virginica, etc. A specimen of this species was sent me from Washington County in June, 1917, from near Salem, by W. H. Rudder. Oenothera triloba parviflora Wats. was reported in Coulter's Catalogue for Blatchley from Monroe County, but Blatchley's original manuscript of the flora of Monroe County does not give this species, but does give Oenothera biennis parviflora. In Coulter's Catalogue the species was reported under a revised nomenclature, and it is believed an error was made in transferring it. Therefore it is here proposed to drop from our flora Oenothera triloba var. parviflora, which is as yet known only from the area west of the Mississippi.

Oxydendrum arboreum (L) DC.

Perry County, June 3, 1918. No. 25,071. A few trees on the lower slope of a beech-sugar maple spur of the sandstone wooded ridge about eight miles southeast of Cannelton. The largest tree was about six inches in diameter breast-high and about forty feet high. This species was closely associated with Fagus, Cornus florida, Nyssa sylvatica, etc.

Styrax americana Lam.

Posey County, June 15, 1918. No. 25,420. Frequent in a swampy place in a flat woods about ten miles southwest of Mount Vernon. A shrub four to six feet high. Associated with Cephalanthus occidentalis and the next.

Trachelospermum difforme (Walt.) A. Gray.

Posey County, June 15, 1918. No. 25,442. A vine climbing a button-bush to a height of six feet, in a swampy place in a low, flat woods about ten miles southwest of Mount Vernon. Closely associated with the last. This plant was detected by the fragrance of its flowers, which could easily be smelled for a rod distant.

Myosotis micrantha Pallas.

Parke County, May 24, 1918. No. 25,037. A common weed about the Administration Building in Turkey Run State Park.

Hedeoma hispida Pursh.

Putnam County, June 24, 1915. No. 1,094. Collected by Earl J. Grimes in a barren pasture field four miles east of Russellville. Uncommon.

Linaria minor (L.) Desf.

Vigo County, July 5, 1918. No. 25,791. Frequent in ballast along the Vandalia Railroad at the Haeckland switch, about four miles southeast of Atherton.

Veronica Tournifortii Gmelin.

Wells County, July 16, 1917. No. 23,761. Common in the lawn of Geo. T. Kocher on South Main street, Bluffton. Also common in a lawn on East Cherry street, Bluffton. This weed was kept under observation in 1918, and it appears that the lawn mower does not stop its progress, and it should be regarded as an aggressive weed.

Utricularia cleistogama (Gray) Britt.

This record was founded on a sheet in the Schneck herbarium which is now in my herbarium. I had the specimen examined by Dr. J. H. Barnhart, a specialist on this genus, and he says it is Utricularia gibba; that it is small and depauperate because it developed late in the season. It is here proposed to drop this species from our flora.

Lonicera japonica Thunb.

Clark County, September 7, 1915. No. 18,770. Roadside half a mile south of Charleston. In this county, near Sellersburg, this species was noted where it had invaded a clearing and had formed a complete mat over an acre. It climbed all of the shrubs of the area and was bending them down. This vine is already recognized in several counties as a great pest. Floyd County, June 8, 1913. No. 13,216. Common along the roadside about three miles west of New Albany. Jefferson County, May 28, 1911. Frequent on the rocky bluffs of the Ohio River between Madison and North Madison. Perry County, May 19, 1918. No. 24,910. Sandy roadside two and a half miles north of Tobinsport. A veritable pest here. Posey County, July 5, 1915. No. 16,852. Roadside one mile northeast of Poseyville.

Aster macrophyllus var. ianthinus (Burgess) Fernald.

Clark County, September 12, 1917. No. 23,794. On a white oak ridge on the Forest Reserve.

Eupatorium incarnatum Walt.

Perry County, September 24, 1918. No. 26,732. Along a woods road over the crest of the wooded sandstone ridge about eight miles southeast of Cannelton. Noted also near a spring at the base of the bluffs of the Ohio River about six miles east of Cannelton.

Taraxicum erythrospermum Anderz.

I thought this species had been reported many years ago, but I find no mention of it. It no doubt is found in lawns and fields in all parts of the State. I have specimens from the following counties: Grant County, May 23, 1916. No. 19,804. Roadside nine miles east of Marion. Huntington County, May 24, 1916. No. 19,774. Common in an open woods pasture two miles south of Mount Etna. Jasper County, May 8, 1916. No. 19,419. Abundant along the Pennsylvania Railroad about two miles east of Goodland. Newton County, May 8, 1916. No. 19,397. Frequent in a blue-grass pasture about one and a half miles east of Brook. Noble County, May 12, 1916. No. 19,624. Moist, sandy shore of the east side of Diamond Lake. Porter County, May 10, 1916. No. 19,496. In sandy soil along roadside two and a half miles south of Valparaiso. Randolph County, May 16, 1916. No. 19,630. Abundant in beech woods pasture five miles north of Winchester. St. Joseph County, May 10, 1916. No. 19,548. Along roadside eight miles west of South Bend. Wells County, May 23, 1916. No. 19,814. In an open woods about three miles south of Mount Zion. Noted also in many places in the county and very common in lawns. In many places it is more common than the other species of dandelion, especially in sandy soil.