## PLANTS NEW OR RARE TO INDIANA, XX

CHAS. C. DEAM, Bluffton, Indiana

Specimens of all of the species reported in this paper are in the Deam Herbarium. Specimens have been identified, or the identification has been checked, by specialists on the groups to which they belong.

Gymnopogon ambiguus (Michx.) BSP. Daviess County, no. 55,656, Sept. 19, 1934. A small colony on an open sand hill in a small woods in the south half of sec. 33 of Steele Township about five miles northwest of Washington.

Juncus scirpoides Lam. No. 21,517, from Newton County and no. 21,710, from Whitley County, I refer to Juncus Torreyi Coville.

Spiranthes Beckii Lindl. Harrison, County, no. 33,462, Oct. 6, 1920. In hard, white clay soil in an open black oak woods about two miles southeast of Corydon. Owen County, no. 23,947, Sept. 22, 1917. In an open, sterile white oak woods about six and a half miles southwest of Spencer.

Carya pallida Ashe. Knox County, no. 54,690, Oct. 8, 1934. A single tree found on the sand ridge on the west side of the C. & E. I. Railroad about a quarter of a mile north of the Duncan Siding or about four miles south of Vincennes. This sand ridge varies from 10 to 25 feet in height and extends from Vincennes to the White River and forms the escarpment east of the Knox County bottoms.

X Quercus runcinata Engelm. (Quercus borealis var. maxima Ashe x Quercus imbricaria Michx.) Lawrence County, nos. 2,767 and 2,768, Oct. 2, 1934. Two trees about 100 rods apart were found along the roadside between Avoca and Eureka on the west side of the J. Moses Fell annex experimental farm of Purdue University, about five miles west of Bedford. These were discovered by Ralph M. Kriebel, a local botanist, whose discerning eyes have detected, also, several specimens of the hybrid X Quercus Leana Nutt. in the same county. This rare hybrid has been found only a few times.

X Quercus Schuettei Trel. (Quercus alba L. x Quercus bicolor Willd.) There are two trees about 3 inches in diameter in the Deam Arboretum near Bluffton, Indiana. These trees originated from seed planted a few years ago, probably from Wells County.

Hosackia americana (Nutt.) Piper. Clay County, August 22, 1934. This specimen was found in a fallow field near the Pennsylvania Railroad about a mile east of Brazil by Prof. Fred Donaghy who has kindly permitted me to report it for him.

Clitoria mariana L. Crawford County, no. 41,581, July 15, 1925, on a black and white oak ridge about a half mile east of West Fork and a quarter mile north of State Road 62. Dubois County, no. 51,544,

Oct. 10, 1931, on a wooded sandstone slope about three-fourths of a mile northwest of Cuzco. Perry County, no. 33,193, Oct. 1, 1920, on a black and post oak ridge about eight miles east of Cannelton. Spencer County, no. 41,621, July 17, 1925, on the crest of a black, white, and post oak ridge about two and a half miles south of Lincoln City.

Euphorbia glyptosperma Engelm. Steuben County, no. 55,400, Aug. 25, 1934. Several plants on the open, gravelly, high bank of the north side of Bass Lake about five miles west of Angola.

Asclepias Meadii Torr. Lake County, July 3, 1888. This specimen was collected in the vicinity of Crown Point by Chancellor M. A. Brannon and contributed to the Deam Herbarium by S. C. Wadmond of Delavan, Wisconsin.

Aster interior Wiegand. (Rhodora 35:35-36. 1933.) (Aster Tradescanti L. in part of Gray's Man., ed. 7.) I have this species from the following counties: Allen, Dearborn, De Kalb, Dubois, Lagrange, Parke, Starke, Steuben, Tippecanoe, Vigo, Warrick, and Whitley.

Aster missouriensis Britton. I have this species from the following counties: Gibson, Knox, Lagrange, Porter, Randolph, Steuben, and Warrick.

Anthemis nobilis L. La Porte County, no. 54-941, May 26, 1934. Common in very sandy soil about the farm buildings and in an adjacent nursery about a mile north of Mill Creek.