PAPERS FROM THE PROGRAM OF THE BOTANY AND BACTERIOLOGY SECTION

PLANTS NEW OR RARE TO INDIANA, XIX

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Specimens of all of the species reported in this paper are in the Deam Herbarium.

Juneus scirpoides Lam. Newton County, Aug. 30, 1916, no. 21,517. In a low, sandy, prairie habitat 9 miles north of Morocco. Whitley County, Sept. 11, 1916, no. 21,710. Low border of the southwest side of Blue River Lake.

Chenopodium missouriense Aellen. My specimens were named by Paul Aellen of Basle, Switzerland. Clay County, Sept. 21, 1932, no. 53,225. Roadside in Coalmont. Vermillion County, Sept. 19, 1932, no. 53,166. In a prairie habitat one and a half miles north and three-fourths of a mile west of Dana.

Anemone caroliniana Walt. This species was reported for Vigo County in 1897. Blatchley says it was collected by Miss Nora Arnold along the Durkey's Ferry road about five and a half miles north of Terre Haute. He adds that it was known to be there by Miss Arnold for, at least, 12 years. So far as I know Blatchley did not preserve specimens, at least, there was none in his herbarium which I bought. This year I asked Fred Donaghy of the State Normal School to visit the place and ascertain if it still persisted. On April 30, 1933, he found it to be common with Ranunculus fascicularis on a sand hill near the old Otter Creek school house and elsewhere.

Cladrastis lutea (Michx. f.) K. Koch. Brown County, Aug. 18, 1933, no. 54,279. This species was discovered by Messrs. Lewis and Zavitz of the Civilian Conservation Corps while working in the Brown County Game Preserve. The find was reported to me by T. E. Shaw, extension forester of the Purdue Agr. Exp. Sta., and he and I collected specimens on the above date. The tree from which we collected specimens is located in the north center of the Brown County Game Preserve on a slope and near the top of what is locally known as the Ogle Hollow. At this place there are several small trees, ¾ inches in diameter, and one large one about a foot in diameter, which is a snag about 9 feet high, the base being alive for about 4 feet and with numerous small branches. We were told that this species was found in adjacent hollows and that a former owner had cut one tree up into lumber. The tree is located in an area where black, white, and chestnut oak and hickory are the dominant species. The trees of this colony were an under story, growing on the steep slopes of both sides of the ravine with a remarkable variety of trees for this region. Within a radius of 50 feet the following species of trees were found: Acer saccharum,

Carya ovata, Carya glabra, Cornus florida, Fagus grandifolia, Fraxinus americana, Juglans cinerea, Ostrya virginiana, Quercus borealis var. maxima, Quercus montana, and Tilia glabra.

Callirhoë triangulata (Leavenw.) Gray. This species was reported by Scott McCoy in Hoosier Outdoors 13, no. 7, October, 1933. He writes that he found it "Aug. 14, 1932, growing in very sandy soil along the C. & E. I. Railroad about one mile north of Oaktown, Indiana." Since Hoosier Outdoors has a very limited circulation I am making this report. There is no specimen of this species in the Gray Herbarium or in New York Botanical Garden Herbarium.

Hydrocotyle americana L. Lagrange County, July 10, 1933, no. 54,090. A small colony was found in a clump of sphagnum moss among several small tamarack trees on the east side of Cogg Lake, which is half mile west of Oliver Lake or about 5 miles northwest of Wolcottville.

Aster exiguus (Fernald) Rydb. This is a segregate from Aster ericoides L. (Aster multiflorus Ait.) which I have from Benton, Jasper, Newton, Noble, Porter, Tipton, Vermillion, Warren, and White counties.

Aster ericoides L. (Aster multiflorus Ait.). Since this species and the preceding are an aggregate, it is best to give the distribution of the segregates. I have this species from Lake and Sullivan counties.

Aster oblongifolius var. rigidulus Gray. (Aster Kumleini Fries). This is a form of the species with an upwardly appressed pubescence. I have it only from Tippecanoe County where it is found in gravelly soil on the north side of Big Wea Creek where the creek is crossed by State Road 25.

Erigeron pusillus Nutt. Knox County, Aug. 28, 1915, no. 18,293, in very sandy soil along the railroad about 4 miles south of Vincennes. I found it here in 1933 and also on a sand hill along the railroad about a mile north of Oaktown.

Anaphalis margaritaceae (L.) B. & H. Elkhart County, Sept. 24, 1933, no. 54,645. A colony about 3 feet wide and 5 feet long in sandy soil, bordering a black and white oak woods on the south side of the road a mile and a half south of the Michigan line and about 6 miles northwest of Elkhart. It is to be noted that this species is strongly stoloniferous and odorless while Gnaphalium obtusifolium with which it is confused is an annual and has a strong characteristic odor. This species has been reported for various parts of the state but I believe all, at least, south of our northern border should be referred to Gnaphalium obtusifolium.

Hieracium longipilum Torr. St. Joseph County, Sept. 24, 1933, no. 54,666. Frequent in very sandy soil in a fallow field on the south side of the Anderson Road about a half mile west of the Elkhart County line or about 3 miles southeast of Granger. We have reports for this species in the state but this is the first authentic specimen I have seen.