PLANTS NEW OR RARE TO INDIANA. No. V.

CHAS. C. DEAM.

Specimens of the species reported are deposited in my herbarinm under the numbers indicated. The Gramineæ were determined by A. S. Hitchcock; the Carices by K. K. Mackenzie; the Juneus by H. H. Bartlett; and the Antennariæ by M. L. Fernald.

Panicum Werneri Scribn.

Floyd County, June 8, 1913. No. 13,256. In a sterile white and black oak woods on the "knobs" about one mile west of New Albany.

Muhlenbergia foliosa Trin.

Grant County, September 4, 1914. No. 15,279. Low border of the lake located about five miles northeast of Fairmount.

Whitley County, August 23, 1914. No. 14,562. Low border on the west side of Round Lake.

The only reference to this species occurring in the State is in Rhodora, Vol. 9:19:1907, in an article by Lamson-Scribner on "Notes on Muhlenbergia", in which he refers to "No. 68, by H. B. Dorner from Indiana." Apera spicaventi (L.) Beauv.

Orange County, August 1, 1914. No. 15,561. Frequent over an area of five or six acres about one mile west of Leipsic. Reported by Prof. M. L. Fisher of Purdue University.

Bromus arvensis L.

Jefferson County, May 28, 1911. No. 8,486. In a woods along the road-side about one-half mile south of North Madison.

Bromus hordeaceus L.

Laporte County, May 28, 1913. No. 13,031. Frequent along the roadside east of the water works at Michigan City.

Carex Leavenworthii Dewey.

Shelby County, June 8, 1913. No. 13,193. Collected by Mrs. Chas. C. Deam in a dry woods one and a half miles west of Morristown.

Vermillion County, May 8, 1910. No. 5,819. In dry soil in a wooded rayine about one mile northwest of Hillsdale.

Carex louisiana Bailey.

Gibson County, June 10, 1913. No. 13,297. In a low flut woods on the east side of Foote's pond.

Carex projecta Mack.

Hendricks County, July 13, 1913. No. 13,677. Collected by Mrs. Chas. C. Deam in a swamp about five miles northwest of Danville.

Curex suberecta (Olney) Britt.

Noble County, June 26, 1914. No. 14,350. Low border of Engle Lake.

Shelby County, June 8, 1913. No. 13,204. Collected by Mrs. Chas. C. Deam in the Milburn Swamp about one mile west of Morristown.

Tipton County, May 24, 1913. No. 12,909. Collected by Mrs. Chas. C. Deam in a low place along the Lake Erie Railroad about two miles west of Goldsmith.

Carex picta Steud.

Brown County, May 21, 1910. No. 6.412. Somewhat frequent on the oak ridges between Helmsburg and Nashville. This sedge has the habit of growing in bunches. When established for some time it advances in the form of a circle, the center of which is bare. Areas two feet in diameter have been noted with a ten-inch bare center.

Morgan County, August 12, 1913. No. 13,958. Collected by Mrs. Chas. C. Deam on a wooded hillside about one and a half miles northeast of Martinsville.

Gray's text-book of botany gives this species as occurring in a ravine near Bloomington upon the authority of Dudley.

Carex impressa (S. H. Wright) Mack,

Allen County, June 14, 1914. No. 14,258. Creek bottom about seven miles south of Ft. Wayne.

Gibson County, June 9, 1913. No. 13,339. In a low flat woods about four miles west of Patoka.

Grant County, June 16, 1907. No. 2,057. Along a creek about two miles northeast of Van Buren.

Hamilton County, May 19, 1912. No. 10.549. Collected by Mrs. Chas. C. Deam in a swamp near Carmel.

Hancock County, June 2, 1912. No. 10,892. Collected by Mrs. Chas. C. Deam in a ditch along the C. H. & D. Railroad near Reedsville.

Huntington County, July 4, 1907. No. 2,141. In a wet woods about two miles north of Buckeye.

Johnson County, June 8, 1912. No. 11,088. Collected by Mrs. Chas. C. Deam along Young's Creek south of Franklin.

Marion County, May 30, 1911. No. 8,522. Collected by Mrs. Chas. C. Deam in a ditch near Irvington.

Posey County, May 24, 1911. No. 8,350. In a wet woods near Goose Pond.

Wells County, May 22, 1908. No. 3,040. Abundant in a wet woods just south of Bluffton.

Carex atherodes Spreng.

Tipton County, July 9, 1913. No. 13,632. Collected by Mrs. Chas. C. Deam in a prairie habitat along the Lake Erie Railroad about two miles west of Goldsmith.

Juncus brachycarpus Engelm.

Crawford County, July 13, 1899. In a valley near Wyandotte Cave.

Marshall County, July 2, 1911. No. 9,021. In a ditch along the railroad about one mile south of Culver.

Alsine graminea (L.) Britt.

Laporte County, May 22, 1910. No. 6,440. On the bank of an open ditch through the prairie just west of the State Prison.

Ranunculus cymbalistes Greene.

Floyd County, April 20, 1913. No. 12,565. Type locality about one-half mile south of the Southern Railroad on the top of the first wooded ridge west of New Albany. Associated with *Pinus virginiana* Mill. and *Quercus Prinus* L.

Physocarpus opulifolius var. intermedius (Rydb.) Rob.

Starke County, September 1, 1914. No. 15,152. A large colony on the south side of Bass Lake.

Sanguisorbia minor Scop.

Lawrence County. Introduced in grass seed in a field about 80 rods from the boundaries of Orange and Washington counties. Reported by Prof. M. L. Fisher of Purdue University.

Meibomia illinoensis (Gray) Kuntze.

Benton County, July 31, 1912. No. 11,839. Roadside about four miles north of Fowler.

Jasper County, July 30, 1912. No. 11,789. Roadside about four miles west of Remington.

Lagrange County, August 29, 1914. No. 14,939. Roadside about three miles northeast of Howe. Associated with *Kuhnia eupatoroides*, and *Drymocallis agrimonioides*.

Lake County, July 29, 1912. No. 11,750. Roadside about four miles southeast of Cedar Lake.

Marshall County, July 2, 1911. No. 8,995. Open wooded hillside about a half mile south of Culver.

Steuben County, August 11, 1903. In woods near Gage Lake. In the same county on a gravelly wooded hill on the east side of Hog-back Lake in 1906. No. 1,265.

Hartmannia speciosa (Nutt.) Small.

Floyd County, June 8, 1913. No. 13,260. Abundant in an alfalfa field and on both sides of an adjoining road on the "knobs" west of New Albany, just beyond the terminal of the traction line to Silver Hills. Solidago hispida Muhl.

Steuben County, September 20, 1914. No. 15,504. In white oak woods and along a wooded roadside on the east side of James Lake.

Antennaria neodioica Greene.

Wells County, May 28, 1914. No. 14,190. Growing with white oak and Antennaria fallax on the high clay bank of the Wabash River about one mile below Vera Cruz.

Antennaria Parlinii Fernald.

Brown County, May 21, 1910. No. 5,985. Frequent on sterile wooded hills between Helmsburg and Nashville.

Clark County, May 8, 1912. No. 10,496. In sterile white and black oak woods on the Forest Reserve.

Decatur County, May 5, 1912. No. 10,479. Abundant on the top of the sterile wooded bank of Flat Rock River about half a mile above St. Paul.

Jennings County, April 28, 1912. No. 10,429. Top of the high bank of the Muscatatuck River between Vernon and North Vernon.

Martin County, May 20, 1913. No. 12,872. On top of a wooded bluff along White River about two miles above Shoals.

Montgomery County, May 16, 1913. No. 12,750. In a white oak woods along Sugar Creek near the "Shades".

Ripley County, May 19, 1912. No. 10,570. On dry clay bank of Baupst Creek about one mile west of Morris.

St. Joseph County, May 29, 1914. No. 14,204. Dry woods about five miles southwest of South Bend.

Antennaria Parlinii var. arnoglossa (Greene) Fernald.

Vermillion County, May 8, 1910. No. 5,837. Top of the bank of a wooded ravine about a mile and a half northwest of Hillsdale.

Antennaria solitaria Rvdb.

Floyd County, April 20, 1913. No. 12,552. Growing under a beech tree in the "knobs" about a mile west of New Albany, also on the top of one of the "knobs" with *Ouercus Prinus*.

