Notes Upon Some Little Known Members of the Indiana Flora.

(PAPER NUMBER TWO.)

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A year ago I gave some notes from my studies in systematic botany, for the summer of 1903, in a paper under the above heading. Certain facts gleaned from my studies the past season, seem to justify me in offering a continuation of that paper. A review of Dr. Coulter's catalogue of the State flora and of all of the subsequent "Additions to the flora ——," etc., in the Academy's "Proceedings," indicates that a few of my recent takes are not reported from the State. Two or three are, however, undoubtedly migrants, though evidently here to stay.

Specimens verifying most of these records have been placed in the herbarium of Mr. Harley H. Bartlett. These are now with him at Harvard University and have been critically examined and compared at the Gray Herbarium. Almost all are also represented in my collection of plant seeds. In accordance with Mr. Bartlett's request. I include a few records which are strictly his own. In reality his name should appear with mine as joint author of this paper.

Avena fatua L. (Marion County.)

A half dozen specimens of this well-marked oat were found by Mr. Bartlett and myself along the "Monon," at the State Fair Grounds, Indianapolis, in July, 1903. About the same number of plants was noted there by myself in August, 1904. An introduction from Europe, it is abundant in California and is not reported east of Minnesota by Britton and Brown,*

Uniola latifolia Michx. (Madison County.)

A small patch found along White River near Anderson. Jefferson County is the only station report by Dr. Coulter.†

Bromus tectorum L. (Tippecanoe and Madison Counties.)

This grass has been recently admitted to the State flora.‡ It is abundant where found at Lafayette and Anderson.

Bromus brizeformis Fisch. and Mey. (Laporte County.)

Found commonly along the Michigan Central R. R. from near Michigan City, Indiana, to New Buffalo, Berrien County, Mich. Said

by Britton and Brown to be "sparingly introduced into Pennsylvania; also from Montana to California. Native of Northern Europe and Asia."

Carex folliculata L. (Laporte County.)

Common in a small tamarack swamp northeast of Michigan City.

Carex intumescens Rudge was also taken in a wet wood south of Michigan City.

Carex monile Tuckerman. (Madison County.)

Taken in a small bog along the Big Four Route, southwest of Anderson. Reported only from Gibson County in State catalogue.

Carex trichocarpa Muhl. (Madison County.)

An abundant rank-growing sedge in boggy places along White River, above and below Anderson.

Carex hystricina Muhl. (Madison County.)

Reported only from extreme northern counties. Taken in a low wet place south of Anderson. Noted as scarce.

Carex aquatilis Wahl. (Laporte and Marion Counties.)

Taken by Mr. Bartlett near Indianapolis; by myself south of Michigan City.

Carex costellata Britton. (Laporte and Marion Counties.)

Also taken near Indianapolis by Mr. Bartlett and near Michigan City by the writer.

Carex lanuginosa Michx. (Madison and Delaware Counties.)

Taken by me near both Anderson and Muncie. In the State catalogue Jefferson County is the only definite station given, but the species has been later reported from Kosciusko County by H. W. Clark.§ and is probably well distributed over the State.

Carex gracillima Schwein. (Madison County.)

Taken near Alexandria. Not common.

Carex Davisii Schwein, and Torr. (Marion County.)

Taken by Mr. Bartlett at Indianapolis. Scarce. Steuben County seems to be the only other station on record.

Carex grisea Wahl. (Marion County.)

Taken by H. H. Bartlett near Indianapolis in 1903.

Carex mirabilis perlonga Fernald. (Madison and Delaware Counties.)

Taken near Anderson and Muncie by the writer.

Carex alata ferruginea Fernald. (Marion County.)

Taken near Indianapolis by Mr. Bartlett.

Juncoides campestre bulbosa Wood. (Marion County.)

Taken by Mr. Bartlett near Indianapolis.

Lilium umbellatum Pursh. (Starke County.) .

Taken by me in "swampy meadows." This plant is reported in two different places in the Academy's Proceedings for 1901 (pp. 164 and 301). I note it here because of the environment in which I found it.

Atriplex patula L. (Marion County.)

Very common in waste places in Indianapolis, especially along Central Avenue. Recognized in 1903 and omitted from my last paper through mistake. Reported from Steuben County by Bradner; but omitted from the State catalogue (see p. 607 of same) because of lack of verifying material.

Atriplex hastata L. (Madison County.)

Taken at Anderson. First reported from Wells County by C. C. Deam.

Tragopogon pratensis L. (Madison County.)

Common along the C., C., C. & St. L., near the Quartz Works, Anderson. Taken both in bloom and in fruit.

Antennaria fallax Greene. (Marion County.)

Taken by Mr. Bartlett at Indianapolis, river-bluffs opposite Fairview Park.

Mr. Bartlett's work at the Gray Herbarium has led us to change our view concerning one of my records of 1903. An annotation in the herbarium copy of Britton & Brown's "Illustrated Flora," to the effect that the characters and figuring of Cavex Baileyi Britton do not hold good as regards the material in the herbarium, led Mr. Bartlett to compare the specimens, determined by us as Baileyi, with the herbarium material. As our specimens agree with the typical Cavex lurida Wahl. (of which Baileyi is there regarded as a sub-species), in spite of Britton's key, etc.. I feel it advisable to cancel my records of Carex Baileyi.

^{*} Illustrated Flora of the Northern States and Canada; I, 173.

[†] Flowering Plants and Ferns of Indiana, State Geol. Report; 1899, 643.

[‡] Additions to the Flora of Indiana; Proc. Ind. Acad. Sci.; 1900, 137. ₹ Flora of Eagle Lake and Vicinity; Proc. Ind. Acad. Sci.; 1901, 162.

