ADDITIONAL ALGAE OF THE LOWER WABASH VALLEY

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This report, made up primarily of algal forms collected in Posey and Gibson Counties, is presented by the writers as an addition to two previous reports of Lower Wabash Valley algae. Although the majority of the forms listed are from the two counties mentioned above, a few forms from other counties have been added. These latter forms have been identified from collections of 1932.

All forms listed from Posey and Gibson Counties were collected on a one-day trip to the extreme southwestern section of the State. Considerable difficulty was experienced by the writers in obtaining algal material in this section of Indiana, because of the hard rains of the early spring and summer months. Every body of water of consequence was visited in Posey County, but with little success. The most valuable materials collected, especially the Oedogoniaceae, were found in roadside ditches and small, shallow bodies of water. Hovey's Lake and Half Moon Pond, two of the largest bodies of water in Posey County, were found to be barren of algae. Surface samples taken with the plankton net in Hovey's Lake were practically devoid of algal forms.

The same methods of collection, preservation and identification were used as described in previous papers. The preservation solution used was Transeau's solution of water, alcohol, and formaldehyde in the ratio of 6:3:1.

The writers are reporting a total of 36 species and varieties. these, eleven species and one variety have not been previously reported Two species, Oedogonium crispum, variety hawaiense Nordstedt, and Oedogonium lageniforme Hirn., have not been previously recorded in published reports from the United States. All other forms are new for the counties listed.

ALGAE SYSTEMATICALLY ARRANGED

CLASS I-MYXOPHYCEAE

Order-Chroococcales

¹Aphanocapsa rivularis (Carm) Rabenhorst. Gibson Co., July 5, 1935.

⁴Merismopedia punctata Meyen. Gibson Co., July 5, 1935.

⁴Merismopedia tenuissima Lemmerman. Posey Co., July 5, 1935.

CLASS V—CHLOROPHYCEAE

Order—Volvocales

*Eudorina elegans Ehrenberg. Posey Co., July 5, 1935.

⁴Pandorina morum Bory. Posey Co., July 5, 1935.

⁴Volvox mononae G. M. Smith. Posev Co., July 5, 1935.

¹Species—not previously reported from state. ²Variety—not previously reported from state.

³Genus-not previously reported from state.

⁴Genus or species or variety—not previously reported from county.

Species-not previously reported from United States.

Order—Chlorococcales

²Pediastrum integrum var. priva Printz. Posey Co., July 5, 1935.

⁴Coelastrum cambricum Archer. Parke Co., September 14, 1932.

⁴Crucigenia crucifera (Wolle) Collins. Posey Co., July 5, 1935.

¹Oocystis elliptica W. West. Sullivan Co., July 5, 1935.

⁴Scenedesmus bijuga (Turpin) Lagerheim. Posey Co., July 5, 1935.

Order-Ulotrichales

⁴Ulothrix zonata (Weber and Mohr) Kuetzing. Posey Co., July 5, 1935.

Order-Oedogoniales

¹Oedogonium areolatum Lagerheim. Posey Co., July 5, 1935. Previously reported from Iowa and Ohio. Measurements of oogonia and oospores slightly smaller than those recorded by Lagerheim.

⁴Oedogonium borisianum (Le Clerc) Wittrock. Posey Co., July 5, 1935.

¹Oedogonium crenulatocostatum var. aureum Tilden. Posey Co., July 5, 1935.

 $^{1}Oedogonium\ crispum\ var.\ gracilescens$ Wittrock. Posey Co. July 5, 1935.

⁵Oedogonium crispum var. hawaiense Nordstedt. Posey Co., July 5, 1935. Previously reported from Hawaii.

⁴Oedogonium globosum Nordstedt. Posey Co., July 5, 1935.

⁵Oedogonium lageniforme Hirn. Posey Co., July 5, 1935. Oospore filling lower part of oogonium in most cases. Previously reported from Brazil.

⁴Oedogonium plagiostomum Wittrock. Vigo Co., August 28, 1932. ⁴Oedogonium pringsheimii var. nordstedtii Wittrock. Posey Co., July 5, 1935. Oospore slightly smaller than those recorded by Wittrock.

Vegetative cells more nearly answer the description of var. abbreviatum.

'Oedogonium rugulosum Nordstedt. Posey Co., July 5, 1935. Epiphytic on Oedogonium and Bulbochaete.

*Oedogonium varians Wittrock and Lundell. Posey Co., July 5, 1935.

Order-Zygnemales

¹Spirogyra articulata Transeau. Vigo Co., 1935.

¹Spirogyra tetrapla Transeau. Vigo Co., 1935.

⁴Zygnema insigne (Hassall) Kuetzing. Vigo Co., 1935.

¹Zygnema subcruciatum Transeau. Vigo Co., 1935.

Order—Desmidiales

*Closterium ehrenbergii Menegh. Posey Co., July 5, 1935.

¹Closterium lunula. Posey Co., July 5, 1935.

⁴Closterium moniliferum (Bory) Ehr. Posey Co., July 5, 1935.

⁴Euastrum verrucosum var. alatum Wolle. Posey Co., July 5, 1935.

⁴Hualotheca dissiliens (Smith) De Brebisson. Posey Co., July 5, 1935.

'Penium margaritaceum (Ehren.) De Brebisson. Posey Co., July 5, 1935

⁴Pleurotaenium maximum (Reinsch) Lund. Gibson Co., July 5, 1935.

⁴Pleurotaenium trabecula (Ehrenb.) Nag. Gibson Co., July 5, 1935.

¹Staurastrum pusillum Wolle. Vigo Co., September 19, 1932.

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