

Algae of Steuben County, Indiana

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ALGÆ OF STEUBEN COUNTY, INDIANA. I

By C. MERVIN PALMER

No published record has yet been made, apparently, of the algal flora of Steuben county, Indiana. The many lakes and bogs, together with several streams which are in the county, make the area an excellent one for collecting algæ. The writer visited the county in May, 1929, July and September, 1933, and obtained specimens particularly from the following lakes: Bass, Crooked, Failing, Fox, Hogback, James, Nevada Mills and Snow. Approximately fifty algæ have so far been identified from the collections. Those that have not previously been reported for Indiana are printed in boldface type. It is hoped that additional lists of the algæ of Steuben county may be published from time to time. No desmids or diatoms are included in this first paper.

MYXOPHYCEÆ

- Anabæna spiroides* Klebahn; Hogback L., July. The straight species has not been reported previously for Indiana. Variety "crassa" was reported for Vigo county.
- Aphanothece stagnina* (Spreng.) A. Br.; Crooked L., Sept. Specimens differ from the species description in having several pseudovacuoles present in each cell.
- Calothrix castelli* (Mass.) B. and F.; L. James, Sept.
- Chroococcus minutus* (Kütz.) Näg.; L. at Nevada Mills, Sept.
- Chroococcus turgidus* (Kütz.) Näg.; Crooked L., Sept.
- Chroococcus turicensis* (Näg.) Hansgirg; Crooked L., Sept. Cells 18-30 microns in diameter, brownish, granular; probably rare for the United States.
- Cælosphærium nægelianum* Unger; Hogback L., July.
- Gleotrichia echinulata* (J. E. Smith) P. Richter; Crooked L., Sept.
- Gomphosphæria aponina* Kütz.; Crooked L., Sept.
- Gomphosphæria lacustris* Chod.; Fox L., July.
- Lynghya ærugineo-cærulea* (Kütz.) Gom.; stream east of Snow L., Sept.
- Lynghya birgei* G. M. Smith; Fox L., July. Resembles *L. hieronymusii* Lemm. but specimens are too large for that species. Filament 27 microns in diam.; trichome 18 microns in diam. Cells 2.5-3 microns long.
- Lynghya majuscula* (Dillw.) Harvey; stream east of Snow L., Sept. The largest species of *Lynghya*, generally marine, but sometimes found in fresh water. Specimens studied had the following dimensions: diam. filament 46-61 microns; diam. trichome 36-43 microns; sheath thickness 5-10 microns; cell length 3.6-7.2 microns. Cells were green, blue and purplish-blue (preserved in weak formalin).
- Merismopedia glauca* (Ehr.) Näg.; stream east of Snow L., Sept.
- Merismopedia tenuissima* Lemm.; Fox L., July.

- Nostoc pruniforme* Ag.; Bass L., July.
Oscillatoria geminata Menegh.; Failing L., July.
Phormidium ambiguum Gomont; small pond in Pokagon Park.
Phormidium retzii (Ag.) Gomont; stream east of Snow L., Sept.
Rivularia globiceps G. S. West; Failing L., July.
Spirulina major Kütz.; lake at Nevada Mills, Sept.
Stigonema informe Kütz.; lake at Nevada Mills, Sept.
Tolypothrix lanata Wartm.; Hogback L., July. On Chara.
Tolypothrix tenuis Kütz.; Crooked L., Sept.

CHLOROPHYCEÆ (AND ALL ALGÆ OTHER THAN MYXOPHYCEÆ)

- Ankistrodesmus falcatus* (Corda) Ralfs; Failing L., July.
Aphanochæte repens A. Br.; Crooked L., Sept.
Bulbochæte monile Wittr. and Lundell, var. *robusta* Hirn.; Bass L., July.
Chara delicatula Agardh., var. *annulata* (Wallman) G. and B. W.; Crooked L., Sept.
 A small form growing in shallow water along the shore line.
Chara fragilis Desvoux; Bass L. and bog near Hogback L., July.
Chlorococcum humicola (Näg.) Rab.; on cow manure in boggy area near Snow L., Sept.
Cladophora crispata (Roth.) Kütz.; Hogback L., July.
Cœlastrum microporum Næg.; lake at Nevada Mills, Sept.
Cylindrocapsa geminella Wolle; Crooked L., Sept. Rare for the U. S.
Euglena spirogyra Ehrenb.; bog, May.
Glœotœnium loitlesbergerianum Hansg.; Bass L., July. Colony of four cells; length of colony 47 microns, width 42 microns.
Hydrodictyon reticulatum (L.) Lagerh.; pond west of Snow L., Sept.
Kirchneriella obesa (W. west) Schmidle; Crooked L., Sept.
Nitella tenuissima Kütz.; Bass L., July.
Pandorina morum Bory; bog north of Snow L., Sept.
Pediastrum boryanum (Turp.) Menegb.; Hogback L., July.
Pediastrum tetras (Ehr.) Ralfs; bog north of Snow L., Sept.
Phacus pleuronectes (Müll.) Duj.; bog north of Snow L., Sept.
Radiofilum conjunctivum Schmidle; Bass L., July. Helmet-shaped segments of wall present. Cell diam. 4.5-5.5 microns; cell length 5-6.5 microns. No gelatinous sheath visible in some of the specimens.
Scenedesmus arcuatus Lemm., var. *platydisca* G. M. Smith; in drinking trough, July.
Scenedesmus bijuga (Turp.) Lag.; bog north of Snow L., Sept., and lake at Nevada Mills, Sept.
Scenedesmus brasiliensis Bohlin; Failing L., July.
Scenedesmus obliquus (Turp.) Kütz.; drinking trough, July.
Sphærocystis schrœteri Chod.; lake at Nevada Mills, Sept.
Trachelomonas acanthostoma Stokes; bog north of Snow L., Sept. Short, rough collar; short spines on anterior end of cell.
Tribonema utriculosum (Kütz.) Hazen; swamp, May.