

Some Algae of the St. Meinrad Area

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The collections, from which the accompanying list of algae was compiled, were made between September, 1958, and September, 1959. All the algae were collected from within a radius of two miles of St. Meinrad Archabbey. This region includes sections of Spencer County which is located west of the Anderson River, and Perry County which is located east of the Anderson River; P or S after a species name indicates in which county, or counties, the species was found. All of the species are new reports for the counties cited; it seems that the only previously reported alga for either county is *Chara sejuncta*, found by Charles C. Deam in an artificial lake at Lincoln City in 1916 (1). The species marked by an asterisk are new reports for the state.

St. Meinrad is in the Mansfield sandstone belt, and outcroppings of sandstone on the sides of hills and the banks of streams abound. When these are kept moist by water seepage from the ground or spray from small waterfalls they provide excellent habitats for semi-terrestrial algae; in dryer areas lichens are to be found on these outcroppings.

The elevation of the area ranges from 440 feet to 620 feet above sea level, with the average elevation being about 500 feet. The Ohio River is ten miles south of St. Meinrad, and one of its tributaries, the Anderson River, is three-quarters of a mile east of the Archabbey. The Anderson River itself is usually quite muddy and has a very poor algal flora; but the smaller seasonal spring streams flowing into it along its course form many small quiet pools, and these have a considerable variety of algae growing in them. These pools, together with the many roadside ditches, furnished the main sources for the collection.

There are four artificial lakes in the area from which collections were taken. Two of these are about twenty-five years old and have established algal floras; the other two lakes are only about five years old, and although they show occasional "blooms" of one or more species they haven't the variety of species which the two older lakes show.

The writer wishes to extend special thanks to Father Fabian Frieders, O.S.B., under whose direction this work was made possible and accomplished, for his many helpful suggestions and for his interest in the project. The writer is also indebted to Mr. W. A. Daily for his suggestions, the use of unpublished keys on the Myxophytes, and his kindness in verifying some determinations.

All specimens collected for this study are deposited in the Henrietta Herbarium, of the Biology Department of St. Meinrad College, at St. Meinrad, Indiana.

Chlorophyta

<i>Ankistrodesmus falcatus</i> (Corda) Ralfs.....	S
<i>Chaetophora elegans</i> (Roth) C. A. Agardh.....	P
<i>Chaetophora pistiformis</i> (Roth) C. A. Agardh.....	P
* <i>Characium angustatum</i> A. Braun.....	P

<i>Chlamydomonas globosa</i> Snow.....	P
<i>Chlorella vulgaris</i> Beijerinck.....	S
<i>Cladophora crispata</i> (Roth) Kuetzing.....	S
<i>Cladophora glomerata</i> (Linnaeus) Kuetzing.....	S
<i>Closterium accrosum</i> (Schrank) Ehrenberg.....	P
<i>Closterium didytomocum</i> Ralfs.....	S
* <i>Closterium turgidum</i> Ehrenberg.....	S
<i>Coclastrum microporum</i> Nageli.....	P, S
<i>Coleochaete irregularis</i> Pringsheim.....	P
<i>Coleochaete soluta</i> (Brebisson) Pringsheim.....	S
<i>Cosmarium supraspesiosum</i> Wolle.....	P
<i>Desmidiium swartzii</i> C. A. Agardh.....	P
<i>Draparnaldia plumosa</i> (Vaucher) C. A. Agardh.....	P
<i>Eudorina elegans</i> Ehr.....	P
<i>Formidium klebsii</i> G. M. Smith.....	P
<i>Gyalotheca mucosa</i> (Mertens) Ehr.....	S
* <i>Microasterias rotata</i> (Greville) Ralfs.....	S
<i>Microthamnion strictissimum</i> Rabenhorst.....	P
* <i>Nannochloris bacillaris</i> Nauman.....	S
<i>Nephrocytium Agardhianum</i> Nageli.....	S
<i>Oocystis borgei</i> Snow.....	S
* <i>Palmella miniata</i> Leiblein.....	P
* <i>Palmellococcus protothecoides</i> (Kruger) Chodat.....	S
<i>Pediastrum simplex</i> Meyer var. <i>duodenarium</i> (Bailey) Rabenhorst.....	S
<i>Pithophora oedogonia</i> (Montagne) Wittrock.....	S
<i>Protococcus viridis</i> C. A. Agardh.....	S
* <i>Protosiphon botryoides</i> Klebs.....	S
<i>Rhizoclonium fontanum</i> Kuetzing.....	P, S
<i>Rhizoclonium hicroglyphicum</i> (Agardh) Kuetzing.....	S
<i>Scenedesmus bijuga</i> (Turpin) Lagarheim.....	S
<i>Scenedesmus dimorphus</i> (Turpin) Kuetzing.....	S
<i>Scenedesmus opoliensis</i> P. Richter.....	S
<i>Scenedesmus quadricauda</i> (Turpin) Brebisson.....	S
<i>Sphaerocystis choeterei</i> (Chodat).....	S
<i>Stigeoclonium stagnatile</i> (Hazen) Collins.....	S, P
<i>Stigeoclonium tenue</i> (Agardh) Kuetzing.....	S
* <i>Trebouxia cladoniae</i> (Chodat) G. M. Smith.....	S
* <i>Trebouxia crassispina</i> G. M. Smith.....	P
<i>Trochiscia reticularis</i> (Reinsch) Hansgirg.....	S
<i>Ulothrix tenerrima</i> Kuetzing.....	S
<i>Ulothrix variabilis</i> Kuetzing.....	S
<i>Ulothrix zonata</i> (Weber & Mohr) Kuetzing.....	P, S
<i>Zygogonium ericetorum</i> Kuetzing.....	S

Euglenophyta

<i>Euglena elongata</i> Schewiakoff.....	S
<i>Trachelmonas hispida</i> (Perty) Stein.....	S

Chrysophyta (Bacillariophyceae)

<i>Fragilaria capucina</i> Desmaziers.....	S
* <i>Gyrosigma Spencerii</i> (W. Smith) Cleve.....	P
* <i>Navicula seminulum</i> Grunow.....	S
<i>Pinnularia divergens</i> Wm. Smith.....	P
<i>Rhoicosphenia curvata</i> (Kuetzing) Grunow.....	S
<i>Stauroneis anceps</i> Ehr.....	P
* <i>Synedra capitata</i> Ehr.....	P
<i>Synedra ulna</i> (Nitzsch) Ehr.....	S
<i>Tabellaria fenestrata</i> (Lyngbye) Kuetzing.....	P

Pyrrophyta

Ceratium hirundinella (Mueller) Schrank.....P, S

Cyanophyta

Amphithrix janthina (Montagne) Bornet & Flahault.....S
Anabaena variabilis Kuetzing.....P, S
Anacystis incerta (Lemmermann) Drouet & Daily.....S
Lyngbya aeruginosa-coerulea (Kuetzing) Gomont.....P
Lyngbya aestuarii (Mertens) Liebmann.....S
Lyngbya putcalis Montagne.....S
Oscillatoria Agardhii Gomont.....S, P
Oscillatoria curviceps C. A. Agardh.....S
Oscillatoria formosa Bory.....S
Oscillatoria geminata Meneghini.....P, S
Oscillatoria grunowiana Gomont var. *articulata* (Gardner) Drouet.....S
Oscillatoria irrigua (Kuetzing) Gomont.....S
Oscillatoria princeps Vaucher.....P, S
Oscillatoria sancta (Kuetzing) Gomont.....S
Oscillatoria tenuis C. A. Agardh.....S
Oscillatoria tenuis C. A. Agardh var. *natans* Gomont.....S
Phormidium ambiguum Gomont.....S
Phormidium favosum (Bory) Gomont.....S

Literature Cited

1. DAILY, F. K. 1953. The Characeae of Indiana. Butler University Botanical Studies 11:5.