

ALGAE OF INDIANA: ADDITIONS TO THE 1875-1928 CHECK LIST

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The classified check list of algae of Indiana, consisting of those published between 1875 and 1928 was included in volume 38 of the Proceedings of the Indiana Academy of Science. Thirty-two additional notations of genera and species listed in eleven additional papers published between 1875 and 1928 have since been found. Two counties (Hendricks and Putnam) not represented in the original check list, have algae recorded for them. There are four species new for the check list; these are *Draparnaldia plumosa*, *Oscillatoria prolifica*, *Oedogonium braunii* var. *zekneri* and *Oedogonium wabashense*.

It is possible that three other papers¹ listing algae could be included in this check list but in none of the three papers is it definitely stated that the forms listed were found in Indiana, although one would be led to believe that they probably were.

Three corrections should be made in the original check list: page 109, first line of second paragraph, change "96" to "92," page 116, next to last line, change "Chladophora" to "Cladophora;" and page 119, sixth line under Spirogyra, drop "Marion Co. 1928" and add, in the next line just before *S. elongata*, "*S. ellipsospora* Transeau, Marion Co. 1928."

The total number of notations of algae for Indiana, between 1875 and 1928 is shown by county in fig. 1. Figs. 2, 3, and 4 show respectively the number of notations of Cyanophyceae, desmids, and diatoms per county during the same

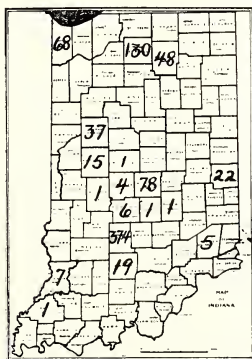


Fig. 1

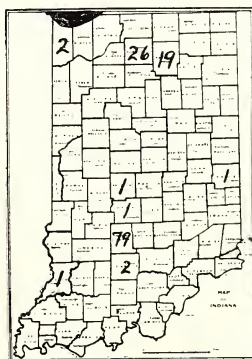


Fig. 2

Fig. 1—Distribution by county of all notations of algae reported for Indiana between 1875 and 1928.

Fig. 2—Distribution by county of all notations of Blue Green Algae reported for Indiana between 1875 and 1928.

Proc. Ind. Acad. Sci. 40: 107-109. (1930) 1931.

¹These three are:

Allen, W. R. The food and feeding habits of freshwater mussels. Biol. Bul. 27:127-147. 1914.

Nieuland, J. A. Hints on collecting and growing algae for class work. Amer. Midland Nat. 1:85-97. 1909.

Nieuland, J. A. The laboratory aquarium. Amer. Midland Nat. 1:208-218. 1910.

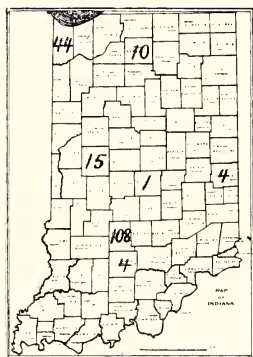


Fig. 3

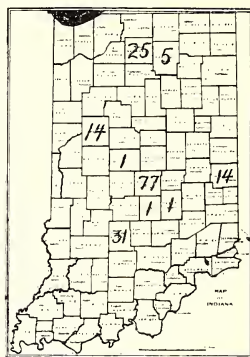


Fig. 4

Fig. 3—Distribution by county of all notations of desmids reported for Indiana between 1875 and 1928.

Fig. 4—Distribution by county of all notations of diatoms reported for Indiana between 1875 and 1928.

period. The number of "all other algae" notations per county may be obtained by subtracting from the figures on Map 1 the sum of the figures on Maps 2, 3, and 4.

Mention probably should be made of three articles listing algae of Indiana but published since 1928. These are by F. M. Andrews² and C. M. Palmer^{3,4}.

The algae of Indiana recorded in the eleven additional papers are given in the following classified list:

ALGAE OF INDIANA—ADDITIONS TO THE 1875-1928 CHECK LIST

GROUP 1. BLUE GREEN ALGAE (CYANOPHYCEAE):

Anabaena. Kosciusko Co. 1913 and 1916; Hendricks Co. 1919.

Lyngbya. Kosciusko Co. 1913 and 1916.

Microcystis. Kosciusko Co. 1913 and 1916.

Oscillatoria. Kosciusko Co. 1916. *O. prolifica* (Grenville) Dumont. Kosciusko Co. 1917.

GROUP 2. (NO ADDITIONS).

GROUP 3. DIATOMS:

Asterionella. Kosciusko Co. 1916.

Fragilaria. Kosciusko Co. 1913 and 1916.

Melosira. Kosciusko Co. 1916.

GROUP 4. ALL OTHER ALGAE (CHLOROPHYCEAE, PIGMENTED FLAGELLATA, ETC.)

Ceratium. Kosciusko Co. 1913 and 1916.

Cladophora. Monroe Co. 1912; Kosciusko Co. 1921.

²Andrews, F. M. Algae of Monroe County, Indiana, III. Proc. Ind. Acad. Sci. **39**: 57-58 1929 (1930).

³Palmer, C. M. Algae of Marion County, Indiana, A description of thirty-two forms. Butler Univ. Bot. Studies 2: 1-21. Feb. 1931.

⁴Palmer, C. M. The algae, Schizomeris and Lemanea, in Indiana. Proc. Ind. Acad. Sci. **40**. 1930 (1931).

Draparnaldia. *D. plumosa* (Vauch) Agardh, Putnam Co. 1902.

Euglena. Kosciusko Co. 1916; Hendricks Co. 1919.

Oedogonium. *O. braunii* Kutz. Pringsh. var. *zehneri* Tiffany, Knox Co. 1927.

O. wabashense Tiffany (not *O. wabashensis*), Knox Co. 1927.

Pediastrum. Kosciusko Co. 1916.

Peridinium. Hendricks Co. 1919.

Phacus. Monroe Co. 1912.

Scenedesmus. Kosciusko Co. 1916.

Spirogyra. *S. dubia*. Monroe Co. 1914. *S. elongata* (Berk) Kg. Monroe Co. 1912.

Tribonema. Kosciusko Co. 1913.

Uroglena. Tippecanoe Co. 1909; Hendricks Co. 1919.

Vaucheria. *V. geminata*, Wayne Co. 1918.

BIBLIOGRAPHY. (Titles Additional to the Original Check-List)

1. 1902. Hazen, T. E. The Ulothricaceae and Chaetophoraceae of the United States. Mem. Tor. Bot. Cl. **11**:135-250.
2. 1909 Burrage, S. Odors and tastes in water supplies. Proc. Ind. Sanitary and Water Supply Asso. 44-47.
3. 1912. Pickett, F. L. A case of changed polarity in *Spirogyra elongata*. Bul. Tor. Bot. Cl. **39**:509-510.
4. 1913. Henry, G. On the vertical distribution of the plankton in Winona Lake. Proc. Ind. Acad. Sci. 77-92.
5. 1914. Weatherwax, P. Some peculiarities in *Spirogyra dubia*. Proc. Ind. Acad. Sci. 203-206.
6. 1916. Scott, W. Report on the lakes of the Tippecanoe Basin (Indiana). Ind. Univ. Stud. **3**:1-39.
7. 1917. Scott, W. An epidemic among the fishes of Huffman's Lake. Proc. Ind. Acad. Sci. 67-71.
8. 1918. Markle, M. S. Some abnormalities in plant structure. Proc. Ind. Acad. Sci. 117-124.
9. 1919. Bartow, E., Ely, H. M. and Greenfield, R. E. Tastes and odors in the Danville City water during the summer of 1919. Proc. Indiana Sanitary and Water Supply Asso. 115-119.
10. 1921. Allen, W. R. Studies of the biology of freshwater mussels. III. Distribution and movements of Winona Lake mussels. Proc. Ind. Acad. Sci. 227-238.
- ✓11. 1927. Tiffany, L. H. New species and varieties of Chlorophyceae. Bot. Gaz. **83**:202-206.

