

THE OEDOGONIALES OF ILLINOIS

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The Oedogoniales is one of the orders of the Chlorophyceae, or green algae. The single family, Oedogoniaceae, comprises three genera: *Oedogonium*, *Balbochaete*, and *Oedocladium*. The filaments of *Oedogonium* are unbranched but those of the other two are branched. The vegetative cells of *Balbochaete* have laterally placed setae while those of *Oedocladium* are devoid of such setae.

Both *Oedogonium* and *Balbochaete* are widely distributed in fresh water throughout the world. *Oedocladium* is so far known only from Germany, India, Puerto Rico, Florida, North Carolina, Virginia, Massachusetts, New Jersey. The species of *Oedogonium* and *Balbochaete* have been reported mostly from North America and Europe, but that probably is the distribution of algologists, rather than

Oedogoniales. Further investigation will doubtless reveal very general distribution of most species.

There have been reported for Illinois to date 79 species and varieties of the Oedogoniales. The numerical distribution in nearby states is as follows: Michigan 101, Iowa 89, Ohio 87, Indiana 79, Kentucky 31, Wisconsin, 3.

As a matter of record the 67 species of *Oedogonium* and 12 species of *Balbochaete* known to occur in Illinois are the following: *O. armandicum* Kütz., *versiporum* De Bary, *asplum* M. & W., *capitatum* (Litt.) THIL., *americanum* Trans., *aster* Wiltz., *bohemicum* Hirn., *bovianum* (LeCl.) Wiltz., *boscii* (LeCl.) Wiltz., *brunii* Kuetz., *capilliformis* Kuetz., *capitellatum* Wiltz., *cardium* (Mass.) Wiltz., *canadense* (Mass.) Wiltz.,

- menyalocostatum* Witttr., *crispum* (Hass.)
 Witttr., *cyrtospermum* Witttr., *circum-*
Pringsh., *cyathigerum* Witttr., *ochinosper-*
man A. Br., *epiphylicum* Trans. & Tiff.,
fragile Witttr., *franklinianum* Witttr.,
glaberrimum Nordst., *graciliss.* (Witttr.) Tiff.,
gracillimum W. & L., *grande* Kretz.,
harvardii G. S. West, *hendrichianum* Trans.
 & Tiff., *heterosporum* (N. & W.) Tiff.,
illinoense Trans., *intermedium* Witttr.,
irregularis Witttr., *laeve* Witttr., *macran-*
drum var. *ashlandi* Hirn, *maximilianum*
 var. *pratiagnum* (Witttr.) Hirn, *magnusii*
 Witttr., *majus* (Hass.) Tiff., *minutum*
 Hirn, *multisporum* Wood, *oblongatum*
 Kirch., *oblongum* Witttr., *obtusatum*
 Witttr., *ochotawum* Taff., *peduncul-*
 (Hass.) Witttr., *paucicostatum* Trans.,
picatum Witttr., *plagiostomum* Witttr.,
pratense Trans., *pratense* Trans.,
puberulum Hirn, *puberulum* De

- Bary, *puberulum* Hirn, *resiliens* Kirch.,
rugulosum Nordst., *rufescens* var.
siguanum (Bly.) Tiff., *subpicatum* Tiff.,
trichot. Witttr., *ulmiforme* Witttr., *tugro-*
sporium N. & H., *tenicoides* N. & H.,
virgatum Witttr., *virgatum* W. & L., *vul-*
gatum (Witttr.) Tiff., *virgatum* (LeCl.) A.
 Br., *wehrenschi* West, *willianum* Witttr.,
puberulum *brevisporum* Kretz., *cras-*
spicula Nordst., *crenulata* Pringsh., *in-*
signis Pringsh., *intermedia* De Bary,
nitens A. Br., *mirabilis* Witttr., *nana*
 Witttr., *novaeboracensis* Witttr., *reluctata*
 Nordst., *varians* var. *novaeboracensis* Nordst.,
virgatum var. *subpicatum* (Witttr.) Hirn.

REFERENCES

- Flourens, L. H. 1850. The Oedogoniaceae:
 A Monograph. Pub. by the Author.
 Flourens, L. H. 1857. Oedogoniaceae. *Novis*
Botanicum Flora 21(1): 1-132, 33 platea,
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