

THE OEDOGONIACEAE

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Further study of collections of *Oedogonium* and *Bulbochaete* from various parts of the world, since the publication of the author's Monograph,¹ seems to warrant the recognition of additional distinct species in the two genera. In subsequent supplements to the Monograph it is proposed to use the following new names and new combinations as definite species.

BULBOCHAETE Agardh 1817

1. **B. robusta** (Hirn) Tiffany n. comb.
B. monile Wittr. & Lund. var. *robusta* Hirn. Mon.² p. 30, Fig. 73.
2. **B. scrobiculata** Tiffany n. comb.
B. elatior Pringsh. var. *scrobiculata* Tiffany. Mon. p. 33, fig. 3.
3. **B. woronichini** Tiffany n. nom.
B. brebissonii Kuetz. var. *minor* Woronichin. Mon. p. 34.
4. **B. suberecta** (Collins) Tiffany n. comb.
B. nordstedtii Wittr. f. *suberecta* Collins. Mon. p. 37, fig. 18.
5. **B. glabra** (Hirn) Tiffany n. comb.
B. sessilis Wittr. f. *glabra* Hirn. Mon. p. 39, fig. 20.
6. **B. norvegica** (Wittr.) Tiffany n. comb.
B. tenuis (Wittr.) Hirn var. *norvegica* (Wittr.) Hirn. Mon. p. 44, fig. 60.
7. **B. litoralis** (Hirn) Tiffany n. comb.
B. rhadinospora Wittr. var. *litoralis* Hirn. Mon. p. 47, fig. 68.
8. **B. reticulata** Nordstedt
B. insignis Pringsh. var. *reticulata* (Nordst.) Hirn. Mon. p. 49, fig. 63.
9. **B. regalis** (Wittr.) Tiffany n. comb.
B. imperialis Wittr. var. *regalis* Wittr. Mon. p. 49, fig. 65.

¹Tiffany, L. H. 1930. *The Oedogoniaceae*, a Monograph including all the known species of *Bulbochaete*, *Oedocladium*, and *Oedogonium*. Published by the Author, Columbus, Ohio.

²The abbreviation "Mon." will be used throughout to indicate the above Monograph in which the variety or form is described and figured.

OEDOGONIUM Link 1820

1. **Oe. vulgare** (Wittr.) Tiffany n. comb.
Oe. cryptoporum Wittr. var. *vulgare* Wittr. Mon. p. 66, fig. 102.
2. **Oe. australe** (G. S. West) Tiffany n. comb.
Oe. suecicum Wittr. var. *australe* (G. S. West) B. H. Smith³ 1932, p. 193; *Oe. suecicum* f. *australe* G. S. West. Mon. p. 68, fig. 117.
3. **Oe. lemmermannii** Tiffany n. nom.
Oe. cardiacum (Hass.) Wittr. var. *minus* Lemm. Mon. p. 71, fig. 129.
4. **Oe. fennicum** Tiffany n. comb.
Oe. intermedium Wittr. var. *fennicum* Tiffany. Mon. p. 73, fig. 135.
5. **Oe. patulum** Tiffany n. nom.
Oe. hirnii Gutwinski var. *africanum* G. S. West. Mon. p. 73, fig. 138.
6. **Oe. robustum** (West & West) Tiffany n. comb.
Oe. fragile Wittr. var. *robustum* (W. & W.) Tiffany. Mon. p. 75, fig. 146.
7. **Oe. subellipsoideum** Tiffany n. nom.
Oe. upsaliense Wittr. var. *fennicum* Hirn. Mon. p. 78, fig. 158.
8. **Oe. gracilius** (Wittr.) Tiffany n. comb.
Oe. plagiosotomum Wittr. var. *gracilius* Wittr. Mon. p. 81, figs. 141 and 142.
9. **Oe. diversum** (Hirn) Tiffany n. comb.
Oe. capilliforme Kuetz.; Wittr. var. *diversum* (Hirn) Tiffany. Mon. p. 82, fig. 178.
10. **Oe. maximum** West
Oe. fabulosum Hirn. var. *maximum* (West) Hirn. Mon. p. 83, figs. 217 and 218.
11. **Oe. paraguayense** Tiffany n. nom.
Oe. fabulosum Hirn var. *punctatum* Lemm. Mon. p. 84.
12. **Oe. angustum** (Hirn) Tiffany n. comb.
Oe. grande Kuetz.; Wittr. var. *angustum* Hirn. Mon. p. 86, figs. 198 and 199.
13. **Oe. majus** (Hansg.) Tiffany n. comb.
Oe. grande Kuetz.; Wittr. var. *majus* Hansg. Mon. p. 86, fig. 197.
14. **Oe. amplum** Magnus & Wille
Oe. crassum (Hass.) Wittr. var. *amplum* (M. & W.) Hirn. Mon. p. 88, figs. 204 and 205.
15. **Oe. longum** Transeau n. comb.
Oe. crassum (Hass.) Wittr. var. *longum* Transeau. Mon. p. 88, fig. 208.
16. **Oe. carolinianum** Tiffany n. nom.
Oe. paludosum (Hass.) Wittr. var. *americanum* Nordst. Mon. p. 90, fig. 233.
17. **Oe. occidentale** (Hirn) Tiffany n. comb.
Oe. boscii (Le Clerc) Wittr. var. *occidentale* Hirn. Mon. p. 92, figs. 227 and 228.
18. **Oe. aureum** (Tilden) Tiffany n. comb.
Oe. crenulatocostatum Wittr. var. *aureum* Tilden. Mon. p. 93, fig. 245.

³Smith, B. H. Proc. Indiana Academy of Science, 41: 177-206.

19. **Oe. longiarticulatum** (Hansg.) Tiffany n. comb.
Oe. crenulatocostatum Wittr. var. *longiarticulatum* Hansg. Mon. p. 93, figs. 242 and 243.
20. **Oe. paucostriatum** Tiffany n. nom.
Oe. paucocostatum Trans. var. *gracilis* Tiffany. Mon. p. 98, fig. 278.
21. **Oe. abbreviatum** (Hirn) Tiffany n. comb.
Oe. pringsheimii Cramer; Wittr. var. *abbreviatum* Hirn. Mon. p. 107, fig. 331.
22. **Oe. commune** (Hirn) Tiffany n. comb.
Oe. nodulosum Wittr. var. *commune* Hirn. Mon. p. 108, fig. 376.
23. **Oe. epiphyticum** Transeau & Tiffany n. nom.
Oe. pisanum Wittr. var. *gracilis* T. & T. Mon. p. 110, figs. 365 and 366.
24. **Oe. amplius** (W. R. Taylor) Tiffany n. comb.
Oe. pyrulum Wittr. var. *amplius* Taylor. Mon. p. 111, fig. 350.
25. **Oe. hallasiae** Tiffany n. nom.
Oe. oblongum Wittr. f. *sphaericum* (Hallas) Hirn. Mon. p. 117, figs. 368 and 369.
Oe. sphaericum Hallas, preoccupied by *Oe. sphaericum* (Hass.) Kuetz. (De Toni 1889, p. 90).
26. **Oe. sinuatum** Transeau n. nom.
Oe. undulatum (Breb.) Al. Br.; Wittr. var. *americanum* Transeau. Mon. p. 119, fig. 408.
27. **Oe. canadense** Tiffany n. comb.
Oe. hystrix Wittr. var. *canadense* Tiffany. Mon. p. 121, fig. 418.
28. **Oe. subglobosum** (Wittr.) Tiffany n. comb.
Oe. hystrix Wittr. var. *subglobosum* Wittr. Mon. p. 121, fig. 419.
29. **Oe. acutum** (West & West) Tiffany n. comb.
Oe. spirale Hirn. var. *acutum* West & West. Mon. p. 123, fig. 430.
30. **Oe. latviense** Tiffany n. comb.
Oe. spirale Hirn. var. *latviense* Tiffany. Mon. p. 123, fig. 429.
31. **Oe. zehneri** Tiffany n. comb.
Oe. braunii Kuetz.; Pringsh. var. *zehneri* Tiffany. Mon. p. 125, fig. 459.
32. **Oe. angulosum** Hallas
Oe. sexangulare Cleve var. *angulosum* (Hallas) Hirn. Mon. p. 126, figs. 455 and 456.
33. **Oe. subsexangulare** Tiffany n. nom.
Oe. sexangulare Cleve. var. *majus* Wille. Mon. p. 127, fig. 457.
34. **Oe. westii** Tiffany & Brown n. comb.
Oe. borisianum (LeCl.) Wittr. var. *westii* Tiffany & Brown. Mon. p. 128, fig. 470.
35. **Oe. idioandrosorum** (Nordst. & Wittr.) Tiffany n. comb.
Oe. crassiusculum Wittr. var. *idioandrosorum* Nordst. & Wittr. Mon. p. 130, figs. 475 and 476.
36. **Oe. magnum** (Ackley) Tiffany n. comb.
Oe. multisporum Wood var. *magnum* Ackley. Mon. p. 131, fig. 452.

37. **Oe. incertum** Tiffany n. nom.
Oe. cyathigerum Wittr. f. *americanum* Wolle. Mon. p. 134.
38. **Oe. perfectum** (Hirn) Tiffany n. comb.
Oe. cyathigerum Wittr. f. *perfectum* Hirn. Mon. p. 134, figs. 486 and 487.
39. **Oe. striatum** Tiffany n. nom.
Oe. wolleanum Wittr. f. *insigne* (Nordst.) Hirn. Mon. p. 136, figs. 482 and 483.
40. **Oe. rectangulare** (Rich) Tiffany n. comb.
Oe. concatenatum (Hass.) Wittr. var. *rectangulare* Rich. Mon. p. 137, figs. 496 and 497.
41. **Oe. exoticum** (Hirn) Tiffany n. comb.
Oe. cleveanum Wittr. f. *exoticum* Hirn. Mon. p. 138.
42. **Oe. subplenum** Tiffany n. nom.
Oe. areschougii Wittr. var. *americanum* Tiffany. Mon. p. 140, fig. 501.
43. **Oe. pseudoplenum** Tiffany n. nom.
Oe. areschougii f. *robustum* Hirn. Mon. p. 140, figs. 502 and 503.
44. **Oe. exostriatum** Tiffany n. nom.
Oe. oelandicum Wittr.; Hirn f. *minus* Borge. Mon. p. 142, fig. 540.
45. **Oe. senegalense** (Nordst.) Tiffany n. comb.
Oe. longicolle Nordst. var. *senegalense* Nordst. Mon. p. 144, figs. 518 and 519.
46. **Oe. acuminatum** (Hirn) Tiffany n. comb.
Oe. macrandrium Wittr. f. *acuminatum* Hirn. Mon. p. 151, fig. 550.
47. **Oe. borgei** (Hirn) Tiffany n. comb.
Oe. monile Berk. & Harv. f. *borgei* Hirn. Mon. p. 154, fig. 567.
48. **Oe. eminens** (Hirn) Tiffany n. comb.
Oe. monile Berk. & Harv. var. *eminens* Hirn. Mon. p. 154, figs. 568 and 569.
49. **Oe. exmonile** Tiffany n. nom.
Oe. monile Berk. & Harv. f. *victoriense* West. Mon. p. 154, fig. 566.
50. **Oe. completum** (Hirn) Tiffany n. comb.
Oe. obtruncatum Wittr. var. *completum* Hirn. Mon. p. 155, figs. 579-582.

Television in Time.

This book is sheer fantasy, reminiscent of Wells, Doyle and Verne at their best. It is scientific fantasy, however, and presents intriguing possibilities of future development in television. In the story, a television is devised which when applied to fossils, rocks or other ancient objects, projects about itself a vivid reconstruction of the events which have taken place during the time the object has been exposed to light. The analysis of past events, in which the reader becomes a witness of the actual happenings, moves dramatically across the centuries as continents and oceans form and change, hordes of prehistoric monsters march across the panorama of the years, and the struggle for existence goes ceaselessly on. The book will provide a fascinating evening's entertainment for anyone with a vestige of imagination. L. H. S.

Before the Dawn, by John Taine. vii+247 pp. Baltimore, the Williams and Wilkins Co.