

- name is Ceratocorythaceae rather than Ceratocoryaceae as used by Lindemann and all subsequent authors.
- Chytriodiniaceae J. Cachon et M. Cachon (1968, p. 260, 'Chytriodinidae')
- Citharistaceae Kofoid et Skogsberg (1928, p. 707, 'Citharistidae')
- Cladopyxidaceae Kofoid (1907, p. 165, 'Cladopyxidae')
- Coccidiiniaceae Chatton et Biecheler (1934, p. 255, 'Coccidiinidae')
- Congruentidiaceae Schiller (1935, p. 320)
- Crypthecodiniaceae Biecheler (1952, pp. 81, 83, 'Crypthecodinidae')
- Cystodiniaceae Kofoid et Swezy (1921, p. 107, 'Cystodiniidae'). This name was initially superfluous since the family to which it was applied included *Glenodinium*, the type of Glenodiniaceae (Schütt) Lemmermann 1899. See Phytodiniaceae.
- Desmocapsaceae Pascher (1914, pp. 149, 158)
- Desmomastigaceae Fott ex A. R. Loeblich III (1970, pp. 881, 906). This name was initially superfluous since the family to which it was applied included *Haplodinium*, the type of Haplodiniaceae Lindemann 1928. See Haplodiniaceae.
- Desmomonadaceae Pascher ex Schiller (1931, p. 6). This descriptive and hence invalid name was applied to a family that included *Desmomastix* and *Haplodinium*. See Haplodiniaceae.
- Dinamoebaceae Pascher (1916, p. 135). Upon realizing that *Dinamoeba* Pascher 1916 was preoccupied in zoological nomenclature, Pascher (1916a) proposed the substitute name *Dinamoebidium*. Because *Dinamoebidium* is superfluous in botanical nomenclature, Dinamoebidiaceae Fott 1959 is illegitimate. Amoebodiniaceae Pascher ex Schiller 1937 is a descriptive and hence invalid name applied to a family that included only *Dinamoebidium*.
- Dinamoebidiaceae Fott (1959, p. 361). This name is illegitimate because *Dinamoebidium* Pascher (1916a) is a superfluous name for *Dinamoeba* Pascher (1916). Conservation of *Dinamoebidium*, which I have proposed elsewhere, would make Dinamoebidiaceae available and thus bring botanical and zoological nomenclature into agreement. See Dinamoebaceae.
- Dinifera Bergh (1881, p. 273). This descriptive and hence invalid name was applied to a family comprising a majority of dinoflagellates known at that time.
- Dinocloniaceae Pascher (1927a, p. 15 footnote)
- Dinococcaceae Fott (1959, p. 363, invalid: no Latin diagnosis). See Phytodiniaceae.
- Dinococcidae Chatton (1952, p. 360). This descriptive and hence invalid name was applied to a family with essentially the same circumscription as Dinococcaceae Fott 1959.
- Dinophysaceae Bütschli (1885, p. 1009, 'Dinophysida'). The stem of *Dinophysis* Ehrenberg (1839, p. 157) has variously been considered to be Dinophy- (Dinifera subfam. Dinophyida Bergh, 1881, p. 273), Dinophys- (Dinifera fam. Dinophysida Bütschli, 1885, p. 1009; Peridiniaceae tribe Dinophyseae Schütt, 1896, pp. 16, 26; Dinophysaceae (Schütt) Lemmermann, 1899a, p. 371), Dinophysid- (Dinophysaceae Pavillard, 1916, p. 44), and Dinophysid- (Dinophysidaceae Engler, 1892, p. 6). The decision as to which is correct depends upon whether *-physis* is Greek or latinized Greek. If one assumes that it is Greek (meaning 'creature'), with the genitive singular *φυσεως*, the correct stem is Dinophysid- (or Dinophys- if one follows the practice of dropping the *ι* or *ε* from Greek stems when forming Latin derivatives). Ehrenberg, however, indi-

- cated that the chief character of the organism was its urceolate shape, so that it seems more likely that *-physis* is a latinization of *φύσα*, the Greek word for 'bellows' or 'bladder'. According to this interpretation, the stem would be *Dinophys-*, as used by Bütschli, the first author to propose a family name based on *Dinophysis*.
- Dinosphaeraceae Lindemann (1928, pp. 34, 80, 84)
- Dinotrichaceae Pascher (1931, p. 326)
- Diplomorphaceae J. Cachon (1964, pp. 8, 141, 'Diplomorphidae'). This name is unavailable under the ICZN and illegitimate under the ICBN because the type genus, *Diplomorpha* M. Rose et J. Cachon 1951, is preoccupied in both nomenclatures. See Cachonellaceae.
- Dubosquellaceae Chatton (1920, p. 455, 'Dubosquellidae')
- Endodiniaceae Schiller (1935, pp. 15, 61). *Endodinium* (type: *E. chattonii*) was described by Hovasse (1922, p. 845) as a dinoflagellate parasitic in the endoderm of the jellyfish *Veleva*. Later, Hovasse & Teissier (1923) decided that *Endodinium chattonii* was congeneric with *Zooxanthella nutricula* Brandt 1881, a parasite in the radiolarian *Collozoum inerme* and the type of its genus. In the ING, *Zooxanthella* was assigned to Dinophyceae/Cryptophyceae, while *Endodinium* was assigned to the Endodiniaceae. If *Zooxanthella* and *Endodinium* are placed in the same family, whether or not they are considered congeneric, the correct name for the family is Zooxanthellaceae Hovasse et Teissier 1923. *Endodinium* has sometimes been used incorrectly in preference to *Zooxanthella* (e.g., Hollande & Carré, 1975).
- Entomosigmataceae Chatton (1952, p. 344, 'Entomosigmatidae', *nom. nud.*). See Protodiniaceae.
- Glenodiniaceae (Schütt) Lemmermann (1899a, p. 361); Peridiniaceae tribe Glenodiniaceae Schütt (1896, p. 16)
- Glenodiniopsidaceae Schiller (1935, p. 80). This name was initially superfluous since the family to which it was applied included *Pyrophacus*, the type of Pyrophacaceae Lindemann 1928. See Pyrophacaceae.
- Gloeodiniaceae Pascher ex Schiller (1937, p. 482)
- Gomesiamonadaceae Skvortzov et Noda (1969a, p. 101, invalid: no Latin diagnosis)
- Goniodomataceae Lindemann (1928, pp. 34, 80, 94, 'Goniodomaceae'). Heteraulacaceae A. R. Loeblich Jr. et Drugg 1968, based on *Heteraulacus* Diesing 1850, a taxonomic synonym of *Goniodoma* F. Stein 1883, is the correct name for this family in zoological nomenclature, in which *Goniodoma* is preoccupied. Conservation of Heteraulacaceae against Goniodomataceae would bring botanical and zoological nomenclature into agreement.
- Gonyaulacaceae Lindemann (1928, pp. 34, 80, 84)
- Gymnasteraceae Poche (1913, p. 165, 'Gymnasteridae'). *Gymnaster* Schütt 1891 and *Actiniscus* (Ehrenberg) Ehrenberg 1843 have the same lectotype species, so that Gymnasteraceae is an obligate synonym of Actiniscaceae Kützing 1844. In the ING, Gymnasteraceae rather than Actiniscaceae was inadvertently indicated for *Monaster*.
- Gymnodiniaceae Lankester (1885, p. 859, 'Gymnodinida')
- Gymnosclerotaceae Schiller (1935, p. 1). This descriptive and hence invalid name was applied to a family that included *Amphilothus* and *Gymnaster*. See Actiniscaceae.
- Haplodiniaceae Lindemann (1928, pp. 33, 36). As circumscribed in the ING, this family includes *Desmomastix*, the type of Desmomastigaceae Fott ex A. R. Loeblich III