

A list of free-living dinoflagellate species in the world's oceans

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A checklist of free-living marine dinoflagellates (Dinophyceae) is given. The nomenclature is brought up to date and synonyms are included. The spelling of several taxa is corrected according to the International Code of Botanical Nomenclature (ICBN). A total of 1555 species (117 genera) constitute the free-living marine dinoflagellates, with 135 new species in the period 1993 to 2003. The most numerous genera are: *Protoperidinium* (264 species), *Gymnodinium* (173 species), *Dinophysis*+*Phalacroma* (104+41 species), *Gyrodinium* (87 species), *Amphidinium* (76 species), *Histioneis* (65 species), *Ceratium* (64 species) and *Gonyaulax* (60 species).

Key words: Phytoplankton, checklist, Dinophyta, dinoflagellates, algae, nomenclature, taxonomy.

Introduction

Dinoflagellates constitute one of the main groups of marine protists. SCHILLER (1931–1937) provided a description of all the species, both marine and freshwater, known at that time. Later SOURNIA (1973, 1978, 1982, 1990, 1993) listed the new taxonomic entries published after SCHILLER (1931–1937). SOURNIA (1986) gave descriptions and illustrations of the marine genera of dinoflagellates, excluding information at the species level. After SCHILLER (1931–1937) no compilation of free-living marine dinoflagellates was made available. This study provides for the first time a checklist and evaluates the species richness of dinoflagellates in the world oceans.

Material and methods

This study is based on literature records of free-living dinoflagellates. The primary sources are SCHILLER (1931–1937) and SOURNIA (1973, 1978, 1982, 1990, 1993). References to new species and combinations published between 1993 and 2003 are provided in brackets in table 1. Species with their nomenclatural authorities and the date of the description are arranged alphabetically within the genus. Genera are ordered alphabetically within

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each family. SOURNIA (1973, 1978, 1982, 1990, 1993) reported lists of dinoflagellates in alphabetic order, with no classification. The present list does not pretend to propose any classification, but it is superior to a mere alphabetical list. The classification of the dinoflagellates is being continuously subjected to changes according to new findings, especially with the application of recent molecular techniques. This study follows the most common classification from the literature and is updated according to recent knowledge, but any classification is unavoidably associated with discrepancies among authors.

SOURNIA (1973, 1978, 1982, 1990, 1993) in his successive checklists of marine species did not report synonyms or doubtful species, except for the new combinations proposed. Sournia et al. (1991) reported 1424–1772 species (115–131 genera) of extant free-living marine dinoflagellates. The higher number included little known or doubtful species. The lower number according to SOURNIA et al. (1991) is »that of the taxa which look presently reliable and have a practical value to the taxonomist in charge of identifying a species«. However no list of reliable or doubtful species was reported. In this study, only taxa of very doubtful validity are marked with an asterisk (*) and not considered for species counting. However the number of taxa that should be considered doubtful is higher. Many taxa have not been reported in the last 80 years and the original descriptions are insufficient or inadequate. For example, when species of the genus *Dinophysis* are temporally maintained in cultures, several species turn out to be morphotypes in the life cycle of one taxon (e.g., REGUERA and GONZÁLEZ-GIL 2001). Thus, probably if the life cycles of species of genera such as *Histioneis* or *Amphisolenia* are investigated, the species number of these genera will be drastically reduced. On the other hand, many taxa such as gymnodiniacens remain un-described because they are considered to be co-specific and misidentified with known species. Taxa reported only from the identification of cysts have been excluded except when live cells have germinated from cysts.

Another difficulty is the separation of marine and freshwater species. Some freshwater species can tolerate marine conditions and in other cases the marine records are misidentifications. SOURNIA et al. (1991) reported that 240 species constitute continental dinoflagellates. The revisions by Sournia entitled »catalogue of marine dinoflagellates« included some freshwater species [for example *Prorocentrum playfairii*, SOURNIA (1990)]. GÓMEZ and BOICENCO (2004) provided a list of freshwater dinoflagellates found in the brackish waters of the Black Sea.

Results and discussion

The spelling of several taxa has been modified according to the International Code of Botanical Nomenclature (GREUTER et al. 2000). Although typographical and orthographical errors may be corrected, no change has been applied under the retention of original spelling provision of Article 60.1. For the species *Gambierdiscus belizeanus* Faust, *Ostreopsis caribbeana* Faust, *Plagiodinium belizeanum* Faust et Balech, *Prorocentrum belizeanum* Faust, *Protoperidinium belizeanum* Faust and *Prorocentrum caribbaeum* Faust and the orthographically correct epithets are »belizianum« and »caribbaeum« respectively. The epithet »arabicum« is orthographically correct for *Prorocentrum arabianum* Morton et Faust.

For epithets commemorating persons, substantive epithets are more commonly applied than adjectival epithets. These cases are *Prorocentrum hoffmannianum* Faust instead of

»hoffmannii«; *Prorocentrum norrisianum* Faust instead of »norrisii« and *Prorocentrum ruetzlerianum* Faust instead of »ruetzleri«. No change was applied according to Article 60.1. (GREUTER et al. 2000).

Only a few epithets with the wrong gender termination (Art. 32.5) were modified to accord with Article 23.5.: *Prorocentrum panamense* Grzebyk, Sako et Berland [published as »panamensis«], *Prorocentrum tropicale* Faust [published as »tropicalis«], *Ostreopsis belizeana* Faust [published as »belizeanum«], *Ostreopsis caribbeana* Faust [published as »caribbeanus«] and *Ostreopsis marina* Faust [published as »marinus«], and the freshwater species *Peridinium belizense* Carty et Wujek [published as »belizensis«]. The genus *Takayama* de Salas, Bolch, Botes et Hallegraeff is named after Dr. Haruyoshi Takayama (male). In these cases is usual to add a Latin termination (i.e. Takayamaea). The epithet of the species *Akashiwo sanguinea* (Hirasaka) G.Hansen et Moestrup showed a feminine ending. The use of "Akashio" instead of "Akashiwo" is recommendable. No change is applied.

The epithet of *Gambierdiscus australis* Chinain et Faust is not a case of wrong gender termination. In the epithet that refers its geographical locality, Australes Islands (no Austral region), is lacking a suffix. It can be formed by adding Latin adjectival suffixes to the place-name such as –anus »australesanus« or –ensis »australesensis«. In addition, it is reported that the genus *Gaarderia* Carbonell-Moore is pre-occupied by the extant coccolithophorid *Gaarderia* (Lecal) Kleijne.

Free-living marine dinoflagellates (excluding Phytodiales Christensen ex Loeblich III) were represented by 1555 species (117 genera) (Tab. 1). The most numerous genera are: *Proto-peridinium* (264 species), *Gymnodinium* (173 species), *Dinophysis*+*Phalacroma* (104+41 species), *Gyrodinium* (87 species), *Amphidinium* (76 species), *Histioneis* (65 species), *Ceratium* (64 species) and *Gonyaulax* (60 species). In the last decade, since the last revision by SOURNIA (1993), 135 new species (no combinations) have been described (excluding several new extant species, known only from the fossil record). The new entries mainly belong to the genera *Gymnodinium* (+*Karenia*) (19+6 species), *Prorocentrum* (19 species), *Lissodinium* (17 species), *Amphidiniopsis* (8 species), *Gyrodinium* (+*Takayama*) (8+5 species) and *Heterocapsa* (6 species). The genera *Akashiwo*, *Amphidiniella*, *Bystratrum*, *Gaarderia*, *Heterobractum*, *Karenia*, *Karlodinium*, *Lessardia*, *Mysticella*, *Plagiodinium*, *Polarella* and *Takayama* have been erected in the period 1993 to 2003.

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Tab. 1. List of free-living marine dinoflagellates. Species names following the International Code of Botanical Nomenclature (ICBN; GREUTER et al. 2000). References of the new species and combinations published between 1993 and 2003 are provided. * – Taxa of doubtful validity

DINOPHYCEAE G.S. West et Fritsch 1927

Actiniscales Sournia 1984

Actiniscaceae Kützing 1844

1 *Achradina* Lohmann 1902

1 *Achradina pulchra* Lohmann 1902 (= *A. pulchra* f. *angusta* (Lohmann) Nival 1969, f. *reticulata* (Lohmann) Nival 1969, f. *angusta* (Lohmann) Nival 1969)

2 *Actiniscus* Ehrenberg 1843

2 *Actiniscus pentasterias* (Ehrenberg 1840) Ehrenberg 1854 (= *Dictyocha pentasterias* Ehrenberg 1840, *Gymnaster striatum* Meunier 1910, *G. helix* Meunier 1910, *G. pentasterias* Schütt 1895)

3 *Amphilothus* Schütt 1895

3 *Amphilothus elegans* (Schütt 1895) Kofoid 1907

4 *Amphilothus quincuncialis* Kofoid 1907

4 *Dicroerisma* F.J.R. Taylor et Cattell 1969

5 *Dicroerisma psilonerebella* F.J.R. Taylor et Cattell 1969

Brachidinales Loeblich III ex Sournia 1984

Brachidiaceae Sournia 1972 [the criteria for the differentiation of species require further research, related to Gymnodinales Lemmermann]

5 *Asterodinium* Sournia 1972

6 *Asterodinium gracile* Sournia 1972

7 *Asterodinium libanum* Abboud-Abi Saab 1989 [probably a morphotype of the type species]

8 *Asterodinium spinosum* Sournia 1972 [probably a morphotype of the type species]

6 *Brachidinium* F.J.R. Taylor 1963 [usually as *Brachydidinium*, see Gómez (2003)]

9 *Brachidinium brevipes* Sournia 1972 [probably a morphotype of the type species]

10 *Brachidinium capitatum* F.J.R. Taylor 1963

**Brachidinium catenatum* F.J.R. Taylor 1967

11 *Brachidinium taylorii* Sournia 1972 [probably a morphotype of the type species]

Dinophysiales Lindemann 1928
Citharistaceae Kofoid *et* Skogsberg 1928**7 *Citharistes* Stein 1883**

- 12 *Citharistes apsteinii* Schütt 1895
 13 *Citharistes regius* Stein 1883

Dinophysaceae Stein 1883

8 *Amphisolenia* Stein 1883 (32 species)

- 14 *Amphisolenia astragalus* Kofoid *et* Michener 1911
 15 *Amphisolenia asymmetrica* Kofoid 1907
 16 *Amphisolenia bidentata* Schröder 1900 (non *A. bidentata* Pavillard 1916, non *A. bidentata* Okamura 1907)
 17 *Amphisolenia bifurcata* Murray *et* Whitting 1899 (= *A. thrinax* Zacharias 1906, *A. projecta* Kofoid 1907)
 18 *Amphisolenia biprojecta* Saifullah *et* Hassan 1973
 19 *Amphisolenia bispinosa* Kofoid 1907
 20 *Amphisolenia brevicauda* Kofoid 1907
 21 *Amphisolenia clavipes* Kofoid 1907
 22 *Amphisolenia complanata* Kofoid *et* Skogsberg 1928
 23 *Amphisolenia curvata* Kofoid 1907
 **Amphisolenia elegans* Böhm 1933
 24 *Amphisolenia elongata* Kofoid *et* Skogsberg 1928
 25 *Amphisolenia extensa* Kofoid 1907
 26 *Amphisolenia globifera* Stein 1883 (= *A. globosa* Gran 1912, *A. tenella* Gran 1912)
 27 *Amphisolenia inflata* Murray *et* Whitting 1899
 28 *Amphisolenia laticincta* Kofoid 1907
 29 *Amphisolenia lemmermannii* Kofoid 1907
 30 *Amphisolenia microcephalus* Abé 1967
 31 *Amphisolenia mozambica* Sournia 1967 (= ?*A. sigma* Halim 1965)
 32 *Amphisolenia palaeotheroides* Kofoid 1907
 33 *Amphisolenia palmata* Stein 1883 (= *A. bidentata* Pavillard 1916 partim)
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Tab. 1. – continued

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- 34 *Amphisolenia quadricauda* Kofoid et Michener 1911 (= *A. quinquecauda* Kofoid 1907)
 35 *Amphisolenia quadrispina* Kofoid 1907
 37 *Amphisolenia rectangulata* Kofoid 1907
 38 *Amphisolenia schauinslandii* Lemmermann 1899
 39 *Amphisolenia schroederi* Kofoid 1907
 40 *Amphisolenia sigma* Halim 1965 (= *A. spinulosa* Kofoid 1907, ? *A. mozambica* Sournia 1967)
 41 *Amphisolenia spinulosa* Kofoid 1907
 42 *Amphisolenia taylorii* Saifullah et Hassan 1973
 43 *Amphisolenia testa* Balech 1962
 44 *Amphisolenia thrinax* Schütt 1893 (non *A. thrinax* Zacharias 1906)
 45 *Amphisolenia truncata* Kofoid et Michener 1911
 9 ***Dinofurcula*** Kofoid et Skogsberg 1928 (= ***Phalacroma*** Stein 1883 partim)
 46 *Dinofurcula ultima* (Kofoid 1906) Kofoid et Skogsberg 1928
 47 *Dinofurcula ventralis* Kofoid et Skogsberg 1928
 10 ***Dinophysis*** Ehrenberg 1839 (= ***Phalacroma*** Stein 1883 partim) (104 species) [see *Phalacroma*]
 48 *Dinophysis acuminata* Claparède et Lachmann 1859 (= *D. ovum* var. *baltica* Paulsen 1908, *D. arctica* sensu Woloszyńska 1928, *D. baltica* (Paulsen) Woloszyńska 1928, *D. baltica* (Paulsen) Kofoid et Skogsberg 1928, *D. cassubica* Woloszyńska 1928, *D. levanderi* Woloszyńska 1928, *D. paulsenii* Woloszyńska 1928, *D. boehmii* Paulsen 1949 ex Balech 1971, *D. borealis* Paulsen 1949, *D. lachmannii* Paulsen 1949)
 49 *Dinophysis acuta* Ehrenberg 1839 (= *D. dens* Pavillard 1915, *D. groenlandica* (Schiller 1933) Balech 1967)
 50 *Dinophysis acutissima* Gaarder 1954
 51 *Dinophysis alata* Jørgensen 1923 (= ? *D. alata* Böhm 1931, non *D. alata* (Wood 1954) Balech 1967)
 52 *Dinophysis amandula* (Balech 1967) Sournia 1973 (= *D. amygdala* Balech 1967, *Ph. ovum* Schütt 1895, non *D. amygdalus* Paulsen 1949, non *D. ovum* Schütt 1895)
 53 *Dinophysis amphora* Balech 1971
 54 *Dinophysis anabilis* Abé 1967
 55 *Dinophysis apiculata* Meunier 1910
 56 *Dinophysis arctica* Mereschkowsky 1879 (= *D. laevis* (Bergh 1881) Pouchet 1883, *D. rotundata* Levander 1894, *D. granulata* Cleve 1899, non *D. laevis* Bergh, non *D. rotundata* Claparède et Lachmann 1859, non *D. arctica* sensu Woloszyńska 1928, ? *D. vertex* Meunier 1910)
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Tab. 1. – continued

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- 57 *Dinophysis balechii* Norris et Berner 1970
- 58 *Dinophysis bibulbus* Balech 1971
 **Dinophysis biceras* Schiller 1928 (= *Dinoceras biceras* Schiller 1933)
- 59 *Dinophysis braarudii* (Nordli 1951) Balech 1967 (= *Ph. braarudii* Nordli)
- 60 *Dinophysis brevisulcus* Tai et Skogsberg 1934
- 61 *Dinophysis capitulata* Balech 1967
- 62 *Dinophysis carpentariae* Wood 1963
- 63 *Dinophysis caudata* Saville-Kent 1881 (= *D. homunculus* Stein 1883; related to *D. tripos* Gourret 1883)
 **Dinophysis collaris* Kofoid et Skogsberg 1928
- 64 *Dinophysis cornuta* (Peters 1928) Balech 1967 (= *Ph. cornutum* Peters)
 **Dinophysis crassior* Paulsen 1949 (= *D. norvegica* var. *crassior* Paulsen 1907, small cell of *D. norvegica* Claparède et Lachmann)
- 65 *Dinophysis curvata* Schiller 1933 (= *D. sphaerica* Stein 1883 partim, non *D. diegensis* var. *curvata* Kofoid 1907)
- 66 *Dinophysis cyrtoptera* Balech 1978
 **Dinophysis dens* Pavillard 1915 (small cell of *D. acuta* Ehrenberg)
- 67 *Dinophysis dentata* Schiller 1928
 **Dinophysis diegensis* Kofoid 1907 (small cell of *D. caudata* Saville-Kent 1881)
 **Dinophysis diegensis* var. *curvata* Kofoid 1907 (small cell of *D. tripos* Gourret)
- 68 *Dinophysis dolychopterygium* (Murray et Whitting 1899) Balech 1967
- 69 *Dinophysis doryphorum* (Stein 1883) Abé vel Balech 1967 (= *D. doryphorides* (P. Dangeard 1927) Balech 1967)
- 70 *Dinophysis dubia* Balech 1978
- 71 *Dinophysis ellipsoides* Kofoid 1907 [related to *D. acuminata*]
- 72 *Dinophysis equalantii* Balech 1971
- 73 *Dinophysis exigua* Kofoid et Skogsberg 1928
- 74 *Dinophysis fortii* Pavillard 1923 (= *D. laevis* Pouchet 1883, *D. ovum* Schütt sensu Martin 1929, *D. lapidistrigiliformis* Abé 1967, *D. intermedia* Pavillard 1916, non *D. intermedia* Cleve 1900)
- 75 *Dinophysis fortunata* Sournia 1973 (= *Ph. longialatum* Gaarder 1954, *Heteroschisma longialata* (Gaarder) Balech 1967, non *D. longialata* Gran et Braarud 1935)
- 76 *Dinophysis gaarderae* Sournia 1973 (= *Ph. robustum* Gaarder 1954, non *D. robusta* Gran et Braarud 1935)
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Tab. 1. – continued

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- 77 *Dinophysis granii* Paulsen 1949
 78 *Dinophysis hasleae* Balech 1973
 79 *Dinophysis hastata* Stein 1883 (= *D. uracantha* (Stein) E.S. Silva 1956)
 80 *Dinophysis hyalina* Wood 1963
 81 *Dinophysis intermedia* Cleve 1900 (non *D. intermedia* Pavillard 1916)
 82 *Dinophysis irregularis* (Lebour 1925) Balech 1967 (= *Ph. irregulare* Lebour)
 **Dinophysis islandica* Paulsen 1949
 **Dinophysis joergersenii* Kofoid et Skogsberg 1928 (= *D. triacantha* Jørgensen 1923 partim)
 83 *Dinophysis lacrima* (Gaarder 1954) Balech 1967 (= ?*D. elongatum* (Jørgensen 1923) Abé vel Balech 1967)
 84 *Dinophysis laevis* Claparède et Lachmann 1859 (non *D. laevis* Bergh 1881, non *D. laevis* Pouchet 1883)
 **Dinophysis lapidistrigiliformis* Abé 1967 (small cell of *D. fortii* Pavillard 1923)
 85 *Dinophysis lata* (Gaarder 1954) Balech 1967 (= *Ph. latum* Gaarder, non *D. lata* Balech 1971 = *D. sourniai* Balech 1978)
 86 *Dinophysis laticincta* Balech 1979
 **Dinophysis longialata* Gran et Braarud 1935
 87 *Dinophysis meteorii* Böhm 1933
 88 *Dinophysis minuta* (Cleve 1900) Balech 1967 (= *D. elongata* (Jørgensen 1923) Abé vel Balech 1967)
 89 *Dinophysis meunieri* Schiller 1928 (= *D. cuneiformis* Meunier 1910, non *D. cuneiformis* Mangin 1922)
 90 *Dinophysis micheneri* Sournia 1973 (= *Ph. limbatum* Kofoid et Michener 1911)
 91 *Dinophysis micropleura* Balech 1971
 92 *Dinophysis micropterygia* P. Dangeard 1927
 93 *Dinophysis microstrigiliformis* Abé 1967
 94 *Dinophysis miles* Cleve 1900 (= *Heteroceras schroeteri* Forti 1901)
 95 *Dinophysis mitroides* Sournia 1973 (= *Ph. okamurai* Pavillard 1931, non *D. okamurai* Kofoid et Skogsberg 1928)
 96 *Dinophysis modesta* (Böhm 1936) Balech 1967 (= *Ph. modestum* Böhm)
 97 *Dinophysis monacantha* Kofoid et Skogsberg 1928 (non *Ph. monacanthum* Gail 1950)
 98 *Dinophysis moresbyensis* Wood 1963
 99 *Dinophysis mucronata* (Kofoid et Skogsberg 1928) Sournia 1973 (= *D. paulsenii* (Schiller 1928) Balech 1967,
 non *D. paulsenii* Woloszyńska 1928)
 100 *Dinophysis neolenticula* Sournia 1973 (= *Ph. lenticulata* Kofoid 1907, non *D. lenticula* Daday 1888, nec *D. lenticula* Pavillard 1916)
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Tab. 1. – continued

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- 101 *Dinophysis nias* Karsten 1907 (= *D. triacantha* Karsten 1907)
- 102 *Dinophysis norvegica* Claparède et Lachmann 1859 (= *D. norvegica* var. *debilior* Paulsen 1907, *D. debilior* (Paulsen) Paulsen 1949)
- 103 *Dinophysis okamurai* Kofoid et Skogsberg 1928 (= *D. vanhoeffenii* Okamura 1907 partim, non *D. vanhoeffenii* Ostenfeld 1899)
- 104 *Dinophysis odiosa* (Pavillard 1930) Tai et Skogsberg 1934 (= *Ph. odiosum* Pavillard 1930, *Ph. hastatum* Pavillard 1909)
- 105 *Dinophysis operculata* (Stein 1883) Balech 1967
- 106 *Dinophysis opposita* Wood 1963
- 107 *Dinophysis oviformis* Chen et Ni 1988 (non *D. oviformis* Schiller 1928)
- 108 *Dinophysis ovum* Schütt 1895 (= *D. brevisulcus* Tai et Skogsberg 1937 partim, *D. antarctica* Balech 1958, non *Ph. ovum* Schütt 1895)
- 109 *Dinophysis pacifica* Wood 1963
- 110 *Dinophysis paralata* Sournia 1973 (= *D. alata* (Wood 1954) Balech 1967)
- 111 *Dinophysis parva* Schiller 1928 (= *D. infundibulus* Schiller 1928)
- 112 *Dinophysis perforata* Sournia 1973 (= *D. porosa* (Kofoid et Skogsberg 1928) Balech 1967)
- 113 *Dinophysis planiceps* (Schiller 1928) Balech 1967 (= *Ph. planiceps* Schiller)
- 114 *Dinophysis porodictyum* (Stein 1883) Abé vel Balech 1967 (= *D. amygdala* Balech 1971, non *D. amygdala* 1967)
- 115 *Dinophysis punctata* Jørgensen 1923 (non *D. punctata* Balech 1971)
- 116 *Dinophysis pusilla* Jørgensen 1923
- 117 *Dinophysis recurva* Kofoid et Skogsberg 1928 (= *D. lenticula* Pavillard 1916, non Daday 1888)
- 118 *Dinophysis rete* Sournia 1973 (= *D. reticulata* (Kofoid 1907) Balech 1967, non *D. reticulata* Gaarder 1954)
- 119 *Dinophysis reticulata* Gaarder 1954 (non *D. reticulata* (Kofoid 1907) Balech 1967)
- 120 *Dinophysis richardii* (Pavillard 1934) Balech 1967
**Dinophysis robusta* Gran et Braarud 1935
- 121 *Dinophysis rudgei* Murray et Whitting 1899 (non *Ph. rudgei* Murray et Whitting 1899)
- 122 *Dinophysis rugosa* Kofoid et Michener 1911 (= *Histiophysis rugosa* Kofoid et Michener 1911)
- 123 *Dinophysis ruudii* (Braarud 1935) Balech 1967 (= *Ph. ruudii* Braarud)
- 124 *Dinophysis sacculus* Stein 1883 (= *D. acuminata* f. *reniformis* Pavillard 1905, *D. acuminata* f. *reniformis* (Pavillard 1905) Zingone, Montesor et Marino 1998, *D. pavillardii* Schröder 1906, *D. reniformis* (Pavillard) Kofoid et Skogsberg 1928, *D. ventrecta* Schiller 1933, *D. phaseolus* E.S. Silva 1952) [Zingone et al. (1998)]
- 125 *Dinophysis scabra* Sournia 1973 (= *Ph. rugosum* Gaarder 1954)
- 126 *Dinophysis schilleri* Sournia 1973 (= *Ph. sphaeroideum* Schiller 1928)
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Tab. 1. – continued

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- 127 *Dinophysis schroederi* Pavillard 1909
 128 *Dinophysis schuettii* Murray et Whitting 1899 (= *D. uracantha* Schütt 1895, non *D. uracantha* Stein 1883)
 129 *Dinophysis scrobiculata* Balech 1971 (= *Ph. scrobiculata* (Balech) Díaz-Ramos et Estrella in Díaz-Ramos 2000) [Díaz-Ramos (2000)]
 130 *Dinophysis semen* Meunier 1910
 131 *Dinophysis siankanensis* Becerril-Almazán et Hernández-Becerril 2002 [Becerril-Almazán and Hernández-Becerril (2002)]
 132 *Dinophysis similis* Kofoid et Skogsberg 1928 (= *D. sphaerica* Schütt 1895, *D. simplex* Balech 1962 = *D. tai* Balech 1971, non *D. simplex* Böhm 1933)
 133 *Dinophysis simplex* Böhm 1933 (non *D. simplex* Balech 1962 = *D. tai* Balech 1971 = *D. similis* Kofoid et Skogsberg 1928)
 **Dinophysis skagii* Paulsen 1949 (small cell of *D. acuminata*)
 134 *Dinophysis sourniai* Balech 1978 (= *D. lata* Balech 1971, non *D. lata* (Gaarder 1954) Balech 1967)
 135 *Dinophysis sphaerica* Stein 1883 (= *D. vanhoffenii* Ostefeld 1899, non *D. sphaerica* Schütt 1895)
 136 *Dinophysis spinata* (Peters 1928) Balech 1967
 **Dinophysis spinosa* Rampi 1950
 137 *Dinophysis subcircularis* Paulsen 1949
 138 *Dinophysis swezyae* Kofoid et Skogsberg 1928
 139 *Dinophysis symmetrica* (Gaarder 1954) Balech 1967
 140 *Dinophysis tailisunii* Chen et Ni 1988
 **Dinophysis taylorii* Hernández-Becerril 1992 (small cell of *D. tripos*/*D. caudata*)
 141 *Dinophysis tenuivelata* Balech 1973
 142 *Dinophysis thompsonii* (Wood 1954) Balech 1967
 **Dinophysis trapezium* Kofoid et Skogsberg 1928
 **Dinophysis triacantha* Kofoid 1907 (non *D. triacantha* Karsten 1907)
 143 *Dinophysis tripos* Gourret 1883 (= *D. caudata* var. *tripos* (Gourret) Gail 1950)
 144 *Dinophysis truncata* Cleve 1901 (= *D. cuneiformis* Mangin 1922, non *D. cuneiformis* Meunier 1910)
 145 *Dinophysis tuberculata* Mangin 1926 (= *D. carinata* Peters 1928)
 146 *Dinophysis turbinea* (Kofoid et Michener 1911) Balech 1967
 147 *Dinophysis umbosa* Schiller 1928
 148 *Dinophysis uracantha* Stein 1883 (non *D. uracantha* Schütt 1895 = *D. schuettii* Murray et Whitting 1899)
 149 *Dinophysis urceola* Kofoid et Skogsberg 1928
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Tab. 1. – continued

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- 150 *Dinophysis vertex* Meunier 1910 (= ?*D. arctica* Mereschkowsky 1879)
 151 *Dinophysis whiteleggei* (Wood 1954) Balech 1967
 11 **Heteroschisma** Kofoid *et* Skogsberg 1928
 152 *Heteroschisma globulus* Schiller 1933 (= *Phalacroma globulus* Schütt 1895)
 153 *Heteroschisma pirum* (Gaarder 1954) Balech 1967 (= *Phalacroma pirum* Gaarder)
 154 *Heteroschisma inaequale* Kofoid *et* Skogsberg 1928 (= *Latifascia inaequale* (Kofoid *et* Skogsberg) Loeblich Jr. *et* Loeblich III 1966)
 155 *Heteroschisma subantarcticum* Balech 1971
 12 **Histioneis** Stein 1883 (= **Parahistioneis** Kofoid *et* Skogsberg 1928) (65 species)
 156 *Parahistioneis acutiformis* Rampi 1947 (= ?*H. diamantinae* Wood 1963)
 157 *Histioneis aequatorialis* Wood 1963
 158 *Histioneis australiae* Wood 1963 (= ?*H. moresbyensis* Wood 1963)
 159 *Histioneis biremis* Stein 1883
 160 *Histioneis bougainvillae* Wood 1963
 161 *Histioneis caminus* Böhm 1931 *in* Schiller 1933
 162 *Histioneis carinata* Kofoid 1907
 163 *Histioneis cerasus* Böhm 1931 *in* Schiller 1933
 164 *Histioneis cleaveri* Rampi 1952
 165 *Histioneis costata* Kofoid *et* Michener 1911 (= ?*H. elongata* Kofoid *et* Michener 1911)
 166 *Histioneis crateriformis* Stein 1883 (= *H. reticulata* Kofoid 1907)
 167 *Histioneis cymbalaria* Stein 1883 (= *H. skogsbergii* Schiller 1933, *H. depressa* Schiller 1933, *H. speciosa* Rampi 1969)
 168 *Histioneis dentata* Murray *et* Whitting 1899
 169 *Histioneis detonii* Rampi 1947 (= ?*H. cleaveri* Rampi 1952)
 170 *Histioneis diamantinae* Wood 1963 (= ?*P. acutiformis* Rampi 1947)
 171 *Histioneis diomedae* Kofoid *et* Michener 1911 (= *P. diomedae* (Kofoid *et* Michener) Kofoid *et* Skogsberg 1928)
 172 *Histioneis dubia* Böhm 1933 (= ?*H. mediterranea* sec Rampi)
 173 *Histioneis elongata* Kofoid *et* Michener 1911 (= *H. subcarinata* Rampi 1947, ?*H. costata* Kofoid *et* Michener 1911)
 174 *Histioneis fragilis* Böhm 1931 *in* Schiller 1933 (= ?immature *H. milneri* Murray *et* Whitting 1899)
 175 *Histioneis garrettii* Kofoid 1907 (= *P. garrettii* (Kofoid) Kofoid *et* Skogsberg 1928)
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Tab. 1. – continued

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- 176 *Parahistioneis gascoynensis* Wood 1963
 177 *Histioneis gregoryi* Böhm 1936 (= ?*H. pachypus* Böhm 1931 in Schiller 1933)
 178 *Histioneis gubernans* Schütt 1895 (= *H. expansa* Rampi 1947, *H. ligustica* Rampi 1940)
 179 *Histioneis highleyi* Murray et Whitting 1899
 180 *Histioneis hyalina* Kofoid et Michener 1911 (= ?*H. longicollis* Kofoid 1907)
 181 *Histioneis imbricata* Halim 1960 (= ?*H. longicollis* Kofoid 1907)
 182 *Histioneis inclinata* Kofoid et Michener 1911 (= *H. alata* Rampi 1947)
 183 *Histioneis inornata* Kofoid et Michener 1911
 184 *Histioneis isselii* Forti 1932 (= ?*H. elongata* sec Böhm 1936)
 185 *Histioneis joergensenii* Schiller 1928 (= ?*H. vouckii* Schiller 1928, = ?*H. planeta* Wood 1963)
 186 *Histioneis josephinae* Kofoid 1907 (= ?*H. megalocopa* Stein 1883)
 187 *Histioneis karstenii* Kofoid et Michener 1911 (= *P. karstenii* (Kofoid et Michener) Kofoid et Skogsberg 1928)
 188 *Histioneis lanceolata* Wood 1963
 189 *Histioneis longicollis* Kofoid 1907 (= *H. elegans* Halim 1960, *H. faouzii* Halim 1960, *H. kofoidii* Forti et Issel 1925, *H. minuscula* Rampi 1950, *H. sublongicollis* Halim 1960, *H. villafranca* Halim 1960)
 190 *Histioneis marchesonii* Rampi 1941
 191 *Histioneis mediterranea* Schiller 1928 (= ?*H. reticulata* Kofoid 1907)
 192 *Histioneis megalocopa* Stein 1883 (= *H. dolon* Murray et Whitting 1899)
 193 *Histioneis milneri* Murray et Whitting 1899 (= *H. helenae* Murray et Whitting 1899, *H. hippoperoides* Kofoid et Michener 1911)
 194 *Histioneis mitchellana* Murray et Whitting 1899 (= *H. mitchelliana* Schröder 1906, ?*H. pulchra* Kofoid 1907)
 195 *Histioneis moresbyensis* Wood 1963 (= ?*H. costata* Kofoid et Michener 1911)
 196 *Histioneis navicula* Kofoid 1907 (= ?*H. oceanica* Rampi 1950)
 197 *Histioneis oceanica* Rampi 1950 (= ?*H. navicula* Kofoid 1907)
 198 *Histioneis oxypteris* Schiller 1928 (= ?*H. paulsenii* Kofoid 1907)
 199 *Parahistioneis pachypus* Böhm 1931 in Schiller 1933 (= *P. varians* Böhm 1933, = ?*H. gregoryi* Böhm 1936)
 200 *Histioneis pacifica* Kofoid et Skogsberg 1928 (= *H. pavillardii* Rampi 1939, *H. bernhardii* Rampi 1969)
 201 *Histioneis panaria* Kofoid et Skogsberg 1928 (= ?*H. panda* Kofoid et Michener 1911)
 202 *Histioneis panda* Kofoid et Michener 1911 (= ?*H. panaria* Kofoid et Skogsberg 1928)
 203 *Histioneis para* Murray et Whitting 1899 (= *P. conica* Böhm 1931 in Schiller 1933)
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Tab. 1. – continued

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- 204 *Histioneis paraformis* (Kofoid et Skogsberg 1928) Balech 1971 (= *H. para* Okamura 1912, *P. acuta* Böhm 1931 in Schiller 1933)
- 205 *Histioneis paulsenii* Kofoid 1907 (= ?*H. crateriformis* Stein 1883, ?*H. reticulata* Kofoid 1907 sec Balech 1988)
- 206 *Parahistioneis pieltainii* Osorio-Tafall 1942 (= ?*H. sphaeroidea* Rampi 1947, ?*H. tubifera* Böhm 1931 in Schiller 1933)
- 207 *Histioneis pietschmannii* Böhm 1931 in Schiller 1933
- 208 *Histioneis planeta* Wood 1963 (= ?*H. longicollis* Kofoid 1907)
- 209 *Histioneis pulchra* Kofoid 1907 (= ?*H. mitchellana* Murray et Whitting 1899)
- 210 *Histioneis rampii* Halim 1960 (= ?*H. cymbalaria* Stein 1883)
- 211 *Histioneis reginella* Kofoid et Michener 1911
- 212 *Histioneis remora* Stein 1883 (= ?*H. sphaeroidea* Rampi 1947)
- 213 *Histioneis robusta* Rampi 1969
- 214 *Histioneis rotundata* Kofoid et Michener 1911 (= *P. rotundata* (Kofoid et Michener) Kofoid et Skogsberg 1928)
- 215 *Histioneis schilleri* Böhm 1931 in Schiller 1933
- 216 *Histioneis simplex* Wood 1963
- 217 *Parahistioneis sphaeroidea* Rampi 1947 (= ?*H. pieltainii* Osorio-Tafall 1942, = ?*H. tubifera* Böhm 1931 in Schiller 1933)
- 218 *Histioneis striata* Kofoid et Michener 1911 (= *H. variabilis* Schiller 1933, *H. steinii* Schiller 1928, *H. parallela* Gaarder 1954)
- 219 *Histioneis tubifera* Böhm 1931 in Schiller 1933 (= ?*H. pieltainii* Osorio-Tafall 1942, = ?*H. sphaeroidea* Rampi 1947)
- 220 *Histioneis vouckii* Schiller 1928 (= ?*H. joergensenii* Schiller 1928)
- **Metadinophysis* Nie et Wang 1941 (= ?*Dinophysis* Ehrenberg 1839)
- **Metadinophysis sinensis* Nie et Wang 1941
- 13 Metaphalacroma** Tai et Skogsberg 1934
- 221 *Metaphalacroma skogsbergii* Tai in Tai et Skogsberg 1934
- 14 Ornithocercus** Stein 1883 (15 species)
- 222 *Ornithocercus australis* Wood 1963
- 223 *Ornithocercus bilobatus* Rampi 1950 (= ?*O. quadratus* f. *intermedia* Kofoid et Skogsberg 1928)
- 224 *Ornithocercus carpentariae* Wood 1963
- 225 *Ornithocercus cristatus* Matzenauer 1933
- 226 *Ornithocercus francescae* (Murray 1899) Balech 1962 (= *O. carolinae* Kofoid 1907, *Histioneis francescae* Murray in Murray et Whitting 1899)
- 227 *Ornithocercus formosus* Kofoid et Michener 1911
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Tab. 1. – continued

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- 228 *Ornithocercus geniculatus* P. Dangeard 1927
 229 *Ornithocercus heteroporoides* Abé 1967
 230 *Ornithocercus heteroporus* Kofoid 1907 (= *O. biclavatus* Wood 1954, *O. triclavatus* Wood 1954)
 231 *Ornithocercus magnificus* Stein 1883 (= *O. minor* Jørgensen 1923, non *O. magnificus* Bütschli 1885)
 232 *Ornithocercus quadratus* Schütt 1900 (= *O. assimilis* Jørgensen 1923, *Histioneis quadrata* Lemmermann 1901, *O. galea* (Pouchet 1883) Abé 1967)
 233 *Ornithocercus skogsbergii* Abé 1967
 234 *Ornithocercus splendidus* Schütt 1895 (= *Histioneis splendida* Murray et Whitting 1899)
 235 *Ornithocercus steinii* Schütt 1900 (= *O. serratus* Kofoid 1907, *O. orbiculatus* Kofoid et Michener 1911)
 236 *Ornithocercus thumii* (Schmidt 1888) Kofoid et Skogsberg 1928
 15 ***Phalacroma*** Stein 1883 (= *Dinophysis* Ehrenberg 1839 partim) (41 species) [*Phalacroma* has been considered a synonym of *Dinophysis* but the genus is maintained on the basis of the larger height of the epitheca and the prevailing heterotrophic behaviour. This is still a matter of debate]
 237 *Phalacroma acutum* (Schütt 1895) Pavillard 1916 (= *D. acutoides* Balech 1967, non *D. acuta* Ehrenberg 1839)
 238 *Phalacroma apicatum* Kofoid et Skogsberg 1928 (= *D. apicata* (Kofoid et Skogsberg) Abé vel Balech 1967)
 239 *Phalacroma argus* Stein 1883 (= *D. argus* (Stein) Abé vel Balech 1967)
 240 *Phalacroma biceps* (Schiller 1928) Schiller 1933 (= *D. biceps* Schiller)
 241 *Phalacroma bipartitum* Kofoid et Skogsberg 1928 (= *D. bipartita* (Kofoid et Skogsberg) Balech 1967)
 242 *Phalacroma circumcinctum* Kofoid et Michener 1911 (= *D. circumcincta* (Kofoid et Michener) Balech 1967)
 243 *Phalacroma circumsutum* Karsten 1907 (= *D. circumsutum* (Karsten) Balech 1967)
 244 *Phalacroma complanatum* Gaarder 1954
 245 *Phalacroma contractum* Kofoid et Skogsberg 1928 (= *D. contracta* (Kofoid et Skogsberg 1928) Balech 1967, *Ph. ruudii* Braarud 1935)
 246 *Phalacroma cuneolus* Kofoid et Skogsberg 1928 (= *D. cuneolus* (Kofoid et Skogsberg) Balech 1967)
 247 *Phalacroma cuneus* Schütt 1895 (= *D. cuneus* (Schütt) Abé vel Balech 1967, *Ph. blackmanii* Murray et Whitting 1899, *Ph. triangulare* Wood 1954, *Dinophysis triangulare* (Wood) Balech 1967)
 248 *Phalacroma doryphorum* Stein 1883
 249 *Phalacroma expulsum* (Kofoid et Michener 1911) Kofoid et Skogsberg 1928 (= *P. stenopterygium* Jørgensen 1923)
 250 *Phalacroma favus* Kofoid et Michener 1911 (= *P. hindmarchii* Pavillard 1916)
 251 *Phalacroma fimbriatum* Kofoid et Michener 1911 (= *D. fimbriata* (Kofoid et Michener) Balech 1967)
 252 *Phalacroma giganteum* Kofoid et Michener 1911 (= *D. gigantea* (Kofoid et Michener) Balech 1967)
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Tab. 1. – continued

- 253 *Phalacroma globulus* Schütt 1895 (= *D. globulus* (Schütt) Balech 1967)
- 254 *Phalacroma hindmarchii* Murray et Whitting 1899 (= *D. hindmarchii* (Murray et Whitting) Balech 1967, non *Ph. hindmarchii* Pavillard 1916)
- 255 *Phalacroma jibbonense* Wood 1954 (= *D. jibbonensis* (Wood) Balech 1967)
- 256 *Phalacroma lativelatum* Kofoid et Skogsberg 1928 (= *D. lativelata* (Kofoid et Skogsberg) Balech 1967)
- 257 *Phalacroma dens* Kofoid et Skogsberg 1928 (= *D. lens* (Kofoid et Skogsberg) Balech 1967)
- 258 *Phalacroma mawsonii* Wood 1954 (= *D. mawsonii* (Wood 1954) Balech 1967, ?*Ph. tuberculatum* Galil 1959)
- 259 *Phalacroma minutum* Cleve 1900 (= *D. minuta* (Cleve) Balech 1967)
- 260 *Phalacroma mitra* Schütt 1895 (= *D. mitra* (Schütt 1895) Abé *vel* Balech 1967, *Ph. rapa* Stein 1883, *Ph. dolichopterygium* Murray et Whitting 1899)
- 261 *Phalacroma monacanthum* Gail 1950 (non *D. monacantha* Kofoid et Skogsberg 1928)
- 262 *Phalacroma nasutum* Stein 1883 (= *Pseudophalacroma nasutum* (Stein) Jørgensen 1923, *D. nasutum* (Stein) Parke et Dixon 1968)
- 263 *Phalacroma operculatum* Stein 1883
- 264 *Phalacroma operculoides* Schütt 1895 (= *D. operculoides* (Schütt) Balech 1967)
- 265 *Phalacroma ovatum* (Claparède et Lachmann 1859) Jørgensen 1923
- 266 *Phalacroma parvulum* (Schütt 1895) Jørgensen 1923 (= *P. porodictyum* Stein var. *parvula* Schütt, *D. oviformis* Schiller 1928; ?small cell of *D. rotundata*)
- 267 *Phalacroma porodictyum* Stein 1883
- 268 *Phalacroma praetextum* Kofoid et Michener 1911 (= *D. praetexta* (Kofoid et Michener) Balech 1967)
- 269 *Phalacroma protuberans* Kofoid et Skogsberg 1928 (= *D. protuberans* (Kofoid et Skogsberg) Balech 1967)
- 270 *Phalacroma pugiunculus* Jørgensen 1923 (= *D. pugiunculus* (Jørgensen) Balech 1967)
- 271 *Phalacroma pulchellum* Lebour 1922
**Phalacroma pulchrum* Kofoid et Michener 1911
**Phalacroma pyriforme* Kofoid et Skogsberg 1928
- 272 *Phalacroma rapa* Stein 1883 (= *D. rapa* (Stein) Balech 1967, *Ph. mitra* Okamura 1907)
- 273 *Phalacroma rotundatum* (Claparède et Lachmann 1859) Kofoid et Michener 1911 (= *D. rotundata* Claparède et Lachmann, *D. whittingae* Balech 1971, *Phalacroma rudgei* Murray et Whitting 1899, *D. rotundiformis* Tai et Skogsberg 1934)
- 274 *Phalacroma striatum* Kofoid 1907 (= *D. striata* (Kofoid) Balech 1967)
- 275 *Phalacroma tuberculatum* Galil 1959 (= *D. tuberculata* (Gail) Konovalova 1998, ?*D. mawsonii* (Wood 1954) Balech 1988) [Konovalova (1998)]
- 276 *Phalacroma vastiforme* Tai et Skogsberg 1934 (= *D. vastiformis* (Tai et Skogsberg) Balech 1967)

Tab. 1. – continued

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- 277 *Phalacroma vastum* Schütt 1895 (= *D. vasta* (Schütt) Balech 1967)
16 Sinophysis Nie et Wang 1944
 278 *Sinophysis canaliculata* Quod, Ten-Hage, Turquet, Mascarell et Couté 1999 [Quod et al. (1999)]
 279 *Sinophysis ebriola* (Herdman 1924) Balech 1956 (= *Phalacroma ebriola* Herdman 1924)
 280 *Sinophysis grandis* Hoppenrath 2000 [Hoppenrath (2000c)]
 281 *Sinophysis microcephala* Nie et Wang 1944
 282 *Sinophysis stenosoma* Hoppenrath 2000 [Hoppenrath (2000c)]
17 Triposolenia Kofoid 1906 (10 species)
 283 *Triposolenia ambulatrix* Kofoid 1907 (non *T. ambulatrix* Jørgensen 1923)
 284 *Triposolenia bicornis* Kofoid 1906
 285 *Triposolenia depressa* Kofoid 1906 (= *T. ambulatrix* Jørgensen 1923)
 286 *Triposolenia exilis* Kofoid 1906
 287 *Triposolenia fallax* Hernández-Becerril et Meave del Castillo 1999 [Hernández-Becerril and Meave del Castillo (1999)]
 288 *Triposolenia fatula* Kofoid 1907
 289 *Triposolenia intermedia* Kofoid et Skogsberg 1928
 290 *Triposolenia longicornis* Kofoid 1907
 291 *Triposolenia ramiciformis* Kofoid 1906
 292 *Triposolenia truncata* Kofoid 1906
- Oxyphysaceae Sournia 1984
- 18 Oxyphysis** Kofoid 1926
 293 *Oxyphysis oxytoxoides* Kofoid 1926
- Gymnodiniales Lemmermann 1910**
 Gymnodiniaceae Lankester 1885
- 19 Akashiwo** G. Hansen et Moestrup 2000 (= *Gymnodinium* Stein 1883 partim) [Daugbjerg et al. (2000)]
 294 *Akashiwo sanguinea* (Hirasaka 1924) G. Hansen et Moestrup 2000 (= *G. sanguineum* Hirasaka, *G. splendens* Lebour 1925, *G. nelsonii* Martin 1929 [Daugbjerg et al. (2000), a feminine ending was used for the epithet, the use of “Akashio” is recommendable])
- 20 Amphidinium** Claparède et Lachmann 1859 (76 species)
 295 *Amphidinium acutum* Schiller 1928 (= *A. acutissimum* Schiller 1933)
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Tab. 1. – continued

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- 296 *Amphidinium aloxalocium* Norris 1961
 297 *Amphidinium asymmetricum* Kofoid et Swezy 1921
 **Amphidinium aureum* Böhm 1976
 298 *Amphidinium bipes* Herdman 1924
 299 *Amphidinium boggayum* S. Murray et Patterson 2002 [Murray and Patterson (2002)]
 300 *Amphidinium britannicum* (Herdman 1924) Lebour 1925 (= *A. asymmetricum* var. *britannicum* Herdman 1922)
 301 *Amphidinium carbunculus* Conrad et Kufferath 1954
 302 *Amphidinium celestinum* Conrad et Kufferath 1954
 303 *Amphidinium coeruleum* Conrad 1939
 304 *Amphidinium conradii* (Conrad 1926) Schiller 1933 (= *Gymnodinium glaucum* Conrad)
 **Amphidinium conus* Schiller 1928
 305 *Amphidinium corallinum* Conrad et Kufferath 1954
 306 *Amphidinium corpulentum* Kofoid et Swezy 1921
 307 *Amphidinium corrugatum* J. Larsen et Patterson 1990
 308 *Amphidinium crassum* Lohmann 1908 (= *A. phaeocysticola* Lebour 1925)
 309 *Amphidinium cristatum* Ballantine in Parke et Dixon 1964 (= *A. rostratum* Conrad et Kufferath 1954)
 310 *Amphidinium cucurbita* Kofoid et Swezy 1921
 311 *Amphidinium cucurbitella* Kofoid et Swezy 1921
 312 *Amphidinium curvatum* Schiller 1928
 313 *Amphidinium cyaneoturbo* Conrad et Kufferath 1954
 **Amphidinium dentatum* Kofoid et Swezy 1921
 314 *Amphidinium discoidale* (Diesing 1866) Kofoid et Swezy 1921 (= *A. operculatum* var. *discoidalis* Diesing 1866)
 315 *Amphidinium dubium* Conrad et Kufferath 1954
 316 *Amphidinium emarginaum* (Diesing 1886) Kofoid et Swezy 1921 (= *A. operculatum* var. *marginata* Diesing 1886)
 317 *Amphidinium extensum* Wulff 1916
 **Amphidinium fastigium* Kofoid et Swezy 1921
 **Amphidinium filum* Böhm 1976
 318 *Amphidinium flagellans* Schiller 1928
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Tab. 1. – continued

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- 319 *Amphidinium flexum* Herdman 1923
 **Amphidinium galbanum* Kofoid et Swezy 1921
- 320 *Amphidinium glabrum* Hopperanth et Okolodkov 2000 [Hopperanth and Okolodkov (2000)]
- 321 *Amphidinium glaucum* Conrad 1926
- 322 *Amphidinium globosum* Schröder 1911
- 323 *Amphidinium hadai* Balech 1976 (=A. *acutissimum* Schiller sensu Hada 1970)
- 324 *Amphidinium herdmannii* Kofoid et Swezy 1921 (=A. *operculatum* Herdman 1911)
- 325 *Amphidinium incoloratum* P.H. Campbell 1973 (=A. *boekhoutnesis* Caljon 1983)
- 326 *Amphidinium inflatum* Kofoid 1931
- 327 *Amphidinium kesslitzii* Schiller 1928
- 328 *Amphidinium lacustre* Stein 1883 (=A. *lacustriforme* Schiller 1928, A. *schroederi* Schiller 1928)
- 329 *Amphidinium lanceolatum* Schröder 1911
- 330 *Amphidinium latum* Lebour 1925
- 331 *Amphidinium lilloense* Conrad et Kufferath 1954
- 332 *Amphidinium lissae* Schiller 1925
- 333 *Amphidinium longum* Lohmann 1908 (=A. *acutum* Lohmann 1920, non *Cochlodinium longum* Lohmann 1908, non A. *acutum* Schiller 1928)
- 334 *Amphidinium luteum* Skuja 1939
 **Amphidinium machapungarum* P.H. Campbell 1973
- 335 *Amphidinium macrocephalum* Conrad et Kufferath 1954
- 336 *Amphidinium mammillatum* Conrad et Kufferath 1954 (=A. *pseudogalbanum* Conrad et Kufferath 1954)
- 337 *Amphidinium mananninii* Herdman 1924
- 338 *Amphidinium massartii* Biecheler 1952 (=A. *carterae* Hulburt 1957, non A. *klebsii* Kofoid et Swezy 1921)
- 339 *Amphidinium microcephalum* Norris 1961
- 340 *Amphidinium mootonorum* S. Murray et Patterson 2002 [Murray and Patterson (2002)]
- 341 *Amphidinium oceanicum* Lohmann 1920
- 342 *Amphidinium operculatum* Claparède et Lachmann 1859 (=A. *klebsii* Kofoid et Swezy 1921, A. *wislouchii* Hulburt 1957, A. *rhyngocephalum* Anissimowa 1926, A. *hoefleri* Schiller et Diskus 1955, A. *elegans* Grell et Wohlfarth-Bottermann 1957, *Amphidinium operculatum* var. *gibbosum* Maranda et Shimizu 1996)
- 343 *Amphidinium ornithocephalum* Conrad 1939
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Tab. 1. – continued

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- 344 *Amphidinium ovoideum* (Lemmermann 1896) Lemmermann 1900 (= *Prorocentrum ovoideum* Lemmermann)
- 345 *Amphidinium ovum* Herdman 1924
**Amphidinium pacificum* Kofoid et Swezy 1921
- 346 *Amphidinium pelagicum* Lebour 1925
- 347 *Amphidinium pellucidum* Herdman 1922 (= *A. subsalsum* Biecheler 1952)
- 348 *Amphidinium phthartum* Skuja 1939
- 349 *Amphidinium poecilochroum* J. Larsen 1985
- 350 *Amphidinium prismaticum* (Conrad 1926) Schiller 1933 (= *Trochodinium prismaticum* Conrad)
- 351 *Amphidinium psammophilum* Conrad et Kufferath 1954
- 352 *Amphidinium psittacus* J. Larsen 1985
- 353 *Amphidinium purpureum* Conrad et Kufferath 1954
- 354 *Amphidinium roseolum* (Schmarda 1854) Schiller 1933 (= *Gymnodinium roseolum* (Schmarda) Stein 1878)
- 355 *Amphidinium salinum* Ruinen 1938
- 356 *Amphidinium scissum* Kofoid et Swezy 1921 (= *A. scissoides* Lebour 1925)
- 357 *Amphidinium semilunatum* Herdman 1923 (= *Thecadinium semilunatum* (Herdman) Dodge 1982)
- 358 *Amphidinium semilunatum* Kofoid et Swezy 1921 (non *A. semilunatum* Herdman 1923, *Thecadinium inclinatum* Balech 1956)
- 359 *Amphidinium sphenoides* Wulff 1916 (= *Gymnodinium filum* Lebour 1917)
- 360 *Amphidinium steinii* Lemmemann 1910 (= *Amphidinium operculatum* Stein 1883)
- 361 *Amphidinium stellatum* Conrad et Kufferath 1954
- 362 *Amphidinium stigmatum* Schiller 1928
**Amphidinium sulcatum* Kofoid 1907
- 363 *Amphidinium testudo* Herdman 1924
- 364 *Amphidinium tortum* Conrad et Kufferath 1954
- 365 *Amphidinium trochodinooides* Conrad et Kufferath 1954
**Amphidinium truncatum* Kofoid et Swezy 1921
- 366 *Amphidinium turbo* Kofoid et Swezy 1921
- 367 *Amphidinium vasculum* Kofoid et Swezy 1921
- 368 *Amphidinium vitreum* Herdman 1924
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Tab. 1. – continued

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- 369 *Amphidinium vittatum* Conrad et Kufferath 1954
 370 *Amphidinium yoorugurrum* S. Murray et Patterson 2002 [Murray and Patterson (2002)]
21 Cochlodinium Schütt 1896 (35 species)
 371 *Cochlodinium achromaticum* Lebour 1925
 372 *Cochlodinium adriaticum* Schiller 1933 (= *Gyrodinium adriaticum* Schiller 1928)
 373 *Cochlodinium archimedes* (Pouchet 1883) Lemmermann 1899 (= *Gymnodinium archimedes* Pouchet)
 **Cochlodinium atromaculatum* Kofoid et Swezy 1921 (non *Nematodinium atromaculatum* Kofoid 1931)
 374 *Cochlodinium brandtii* Wulff 1916 (= *C. angustum* Kofoid et Swezy 1921)
 375 *Cochlodinium catenatum* Okamura 1916 (= ?*C. polykrikoides* Margalef 1961)
 376 *Cochlodinium cavatum* Kofoid et Swezy 1921
 377 *Cochlodinium cereum* Kofoid et Swezy 1921
 378 *Cochlodinium citron* Kofoid et Swezy 1921
 379 *Cochlodinium clarissimum* Kofoid et Swezy 1921
 380 *Cochlodinium cnidophorum* Biecheler 1939
 381 *Cochlodinium conspiratum* Kofoid et Swezy 1921
 382 *Cochlodinium constrictum* (Schütt 1895) Lemmermann 1899 (= *Gymnodinium constrictum* Schütt)
 383 *Cochlodinium convolutum* Kofoid et Swezy 1921
 384 *Cochlodinium distortum* Kofoid et Swezy 1921
 **Cochlodinium elongatum* Kofoid et Swezy 1921
 385 *Cochlodinium faurei* Kofoid et Swezy 1921
 386 *Cochlodinium flavum* Kofoid 1931 (non *Gymnodinium flavum* Kofoid et Swezy 1921, non *Gyrodinium flavum* Kofoid 1931)
 387 *Cochlodinium geminatum* (Schütt 1895) Schütt 1896 (= *Gymnodinium geminatum* Schütt)
 388 *Cochlodinium helicoides* Lebour 1925 (= *C. helix* Schütt 1895 partim, *Cochlodinium helix* Kofoid et Swezy 1921)
 389 *Cochlodinium helix* (Pouchet 1887) Lemmermann 1899 (= *Gymnodinium helix* Pouchet, *Gymnodinium helix* Schütt 1895)
 390 *Cochlodinium lebourae* Kofoid et Swezy 1921
 **Cochlodinium moniliforme* Margalef 1968
 391 *Cochlodinium pellucidum* Lohmann 1908
 392 *Cochlodinium pirum* (Schütt 1895) Lemmermann 1899 (= *Gymnodinium pirum* Schütt)
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Tab. 1. – continued

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- 393 *Cochlodinium platycorne* Daday 1888
 394 *Cochlodinium polykrikoides* Margalef 1961 (= *C. heterolobatum* E.S. Silva 1967, =? *C. catenatum* Okamura 1916)
 395 *Cochlodinium pulchellum* Lebour 1917
 396 *Cochlodinium pupa* Lebour 1925
 397 *Cochlodinium radiatum* Kofoid *et* Swezy 1921
 **Cochlodinium rosaceum* Kofoid *et* Swezy 1921
 398 *Cochlodinium schuettii* Kofoid *et* Swezy 1921 (= *Gymnodinium helix* Schütt 1895 partim, non Pouchet 1887)
 399 *Cochlodinium scintillans* Kofoid *et* Swezy 1921
 400 *Cochlodinium semistriatum* Elbrächter 1979
 401 *Cochlodinium strangulatum* (Schütt 1895) Schütt 1896 (= *Gymnodinium strangulatum* Schütt)
 402 *Cochlodinium turbineum* Kofoid *et* Swezy 1921
 403 *Cochlodinium vinctum* Kofoid *et* Swezy 1921
 404 *Cochlodinium virescens* Kofoid *et* Swezy 1921
 405 *Cochlodinium volutum* Kofoid *et* Swezy 1921
 22 ***Gymnodinium*** Stein 1878 emend. G. Hansen *et* Moestrup 2000 (= *Gyrodinium* Kofoid *et* Swezy 1921 partim) (173 species) [Daugbjerg *et al.* (2000)]
 406 *Gymnodinium achromaticum* Lebour 1917
 407 *Gymnodinium adriaticum* (Schmarda 1846) Kofoid *et* Swezy 1921
 408 *Gymnodinium aequatoriale* Hasle 1960
 **Gymnodinium acutissimum* Okolodkov 1997 [Okolodkov (1997), not listed in Okolodkov (1998)]
 409 *Gymnodinium agaricoides* P.H. Campbell 1973
 410 *Gymnodinium agile* Kofoid *et* Swezy 1921 (non *G. agile sensu* Herdman 1922 = *Herdmania litoralis* Dodge 1981)
 411 *Gymnodinium agiliforme* Schiller 1928
 412 *Gymnodinium alaskense* Bursa 1963
 413 *Gymnodinium albidum* J.B. Lackey *et* E.W. Lackey 1970
 414 *Gymnodinium allophron* J. Larsen 1994 [Larsen (1994)]
 415 *Gymnodinium amphityplum* J. Larsen 1994 [Larsen (1994)]
 416 *Gymnodinium amphora* Kofoid *et* Swezy 1921
 **Gymnodinium amplinucleum* P.H. Campbell 1973
 417 *Gymnodinium arcticum* Wulff 1916 (=? *G. soyai* Hada 1970)
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Tab. 1. – continued

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- 418 *Gymnodinium arcuatum* Kofoid 1931
 419 *Gymnodinium arenicolum* Dragesco 1965 (= *G. variable* sensu Dodge 1982, non Herdman 1924)
 420 *Gymnodinium atomatum* J. Larsen 1994 [Larsen (1994)]
 421 *Gymnodinium attenuatum* Kofoid *et* Swezy 1921
 422 *Gymnodinium aurantium* P.H. Campbell 1973
 423 *Gymnodinium auratum* Kofoid *et* Swezy 1921
 424 *Gymnodinium aureolum* (Hulburt 1957) G. Hansen 2000 (= *G. mikimotoi* sensu Hallegraeff 1991, non European *Gyrodinium aureolum* Hulburt sensu Braarud *et* Heimdal 1970, non *Karenia mikimotoi*) [Hansen *et al.* (2000)]
 426 *Gymnodinium australense* Ruiner 1938
 427 *Gymnodinium baccatum* Balech *in* Balech *et* El-Sayed 1965
 **Gymnodinium bicaudatum* Pavillard 1905
 428 *Gymnodinium biconicum* Schiller 1928 (non *Gyrodinium biconicum* Kofoid *et* Swezy 1921)
 429 *Gymnodinium bicorne* Kofoid *et* Swezy 1921 (= *Dissodinium bicorne* (Kofoid *et* Swezy) F.J.R. Taylor 1976)
 430 *Gymnodinium bifurcatum* Kofoid *et* Swezy 1921
 431 *Gymnodinium bilobatum* van Meel 1969
 432 *Gymnodinium birotundatum* van Goor 1925
 433 *Gymnodinium boguense* P.H. Campbell 1973
 434 *Gymnodinium bonaerense* Akselman 1985
 **Gymnodinium boreale* Gaarder *in* Braarud *et al.* 1953
 435 *Gymnodinium canus* Kofoid *et* Swezy 1921
 436 *Gymnodinium capitatum* Conrad *et* Kufferath 1954
 437 *Gymnodinium caput* Schiller 1928
 438 *Gymnodinium cassiei* Norris 1961
 439 *Gymnodinium catenatum* Graham 1943
 440 *Gymnodinium chiasmonetrium* Norris 1961
 441 *Gymnodinium chlorophorum* Elbrächter *et* Schnepf 1996 (= ?*Lepidodinium viride* Watanabe *et al.* 1990) [Elbrächter and Schnepf (1996)]
 442 *Gymnodinium chukwanii* Ballantine 1961
 443 *Gymnodinium cinctum* Kofoid *et* Swezy 1921
 444 *Gymnodinium cnodax* Conrad *et* Kufferath 1954
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Tab. 1. – continued

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- 445 *Gymnodinium coeruleum* Dogiel 1906 (= *Balechina coerulea* (Dogiel) F.J.R. Taylor 1976)
- 446 *Gymnodinium conicum* Kofoid et Swezy 1921 (= *G. viridis* Lebour 1917)
 **Gymnodinium contractum* Kofoid et Swezy 1921
- 447 *Gymnodinium corii* Schiller 1928
- 448 *Gymnodinium costatum* Kofoid et Swezy 1921
- 449 *Gymnodinium cucumis* Schütt 1895
- 450 *Gymnodinium cyaneofungiforme* Conrad et Kufferath 1954
- 451 *Gymnodinium danicans* P.H. Campbell 1973
- 452 *Gymnodinium dentatum* J. Larsen 1994 [Larsen (1994)]
- 453 *Gymnodinium diamphidium* Norris 1961
- 454 *Gymnodinium diploconus* Schütt 1895
- 455 *Gymnodinium dissimile* Kofoid et Swezy 1921
- 456 *Gymnodinium enorme* Ballantine in Parke et Dixon 1964 (= *G. irregulare* Conrad et Kufferath 1954, non *G. irregulare* Hope 1954, nec Christen 1959)
 **Gymnodinium dogielii* Kofoid et Swezy 1921
- 457 *Gymnodinium doma* Kofoid et Swezy 1921
 **Gymnodinium elongatum* Hope 1954 (non *Gyrodinium elongatum* Schiller 1955, ?*Lessardia elongata* Saldarriaga et F.J.R. Taylor 2003)
 [Saldarriaga et al. (2003)]
- 458 *Gymnodinium endofasciculum* P.H. Campbell 1973
- 459 *Gymnodinium enorme* Ballantine in Parke et Dixon 1964
- 460 *Gymnodinium excavatum* van Meel 1969 (non *G. excavatum* Nygaard 1954)
- 461 *Gymnodinium exechegloutum* Norris 1961
- 462 *Gymnodinium fissum* Levander 1894 (= *Spirodinium fissum* (Levander) Lemmermann 1900, non *Gyrodinium fissum* (Levander) Kofoid et Swezy 1921)
- 463 *Gymnodinium flavum* Kofoid et Swezy 1921 (non *Gyrodinium flavum* Kofoid 1931)
- 464 *Gymnodinium fossarum* Conrad et Kufferath 1954
- 465 *Gymnodinium frigidum* Balech in Balech et El-Sayed 1965
Gymnodinium fuscum (Ehrenberg 1834) Stein 1883 (= *G. caudatum* Prescott 1944, *Gymnocystodinium gessneri* Baumeister 1957, *Cystodinium gessneri* (Baumeister) Bourrelly 1970) [freshwater]
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Tab. 1. – continued

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- 466 *Gymnodinium fusus* Schütt 1896 (= *Gyrodinium falcatum* Kofoid *et* Swezy 1921 partim, *Gyrodinium sugashimanii* J. Cachon, H. Sato, M. Cachon *et* S. Sato 1989, *Pseliodinium vaubanii* Sournia 1972)
- 467 *Gymnodinium galatheanum* Braarud 1957 (non *Gyrodinium galatheanum* (Braarud) F.J.R. Taylor 1992, non *Karlodinium micrum* (Leadbeater *et* Dodge 1966) J. Larsen 2000) [Daugbjerg *et al.* 2000]
- 468 *Gymnodinium galeaeforme* Matzenauer 1933
**Gymnodinium galeiforme* Okolodkov 1997 [Okolodkov (1997), not listed in Okolodkov (1998)]
- 469 *Gymnodinium galeatum* J. Larsen 1994 [Larsen (1994)]
- 470 *Gymnodinium galesianum* P.H. Campbell 1973
- 471 *Gymnodinium gelbum* Kofoid 1931
- 472 *Gymnodinium gibbera* Schiller 1928
- 473 *Gymnodinium glandiforme* Conrad *et* Kufferath 1954
- 474 *Gymnodinium gleba* Schütt 1895
- 475 *Gymnodinium gracile* Bergh 1881 (= *G. spirale* var. *nobilis* Pouchet 1883, *G. roseum* Lohmann 1908, *G. abbreviatum* Kofoid *et* Swezy 1921, *G. lohmannii* Paulsen 1908, non *G. roseum* Dogiel 1906)
- 476 *Gymnodinium gracilentum* P.H. Campbell 1973
- 477 *Gymnodinium grammaticum* (Pouchet 1887) Kofoid *et* Swezy 1921 (= *G. punctatum* var. *grammaticum* Pouchet)
- 478 *Gymnodinium guttiforme* J. Larsen 1994 [Larsen (1994)]
- 479 *Gymnodinium guttula* Balech 1976 (= *Gymnodinium cinctum* Kofoid *et* Swezy sensu Hada 1970)
- 480 *Gymnodinium halophilum* Biecheler 1952
**Gymnodinium herbaceum* Kofoid *in* Kofoid *et* Swezy 1921
- 481 *Gymnodinium heterostriatum* Kofoid *et* Swezy 1921 (= *G. lucidum* Ballantine *in* Parke *et* Dixon 1964, *G. hyalinum* Lebour 1925, non *G. striatissimum* Hulburt 1957)
- 482 *Gymnodinium hirosshimaense* Hada 1968
- 483 *Gymnodinium hulburtii* P.H. Campbell 1973
- 484 *Gymnodinium impudicum* (Fraga *et* Bravo 1995) G. Hansen *et* Moestrup 2000 [Fraga *et al.* (1995), Daugbjerg *et al.* (2000)]
- 485 *Gymnodinium incertum* Herdman 1924
- 486 *Gymnodinium incisum* Kofoid *et* Swezy 1921
- 487 *Gymnodinium incoloratum* Conrad *et* Kufferath 1954
- 488 *Gymnodinium inconstans* van Meel 1969
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Tab. 1. – continued

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- 489 *Gymnodinium intercalare* Bursa 1961
 490 *Gymnodinium instriatum* (Freudenthal *et* Lee 1963) Coats 2002 (= *G. instriatum* Freudenthal *et* Lee) [Coats and Park (2002)]
 491 *Gymnodinium irregulare* Hope 1954 (non *G. enorme* Ballantine *in* Parke *et* Dixon 1964,
 non *Gymnodinium irregulare* Christen 1959=*G. uberrimum* (Allman 1855) Kofoid *et* Swezy 1921)
 492 *Gymnodinium japonicum* Hada 1974
 493 *Gymnodinium katodiniforme* Elbrächter 1979
 494 *Gymnodinium kowalevskii* Pitzik 1967
 495 *Gymnodinium lachmannii* Saville-Kent 1881
 496 *Gymnodinium lanskoii* Rouchijajnen 1968
 497 *Gymnodinium lazulum* Hulburt 1957
 498 *Gymnodinium leptum* Norris 1961
 499 *Gymnodinium lineatum* Kofoid *et* Swezy 1921
 **Gymnodinium lineopunicum* Kofoid *et* Swezy 1921
 500 *Gymnodinium lira* Kofoid *et* Swezy 1921
 501 *Gymnodinium loburare* P.H. Campbell 1973
 502 *Gymnodinium luteo-viride* van Meel 1969
 503 *Gymnodinium maguelonnense* Biecheler 1939
 504 *Gymnodinium mammosum* van Meel 1969
 505 *Balechina marianae* F.J.R. Taylor 1976 (to be transferred to *Gymnodinium*)
 506 *Gymnodinium marinum* Saville-Kent 1881
 507 *Gymnodinium maximum* Nordli 1951
 508 *Gymnodinium metum* Hulburt 1957
 509 *Gymnodinium microreticulatum* Bolch, Negri *et* Hallegraeff 1999 [Bolch *et al.* (1999)]
 510 *Gymnodinium minus* Lebour 1917
 511 *Gymnodinium minutulum* J. Larsen 1994 [Larsen (1994)]
 512 *Gymnodinium modestum* Balech 1976 (= *Gymnodinium baccatum* Balech *sensu* Hada 1970)
 513 *Gymnodinium multilineatum* Kofoid *et* Swezy 1921
 514 *Gymnodinium multistriatum* Kofoid *et* Swezy 1921
 515 *Gymnodinium najadeum* Schiller 1928
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Tab. 1. – continued

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- **Gymnodinium nanum* Schiller 1928
- 516 *Gymnodinium natalense* Horiguchi *et* Pienaar 1994 [Horiguchi and Pienaar (1994a)]
- 517 *Gymnodinium neapolitanum* Schiller 1928
- 518 *Gymnodinium nolleri* Ellegaard *et* Moestrup 1999 [Ellegaard and Moestrup (1999)]
- **Gymnodinium nucaceum* Okolodkov 1997 [Okolodkov (1997), not listed in Okolodkov (1998)]
- **Gymnodinium obliquum* Okolodkov 1997 [Okolodkov (1997), not listed in Okolodkov (1998)]
- 519 *Gymnodinium oceanicum* Hasle 1960 (non *Gymnodinium oceanicum* Sukhanova 1968, non *Gyrodinium oceaniae* Okolodkov 1997)
- 520 *Gymnodinium ochraceum* Kofoid 1931
- 521 *Gymnodinium octo* J. Larsen 1994 [Larsen (1994)]
- 522 *Gymnodinium opressum* Conrad 1926
- 523 *Gymnodinium ordinatum* Skuja 1939
- 524 *Gymnodinium ostenfeldii* Schiller 1928
- 525 *Gymnodinium ovato-capitatum* van Meel 1969
- **Gymnodinium ovoideum* Okolodkov 1997 (non *Gyrodinium ovoideum* Kofoid *et* Swezy 1921) [Okolodkov (1997), not listed in Okolodkov (1998)]
- 526 *Gymnodinium ovulum* Kofoid *et* Swezy 1921
- 527 *Gymnodinium pachydermatum* Kofoid *et* Swezy 1921 (= *Balechina pachydermata* (Kofoid *et* Swezy) Loeblich Jr. *et* Loeblich III 1968)
- 528 *Gymnodinium pallidum* Skuja 1939
- 529 *Gymnodinium parvulum* J. Larsen 1994 [Larsen (1994)]
- 530 *Gymnodinium patagonicum* Balech 1971
- 531 *Gymnodinium paulsenii* Schiller 1928
- 532 *Gymnodinium perplexum* van Meel 1969
- 533 *Gymnodinium pigmentosum* (Dodge 1967) Loeblich III 1970 (= *Aureodinium pigmentosum* Dodge)
- 534 *Gymnodinium pingue* van Meel 1969 (non *Gyrodinium pingue* (Schütt 1895) Kofoid *et* Swezy 1921)
- 535 *Gymnodinium placidum* Herdman 1922
- 536 *Gymnodinium polycomma* J. Larsen 1994 [Larsen (1994)]
- 537 *Gymnodinium prolatum* J. Larsen 1994 [Larsen (1994)]
- 538 *Gymnodinium pulchrum* Schiller 1928
- 539 *Gymnodinium pumilum* J. Larsen 1994 [Larsen (1994)]
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Tab. 1. – continued

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- 540 *Gymnodinium punctatum* Pouchet 1887
 541 *Gymnodinium puniceum* Kofoid et Swezy 1921
 542 *Gymnodinium pygmaeum* Lebour 1925 (=?*Gyrodinium aureolum* Hulburt 1957)
 543 *Gymnodinium pyrenoidosum* Horiguchi et Chihara 1988
 544 *Gymnodinium pyrocystis* Jørgensen 1912 (=?*Kofoidinium splendens* J. Cachon et M. Cachon 1967)
 545 *Gymnodinium quadrilobatum* Horiguchi et Pienaar 1994 [Horiguchi and Pienaar (1994b)]
 546 *Gymnodinium radiatum* Kofoid et Swezy 1921
 547 *Gymnodinium ravenescens* Kofoid et Swezy 1921
 548 *Gymnodinium regulare* van Meel 1969
 **Gymnodinium rete* Schütt 1895
 549 *Gymnodinium rhomboides* Schütt 1895
 550 *Gymnodinium roseostigma* P.H. Campbell 1973
 **Gymnodinium rubricauda* Kofoid et Swezy 1921
 551 *Gymnodinium rubrocinctum* Lebour 1925
 552 *Gymnodinium rubrum* Kofoid et Swezy 1921
 553 *Gymnodinium scaphium* van Meel 1969
 554 *Gymnodinium schaefferi* Morris 1937
 555 *Gymnodinium scopulosum* Kofoid et Swezy 1921
 556 *Gymnodinium semidivisum* Schiller 1928
 557 *Gymnodinium simplex* (Lohmann 1911) Kofoid et Swezy 1921 (= *Protodinium simplex* Lohmann 1908)
 558 *Gymnodinium situla* Kofoid et Swezy 1921
 **Gymnodinium sphaericum* (Calkins 1902) Kofoid et Swezy 1921 (= *G. gracile* var. *sphaerica* Calkins)
 559 *Gymnodinium sphaeroideum* Kofoid 1931
 560 *Gymnodinium soyai* Hada 1970
 561 *Gymnodinium stellatum* Hulburt 1957
 562 *Gymnodinium subroseum* P.H. Campbell 1973
 563 *Gymnodinium suffusum* van Meel 1969 [?«subfuscum»]
 564 *Gymnodinium sulcatum* Kofoid et Swezy 1921
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Tab. 1. – continued

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- 565 *Gymnodinium telma* van Meel 1969
 566 *Gymnodinium translucens* Kofoid *et* Swezy 1921 (non *Gymnodinium translucens* P.H. Campbell 1973)
 567 *Gymnodinium translucens* P.H. Campbell 1973 (non *Gymnodinium translucens* Kofoid *et* Swezy 1921)
 **Gymnodinium triangularis* Lebour 1917
 568 *Gymnodinium uncatenatum* (Hulburt 1957) Hallegraeff 2002 [Hallegraeff (2002)]
 569 *Gymnodinium valdecompressum* P.H. Campbell 1973
 570 *Gymnodinium variabile* Herdman 1924 (non *G. variabile* sensu Dodge 1982)
 571 *Gymnodinium vas* van Meel 1939
 572 *Gymnodinium verruculosum* P.H. Campbell 1973
 **Gymnodinium violescens* Kofoid *et* Swezy 1921 (non *Warnowia violescens* (Kofoid *et* Swezy) Lindemann 1928)
 573 *Gymnodinium virescens* Wood 1963 (non *Gymnodinium viridescens* Kofoid 1931)
 **Gymnodinium viridescens* Kofoid 1931
 574 *Gymnodinium vestificii* Schütt 1885 [=?*Katodinium glaucum* (Lebour 1917) Loeblich III 1965]
 575 *Gymnodinium viridans* van Meel 1969
 576 *Gymnodinium voukii* Schiller 1928
 577 *Gymnodinium wilczekii* Pouchet 1894
 578 *Gymnodinium wulffii* Schiller 1933 (non *Gyrodinium wulffii* Schiller 1933)
 23 *Gyrodinium* Kofoid *et* Swezy 1921 emend. G. Hansen *et* Moestrup 2000 (= *Gymnodinium* Stein 1878 partim) [Daugbjerg *et al.* (2000)] (87 species)
 **Gyrodinium aciculatum* G. Hansen *et* J. Larsen 1992
 579 *Gyrodinium acutum* (Schütt 1895) Kofoid *et* Swezy 1921 (= *Gymnodinium spirale* var. *acuta* Schütt)
 580 *Gyrodinium antarcticum* Hasle 1960
 581 *Gyrodinium apidiomorphum* Norris 1961
 582 *Gyrodinium arcticum* Bursa 1961
 583 *Gyrodinium ascendans* Kofoid 1931
 584 *Gyrodinium atractos* J. Larsen 1996 [Larsen (1996)]
 585 *Gyrodinium aureum* (Conrad 1926) Schiller 1933 (= *Spirodinium aureum* Conrad)
 586 *Gyrodinium biconicum* Kofoid *et* Swezy 1921 (non *Gymnodinium biconicum* Schiller 1928)
 587 *Gyrodinium bistellatum* Conrad *et* Kufferath 1954
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Tab. 1. – continued

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- 588 *Gyrodinium britannicum* Kofoid *et* Swezy 1921 (= *Spirodinium spirale* var. *acutum* Schütt sensu Lebour 1917)
 **Gyrodinium californicum* Bursa 1962
- 589 *Gyrodinium calyptroglyphe* Lebour 1925 (= *Sclerodinium calyptroglyphe* (Lebour) Dodge 1981)
- 590 *Gyrodinium capsulatum* Kofoid *et* Swezy 1921
- 591 *Gyrodinium carteretense* P.H. Campbell 1973
- 592 *Gyrodinium caudatum* Kofoid *et* Swezy 1921
- 593 *Gyrodinium citrinum* Kofoid 1931
- 594 *Gyrodinium chiasmonetrium* Norris 1961
- 595 *Gyrodinium cochlea* Lebour 1925
- 596 *Gyrodinium complanatum* P.H. Campbell 1973
 **Gyrodinium concentricum* (Lebour 1917) Kofoid *et* Swezy 1921 (= *Spirodinium concentricum* Lebour)
- 597 *Gyrodinium conicum* Schiller 1928
- 598 *Gyrodinium contortum* (Schütt 1895) Kofoid *et* Swezy 1921 (= *G. contortum* Schütt, *Gymnodinium opimum* Schütt 1895 partim)
- 599 *Gyrodinium corallinum* Kofoid *et* Swezy 1921
- 600 *Gyrodinium cornutum* (Pouchet 1885) Kofoid *et* Swezy 1921 (= *Gymnodinium spirale* var. *cornutum* Pouchet, non *G. cornutum* Schütt 1895)
- 601 *Gyrodinium corsicum* Paulmier, Berland, Billard *et* Nezan 1995 [resembles *Karlodinium micrum*] [Paulmier *et al.* (1995)]
- 602 *Gyrodinium crassum* (Pouchet 1885) Kofoid *et* Swezy 1921 (= *Gymnodinium crassum* Pouchet)
 **Gyrodinium culeus* Kofoid *et* Swezy 1921
- 603 *Gyrodinium cuneatum* Kofoid *et* Swezy 1921 [= *Gymnodinium gracile* Bergh 1881]
- 604 *Gyrodinium dominans* Hulburt 1957
- 605 *Gyrodinium dorsum* Kofoid *et* Swezy 1921
- 606 *Gyrodinium estuariale* Hulburt 1957
- 607 *Gyrodinium falcatum* Kofoid *et* Swezy 1921 (= *Gymnodinium fusus* Schütt 1896 partim,
Gyrodinium sugashimani J. Cachon, H. Sato, M. Cachon *et* S. Sato 1989, *Pseliodinium vaubanii* Sournia 1972)
- 608 *Gyrodinium ferrugineum* Kofoid 1931
- 609 *Gyrodinium fissoides* Elbrächter 1979 [= *G. fissum* (Levander 1894) Kofoid *et* Swezy 1921, non *Gymnodinium fissum* Levander 1894]
- 610 *Gyrodinium flagellare* Schiller 1928
 **Gyrodinium flavescens* Kofoid *et* Swezy 1921
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Tab. 1. – continued

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- **Gyrodinium flavidum* Kofoid *et* Swezy 1921
- 611 *Gyrodinium flavum* Kofoid 1931 (non *Gymnodinium flavum* Kofoid *et* Swezy 1921)
- 612 *Gyrodinium foliaceum* Kofoid *et* Swezy 1921 (= *Gymnodinium viride* Schütt 1895, non *G. viride* Pénard 1891)
- 613 *Gyrodinium formosum* P.H. Campbell 1973
- 614 *Gyrodinium fulvum* Kofoid *et* Swezy 1921
- 615 *Gyrodinium fusus* (Meunier 1910) Akselman 1985 (= *Spirodinium fusus* Meunier, *Gyrodinium fusiforme* Kofoid *et* Swezy 1921)
- 616 *Gyrodinium glaciale* Hada 1970 *ex* Balech 1976
- 617 *Gyrodinium glabrum* Hulburt 1957
- 618 *Gyrodinium grave* (Meunier 1910) Kofoid *et* Swezy 1921 (= *Spirodinium grave* Meunier)
- 619 *Gyrodinium grenlandicum* Braarud 1935
- 620 *Gyrodinium grossestriatum* P.H. Campbell 1973
- 621 *Gyrodinium gutrula* J. Larsen 1996 (non *Gymnodinium guttula* Balech 1976) [Larsen (1996)]
- 622 *Gyrodinium herbaceum* Kofoid *et* Swezy 1921
- 623 *Gyrodinium heterogrammum* J. Larsen 1996 [Larsen (1996)]
- 624 *Gyrodinium impendens* J. Larsen 1996 (= *Gyrodinium impendens* G. Hansen *et* J. Larsen 1992) [Larsen (1996)]
- **Gyrodinium intortum* Kofoid *et* Swezy 1921
- 625 *Gyrodinium katodiniascens* P.H. Campbell 1973
- 626 *Gyrodinium kofoidii* Norris 1961
- 627 *Gyrodinium lachryma* (Meunier 1910) Kofoid *et* Swezy 1921 (= *Spirodinium lachryma* Meunier)
- 628 *Gyrodinium lebourae* Herdman 1924
- 629 *Gyrodinium leptogrammum* J. Larsen 1996 [Larsen (1996)]
- 630 *Gyrodinium lingulifera* Lebour 1925
- 631 *Gyrodinium longum* (Lohmann 1908) Kofoid *et* Swezy 1921 (= *Cochlodinium longum* Lohmann, non *Amphidinium longum* Lohmann 1908)
- 632 *Gyrodinium louisae* Conrad *et* Kufferath 1954
- 633 *Gyrodinium maculatum* Kofoid *et* Swezy 1921 (non *Warnowia maculata* (Kofoid *et* Swezy 1921) Lindemann 1928)
- **Gyrodinium melo* Kofoid *et* Swezy 1921
- 634 *Gyrodinium metum* Hulburt 1957
- 635 *Gyrodinium mitrum* Kofoid *et* Swezy 1921 (= *G. spirale* var. *mitra* Schütt 1895)
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Tab. 1. – continued

- 636 *Gyrodinium mundulum* P.H. Campbell 1973
- 637 *Gyrodinium nasutum* (Wulff 1916) Schiller 1933
- 638 *Gyrodinium oblongum* J. Larsen *et* Patterson 1990
- 639 *Gyrodinium obtusum* (Schütt 1895) Kofoid *et* Swezy 1921 (= *Gymnodinium spirale* Bergh var. *obtusum* Schütt, non *G. spirale* var. *obtusum* Dogiel 1906)
 **Gyrodinium oceaniae* Okolodkov 1997 (non *Gymnodinium oceanicum* Hasle 1960) [Okolodkov (1997), not listed in Okolodkov (1998)]
- 640 *Gyrodinium ochraceum* Kofoid *et* Swezy 1921
- 641 *Gyrodinium opimum* (Schütt 1895) Lebour 1925 (= *Gymnodinium opimum* Schütt, *Gyrodinium contortum* (Schütt) Kofoid *et* Swezy 1921 partim)
- 642 *Gyrodinium ovatum* (Gourret 1883) Kofoid *et* Swezy 1921 (= *Gymnodinium ovatum* Gourret)
 **Gyrodinium ovoideum* Kofoid *et* Swezy 1921 (non *Gymnodinium ovoideum* Okolodkov 1997)
- 643 *Gyrodinium ovum* (Schütt 1895) Kofoid *et* Swezy 1921 (= *Gymnodinium ovum* Schütt)
- 644 *Gyrodinium parvulum* (Schütt 1895) Kofoid *et* Swezy 1921 (= *Gymnodinium parvulum* Schütt)
- 645 *Gyrodinium pavillardii* Biecheler 1934 (= ?*Gymnodinium fissum* Levander 1894)
- 646 *Gyrodinium pellucidum* (Wulff 1916) Schiller 1933
- 647 *Gyrodinium pepo* (Schütt 1895) Kofoid *et* Swezy 1921 (= *Gymnodinium spirale* var. *pepo* Schütt)
- 648 *Gyrodinium phorkorium* Norris 1961
- 649 *Gyrodinium pingue* (Schütt 1895) Kofoid *et* Swezy 1921 (= *Gymnodinium spirale* var. *pinguis* Schütt, *Spirodinium varians* Wulff 1916)
 **Gyrodinium postmaculatum* Kofoid *et* Swezy 1921
- 650 *Gyrodinium prunus* (Wulff 1920) Lebour 1925 (= *Spirodinium prunus* Wulff)
- 651 *Gyrodinium resplendens* Hulburt 1957
- 652 *Gyrodinium rubricaudatum* Kofoid *et* Swezy 1921
- 653 *Gyrodinium schuettii* (Lemmermann 1899) Kofoid *et* Swezy 1921 (= *Spirodinium schuettii* Lemmermann, *Gymnodinium cornutum* Schütt 1895)
- 654 *Gyrodinium spirale* (Bergh 1881) Kofoid *et* Swezy 1921
 **Gyrodinium spumantia* Kofoid *et* Swezy 1921
- 655 *Gyrodinium striatissimum* (Hulburt 1957) G. Hansen *et* Moestrup 2000 (= *G. striatissimum* Hulburt, non *Gymnodinium heterostriatum* Kofoid *et* Swezy 1921) [Daugbjerg *et al.* (2000)]
 **Gyrodinium?* *striatum* (Dodge 1981)? (= *Sclerodinium striatum* Dodge 1981, *Gyrodinium calyptroglyphe* sensu Elbrächter 1979)
- 656 *Gyrodinium submarinum* Kofoid *et* Swezy 1921
 **Gyrodinium truncatum* Kofoid *et* Swezy 1921

Tab. 1. – continued

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- 657 *Gyrodinium truncus* Kofoid *et* Swezy 1921
 658 *Gyrodinium undulans* Hulburt 1957
 659 *Gyrodinium varians* (Wulff 1916) Schiller 1933 (non *Gymnodinium varians* Maskel 1887)
 660 *Gyrodinium vesiculosum* J. Larsen 1996 [Larsen (1996)]
 661 *Gyrodinium virgatum* Kofoid *et* Swezy 1921
 662 *Gyrodinium viridescens* Kofoid *et* Swezy 1921
 663 *Gyrodinium vorax* Biecheler 1952
 664 *Gyrodinium wulffii* Schiller 1933 (non *Gymnodinium wulffii* Schiller 1933)
 665 *Gyrodinium zeta* J. Larsen 1996 [Larsen (1996)]
 24 **Karenia** G. Hansen *et* Moestrup 2000 (= *Gymnodinium* Stein 1878 partim) [Daugbjerg *et al.* (2000)] (8 species)
 666 *Karenia bicuneiformis* Botes, Sym *et* Pitcher 2003 [Botes *et al.* (2003)]
 667 *Karenia brevis* (Davis 1948) G. Hansen *et* Moestrup 2000 (= *Gymnodinium breve* Davis, *Ptychodiscus brevis* (Davis) Steidinger 1979) [Daugbjerg *et al.* (2000)]
 668 *Karenia brevisulcata* (F.H. Chang 1999) G. Hansen *et* Moestrup 2000 (= *Gymnodinium brevisulcatum* F.H. Chang) [Chang (1999), Daugbjerg *et al.* (2000)]
 669 *Karenia cristata* Botes, Sym *et* Pitcher 2003 [Botes *et al.* (2003)]
 670 *Karenia digitata* Yang, Takayama, Matsuoka *et* Hodgkiss 2000 [Yang *et al.* (2000)]
 671 *Karenia longicanalis* Yang, Hodgkiss *et* G. Hansen 2001 [Yang *et al.* (2001)]
 672 *Karenia mikimotoi* (Miyake *et* Kominami *ex* Oda 1935) G. Hansen *et* Moestrup 2000 (= *G. nagasakiense* Takayama *et* Adachi 1984, *Gyrodinium aureolum* sensu Tangen *et* Bjornland 1981, non *Gyrodinium aureolum* Hulbult 1957, non *G. aureolum* (Hulbult) G. Hansen 2000) [Hansen *et al.* (2000)]
 673 *Karenia umbella* de Salas, Bolch *et* Hallegraeff 2003 [Botes *et al.* (2003)]
 25 **Karlodinium** J. Larsen 2000 (= *Gymnodinium* Stein 1878 partim, *Gyrodinium* Kofoid *et* Swezy 1921 partim) [Daugbjerg *et al.* (2000)]
 674 *Karlodinium micrum* (Leadbeater *et* Dodge 1966) J. Larsen 2000 (= *Woloszynskia micra* Leadbeater *et* Dodge, *G. micrum* (Leadbeater *et* Dodge) Loeblich III 1970, *G. galatheanum* Braarud sensu Kite *et* Dodge 1988, *Gyrodinium galatheanum* (Braarud 1957) F.J.R. Taylor 1992, non *Gymnodinium galatheanum* Braarud) [Daugbjerg *et al.* (2000)]
 675 *Karlodinium veneficum* (Ballantine 1956) J. Larsen 2000 (= *Gymnodinium veneficum* Ballantine 1956) [Daugbjerg *et al.* (2000)]
 676 *Karlodinium vitiligo* (Ballantine 1956) J. Larsen 2000 (= *Gymnodinium vitiligo* Ballantine, ?*K. veneficum* (Ballantine) J. Larsen) [Daugbjerg *et al.* (2000)]
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Tab. 1. – continued

- 26 *Katodinium* Fott 1857 (= *Massartia* Conrad 1926) [some brackish/freshwater species included] (11 species)
- 677 *Katodinium asymmetricum* (Massart 1900) Loeblich III 1965 (= *Gymnodinium asymmetricum* Massart)
- 678 *Katodinium dorsalisulcum* Hulburt, McLaughlin *et* Zahl 1960
- 679 *Katodinium galeatum* (Conrad *et* Kufferath 1954) Loeblich III 1965 (= *Massartia galeata* Conrad *et* Kufferath)
- 680 *Katodinium glandula* (Herdman 1924) Loeblich III 1965 (= *Gymnodinium glandula* Herdman)
- 681 *Katodinium glaucum* (Lebour 1917) Loeblich III 1965 (= *Gyrodinium glaucum* (Lebour) Kofoid *et* Swezy 1921, *Spirodinium glaucum* Lebour, *Massartia glauca* Schiller 1933)
- 682 *Katodinium nieuportense* (Conrad 1926) Loeblich Jr. *et* Loeblich III 1966 (= *Massartia nieuportensis* Conrad)
- 683 *Katodinium pluristigmatum* P.H. Campbell 1973
- 684 *Katodinium ruppiae* (Conrad 1939) Loeblich III 1965 (= *Massartia ruppiae* Conrad)
- 685 *Katodinium thiophilum* (Conrad 1939) Loeblich III 1965 (= *Massartia thiophila* Conrad)
- 686 *Katodinium tubulatum* (Rampi 1969) Sournia 1973 (= *Massartia tubulata* Rampi)
- 687 *Katodinium uncinatum* (Kufferath 1957) Loeblich III 1965 (= *Massartia uncinata* Kufferath)
- 27 *Lepidodinium* Watanabe, Suda, Inouye, Sawaguchi *et* Chihara 1990
- 688 *Lepidodinium viride* Watanabe, Suda, Inouye, Sawaguchi *et* Chihara 1990 (= ? *Gymnodinium chlorophorum* Elbrächter *et* Schnepf 1996)
- **Pavillardia* Kofoid *et* Swezy *in* Kofoid 1921
- **Pavillardia tentaculifera* Kofoid *et* Swezy 1921
- 28 *Pheopolykrikos* Chatton 1933 emend. Matsuoka *et* Fukuyo 1986
- 689 *Pheopolykrikos beauchampii* Chatton 1933 (= *Polykrikos beauchampii* (Chatton) Dodge 1982)
- 690 *Pheopolykrikos hartmannii* (Zimmermann 1930) Matsuoka *et* Fukuyo 1986 (= *Polykrikos barnegatensis* Martin 1929)
- 29 *Plectodinium* Biecheler 1934
- 691 *Plectodinium nucleovolvatum* Biecheler 1934 (= *Gyrodinium rhabdomante* Balech 1973, ? *Plectodinium miniatum* (Kofoid *et* Swezy 1921) F.J.R. Taylor 1980, *Cochlodinium miniatum* Kofoid *et* Swezy)
- 30 *Takayama* de Salas, Bolch, Botes *et* Hallegraeff 2003 (= *Gymnodinium* Stein 1878 partim, *Gyrodinium* Kofoid *et* Swezy 1921 partim) [de Salas *et al.* (2003)] (lacking the ending, i.e. Takayamaea)
- 692 *Takayama acrotrochum* (Larsen 1996) de Salas, Bolch *et* Hallegraeff 2003 (= *Gyrodinium acrotrochum* Larsen) [J. Larsen (1996), de Salas *et al.* (2003)]
- 693 *Takayama cladochroma* (J. Larsen 1996) de Salas, Bolch *et* Hallegraeff 2003 (= *Gyrodinium cladochroma* Larsen) [J. Larsen (1996), de Salas *et al.* (2003)]

Tab. 1. – continued

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- 694 *Takayama helix* de Salas, Bolch, Botes *et* Hallegraeff 2003 [de Salas *et al.* (2003)]
- 695 *Takayama pulchella* (J. Larsen 1994) de Salas, Bolch *et* Hallegraeff 2003 (= *Gymnodinium pulchellum* Larsen) [J. Larsen (1994), de Salas *et al.* (2003)]
- 696 *Takayama tasmanica* de Salas, Bolch *et* Hallegraeff 2003 [de Salas *et al.* (2003)] (published as »tasmanica«, ICBN Art. 23.5 and 32.5)
- 31 *Torodinium*** Kofoid *et* Swezy 1921
- 697 *Torodinium robustum* Kofoid *et* Swezy 1921 (= *Gymnodinium teredo* Schütt 1895 partim)
- 698 *Torodinium teredo* (Pouchet 1885) Kofoid *et* Swezy 1921 (= *Gymnodinium teredo* Pouchet, *Torodinium robustum* Kofoid *et* Swezy 1921 partim)
- Polykrikaceae Kofoid *et* Swezy 1921
- 32 *Polykrikos*** Bütschli 1873
- **Polykrikos grassei* Lecal 1972
- 699 *Polykrikos kofoidii* Chatton 1914 (= *P. schwarzii* Kofoid 1907)
- 700 *Polykrikos lebourae* Herdman 1924 (= *P. schwarzii* Herdman 1922)
- 701 *Polykrikos schwarzii* Bütschli 1873 (= *P. auricularia* Bergh 1881)
- Ptychodiscaceae Lemmermann 1899
- 33 *Ptychodiscus*** Stein 1883
- 702 *Ptychodiscus noctiluca* Stein 1883 (= *P. inflatus* Pavillard 1916, *P. carinatus* Kofoid 1907)
- Warnowiaceae Lindemann 1928
- 34 *Erythrospidinium*** P.C. Silva 1960 (= *Erythrospis* Hertwig 1884, *Pouchetia* Schütt 1895 partim)
- 703 *Erythrospidinium agile* (Hertwig 1884) P.C. Silva 1960 (= *E. agilis* Hertwig, *E. pavillardii* (Kofoid *et* Swezy 1921) P.C. Silva 1960, *Erythrospis agilis* Pavillard 1905, *E. (Erythrospis) hispidum* (Kofoid *et* Swezy 1921) P.C. Silva 1960, *E. (Pouchetia) cornutum* (Schütt 1895) P.C. Silva 1960, *E. (Erythrospis) labrum* (Kofoid *et* Swezy 1921) P.C. Silva 1960, *E. (Erythrospis) scarlatinum* (Kofoid *et* Swezy 1921) P.C. Silva 1960, *E. richardii* (Kofoid *et* Swezy 1921) P.C. Silva 1960)
- 704 *Erythrospidinium cochlea* (Schütt 1895) P.C. Silva 1960 (= *Pouchetia cochlea* Schütt)
- 705 *Erythrospidinium extrudens* (Kofoid *et* Swezy 1921) P.C. Silva 1960 (= *E. extrudens* Kofoid *et* Swezy)
- 706 *Erythrospidinium minus* (Kofoid *et* Swezy 1921) P.C. Silva 1960 (= *E. minor* Kofoid *et* Swezy)
- **Greuetodinium* Loeblich III 1980 (= *Leucopsis* Greuet 1968)
- **Greuetodinium cylindricum* (Greuet 1968) Loeblich III 1980 (= *Leucopsis cylindrica* Greuet)
- 35 *Nematodinium*** Kofoid *et* Swezy 1921 (= *Pouchetia* Schütt 1895)
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Tab. 1. – continued

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- 707 *Nematodinium armatum* (Dogiel 1906) Kofoid et Swezy 1921 (= *P. armata* Dogiel, *P. maculata* Kofoid et Swezy 1921, *Nematodinium lebourae* Schiller 1933)
- 708 *Nematodinium atromaculatum* Kofoid 1931 (non *Cochlodinium atromaculatum* Kofoid et Swezy 1921)
- 709 *Nematodinium partitum* Kofoid et Swezy 1921
- 710 *Nematodinium torpedo* Kofoid et Swezy 1921
 **Nematopsides* Greuet 1973
 **Nematopsides tentaculoides* Greuet 1973
- 36 *Proterythropsis*** Kofoid et Swezy 1921
- 711 *Proterythropsis crassicaudata* Kofoid et Swezy 1921
- 712 *Proterythropsis vigilans* Marshall 1925 (= *Nematopsides vigilans* (Marshall) Greuet 1973)
 **Protopsis* Kofoid et Swezy 1921
 **Protopsis elongata* Schiller 1928
 **Protospis neapolitana* Kofoid in Kofoid et Swezy 1921
 **Protospis nigra* (Pouchet 1887) Kofoid et Swezy 1921 (= *Gymnodinium polyphemus* var. *nigrum* Pouchet, *Pouchetia nigra* Lemmermann 1899)
 **Protospis ochrea* (Wright 1907) Kofoid et Swezy 1921 (= *Pouchetia ochrea* Wright)
 **Protospis simplex* Lebour 1925
- 37 *Warnowia*** Lindemann 1928 (= *Pouchetia* Schütt 1895, *Protopsis* Kofoid et Swezy 1921) (25 species)
- 713 *Warnowia alba* (Kofoid et Swezy 1921) Lindemann 1928 (= *P. alba* Kofoid et Swezy)
- 714 *Warnowia atra* (Kofoid et Swezy 1921) Schiller 1933 (= *P. atra* Kofoid et Swezy)
- 715 *Warnowia compacta* (Schütt 1895) Schiller 1933 (= *P. compacta* Schütt, *P. contorta* Schütt 1895)
- 716 *Warnowia dohrnii* Zimmermann 1930
- 717 *Warnowia fusus* (Schütt 1895) Lindemann 1928 (= *P. fusus* Schütt)
- 718 *Warnowia hataii* (Kofoid et Swezy 1921) Schiller 1933 (= *P. hataii* Kofoid 1931)
- 719 *Warnowia juno* (Schütt 1895) Schiller 1933 (= *P. juno* Schütt, *P. nigra* Pavillard 1905 partim)
- 720 *Warnowia maculata* (Kofoid et Swezy 1921) Lindemann 1928 (= *P. maculata* Kofoid et Swezy 1921, non *Gyrodinium maculatum* Kofoid et Swezy 1921)
- 721 *Warnowia maxima* (Kofoid et Swezy 1921) Lindemann 1928 (= *P. maxima* Kofoid et Swezy)
- 722 *Warnowia mutsui* (Kofoid 1931) Schiller 1933 (= *P. mutsui* Kofoid)
- 723 *Warnowia panamensis* (Kofoid 1907) Schiller 1933 (= *P. panamensis* Kofoid)
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Tab. 1. – continued

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- 724 *Warnowia parva* (Lohmann 1908) Lindemann 1928 (= *P. parva* Lohmann)
- 725 *Warnowia polyphemus* (Pouchet 1895) Schiller 1933 (= *P. polyphemus* (Pouchet) Kofoid et Swezy 1921, *Gymnodinium polyphemus* Pouchet, *Warnowia pulchra* Schiller sensu Greuet 1968)
- 726 *Warnowia pouchetii* Schiller 1933 (= *P. pouchetii* Kofoid et Swezy 1921)
- 727 *Warnowia pulchra* (Schiller 1928) Schiller 1933 (= *P. pulchra* Schiller, non *W. pulchra* Schiller sensu Greuet 1968)
- 728 *Warnowia purpurata* (Kofoid et Swezy 1921) Lindemann 1928 (= *P. perforata* Kofoid et Swezy)
- 729 *Warnowia purpurescens* (Kofoid et Swezy 1921) Lindemann 1928 (= *P. purpurescens* Kofoid et Swezy)
- 730 *Warnowia reticulata* (Kofoid 1931) Schiller 1933 (= *P. reticulata* Kofoid)
- 731 *Warnowia rosea* (Pouchet 1879) Kofoid et Swezy 1921 (= *Gymnodinium polyphemus* var. *roseum* Pouchet, non *P. rosea* Schütt 1895)
- 732 *Warnowia rubescens* (Kofoid et Swezy 1921) Lindemann 1928 (= *P. rubescens* Kofoid et Swezy)
- 733 *Warnowia schuettii* (Kofoid et Swezy 1921) Schiller 1933 (= *P. rosea* Schütt 1895)
- 734 *Warnowia striata* (Kofoid et Swezy 1921) Schiller 1933 (= *P. striata* Kofoid et Swezy)
- 735 *Warnowia subnigra* (Kofoid et Swezy 1921) Schiller 1933 (= *P. subnigra* Kofoid et Swezy)
- 736 *Warnowia violescens* (Kofoid et Swezy 1921) Lindemann 1928 (= *P. violescens* Kofoid et Swezy, non *Gymnodinium violescens* Kofoid et Swezy 1921)
- 737 *Warnowia voracis* (Kofoid et Swezy 1921) Schiller 1933 (= *P. voracis* Kofoid et Swezy)
Gymnodiniales incertae sedis
- 38 *Ceratoperidinium*** Margalef 1969
- 738 *Ceratoperidinium yeye* Margalef 1969 (= *C. margalefii* Loeblich III 1980, *C. mediterraneum* Abboud-Abi Saab 1989) [see Gómez *et al.* (2004)]
- Noctilucales Haeckel 1894**
Kofoidiaceae F.J.R. Taylor 1976
- 39 *Cymbodinium*** J. Cachon *et* M. Cachon 1967
- 739 *Cymbodinium elegans* J. Cachon *et* M. Cachon 1967
- 40 *Kofoidinium*** Pavillard 1928 (5 species)
- 740 *Kofoidinium arcticum* Bursa 1964
- 741 *Kofoidinium lebourae* (Pavillard 1921) F.J.R. Taylor 1976 (= *Gymnodinium lebourae* Pavillard, *G. pseudonocutiluca* Lebour 1917, ?*G. fulgens* Kofoid et Swezy 1921)
- 742 *Kofoidinium pavillardii* J. Cachon *et* M. Cachon 1967 (= *Gymnodinium pseudonocutiluca* Pouchet 1885 partim, non *G. pseudonocutiluca* Lebour 1917)
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Tab. 1. – continued

- 743 *Kofoadinium splendens* J. Cachon et M. Cachon 1967
 744 *Kofoadinium velloides* Pavillard 1928
 41 ***Pomatodinium*** J. Cachon et Cachon-Enjumet 1966
 745 *Pomatodinium impatiens* J. Cachon et Cachon-Enjumet 1966
 42 ***Spatulodinium*** J. Cachon et M. Cachon 1968 (= *Gymnodinium* Stein 1878 partim)
 746 *Spatulodinium pseudonoctiluca* (Pouchet 1885) J. Cachon et M. Cachon ex Loeblich Jr. et Loeblich III 1969 (= *G. pseudonoctiluca* Pouchet, *G. fulgens* Kofoid et Swezy 1921, ?*Amphidiniopsis urnaeformis* Gail 1950)
- Leptodiscaceae Kofoid 1905
- 43 ***Cachonodinium*** Loeblich III 1980 (= *Leptodinium* J. Cachon et M. Cachon 1969)
 747 *Cachonodinium caudatum* (J. Cachon et M. Cachon 1969) Loeblich III 1980 (= *Leptodinium caudatum* J. Cachon et M. Cachon)
 44 ***Craspedotella*** Kofoid 1905
 748 *Craspedotella pileolus* Kofoid 1905
 45 ***Leptodiscus*** Hertwig 1877 (= ?*Pratjetella* Lohmann 1920)
 749 *Leptodiscus medusoides* Hertwig 1877 (= ?*Pratjetella medusoides* (Hertwig) Loeblich Jr. et Loeblich III 1966)
 46 ***Leptophyllus*** J. Cachon et Cachon-Enjumet 1964 (= *Abedinium* Loeblich Jr. et Loeblich III 1966)
 750 *Leptophyllus dasypus* J. Cachon et Cachon-Enjumet 1964 (= *Abedinium dasypus* (J. Cachon et Cachon-Enjumet) Loeblich Jr. et Loeblich III 1966)
 47 ***Petalodinium*** J. Cachon et M. Cachon 1969
 751 *Petalodinium porcelio* J. Cachon et M. Cachon 1969
 48 ***Scaphodinium*** Margalef 1963 (= *Leptospathium* J. Cachon et Cachon-Enjumet 1964)
 752 *Scaphodinium mirabile* Margalef 1963 (= *Leptospathium navicula* J. Cachon et Cachon-Enjumet 1964)
- Noctilucaceae Saville-Kent 1881
- 49 ***Noctiluca*** Suriray ex Lamarck 1816
 753 *Noctiluca scintillans* (Macartney 1810) Kofoid 1920 (= *Noctiluca miliaris* Suriray ex Lamarck 1816)
- Protodiniferaceae Kofoid et Swezy 1921
- 50 ***Pronoctiluca*** Fabre-Domergue 1889 [no dinokaryotic nucleus, the consideration as a dinoflagellate requires further research]
 **Pronoctiluca acuta* (Lohmann 1912) Schiller 1933 (= *Rhynchomonas acuta* Lohmann 1912, *R. curvata* Lohmann 1921)
 754 *Pronoctiluca pelagica* Fabre-Domergue 1889 (= *Rhynchomonas marina* Lohmann 1902, *Pelagorhynchus marinus* Pavillard 1917, = ?*P. spinifera*)

Tab. 1. – continued

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- **Pronoctiluca phaeocysticola* (Scherffel 1900) Pavillard 1922 (= *Oxyrrhis phaeocysticola* Scherffel)
 **Pronoctiluca rostrata* F.J.R. Taylor 1976 [related to *Lessardia Saldarriaga et F.J.R. Taylor 2003*]
- 755 *Pronoctiluca spinifera* (Lohmann 1920) Schiller 1933 (= *Protodinifer tentaculata* Kofoid et Swezy 1921, ?*P. pelagica* Fabre-Domergue 1889)
- Oxyrrhinales Sournia 1984** [the consideration as a dinoflagellate requires further research]
 Oxyrrhinaceae Sournia 1984
- 51 *Oxyrrhis*** Dujardin 1841
- 756 *Oxyrrhis marina* Dujardin 1841 (= *O. maritima* van Meel 1969, *O. tentaculifera* Conrad 1939)
- Peridinales Haeckel 1894**
 Amphidomataceae Sournia 1984
- 52 *Amphidoma*** Stein 1883 (= *Pavillardinium* De-Toni 1936 partim, *Murrayella* Kofoid 1907)
- 757 *Amphidoma acuminata* Stein 1883
- 758 *Amphidoma caudata* Halldal 1953 (= *Oxytoxum tonollii* Rampi 1969, *O. margalefii* Rampi 1969)
- **Amphidoma curtata* Kofoid et Swezy 1911
- **Amphidoma depressa* Kofoid et Swezy 1911
- 759 *Amphidoma elongata* Kofoid et Swezy 1911
- **Amphidoma laticincta* Kofoid et Swezy 1911
- 760 *Amphidoma nucula* Stein 1883 (= *A. spinosa* (Kofoid 1907) Kofoid et Michener 1911, *Gonyaulax rouchii* Rampi 1948, *Pavillardinium spinosum* (Kofoid 1907) F.J.R. Taylor 1967 ex Sournia 1973, *Murrayella spinosa* Kofoid 1907)
- **Amphidoma obtusa* Kofoid et Swezy 1911
- 761 *Amphidoma steinii* Schiller 1929
- Ceratiaceae Kofoid 1907
- 53 *Ceratium*** Schrank 1793 [the delimitation of species or infraespecific taxa strongly varies among authors] (63 species)
- **Ceratium angustum* A.S. Campbell 1934
- 762 *Ceratium arcticum* (Ehrenberg 1854) Cleve 1901 (= *C. labradoricum* Vanhöffen 1897, *C. tripos* var. *arctica* Claparède et Lachmann 1859)
- 763 *Ceratium arietinum* Cleve 1900 (= *C. bucephalum* (Cleve 1897) Cleve 1901)
- **Ceratium aultii* Graham et Bronikovsky 1944
- **Ceratium axiale* Kofoid 1907 (= *C. axiale* (Kofoid) Karsten 1907)
- 764 *Ceratium azoricum* Cleve 1900
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Tab. 1. – continued

- **Ceratium balechii* Meave del Castillo, Okolodkov *et* Zamudio 2003 [intermediate with *Ceratium divaricatum* *dens*]
[Meave del Castillo *et al.* (2003)]
- 765 *Ceratium belone* Cleve 1900 (= *C. pacificum* Schröder 1906, non *C. pacificum* Wood 1963)
- 766 *Ceratium bigelowii* Kofoid 1907
- 767 *Ceratium breve* (Ostenfeld *et* Schmidt 1901) Schröder 1906 (= *C. tripos* var. *breve* Ostenfeld *et* Schmidt, *C. schmidtii* Jørgensen 1911, *C. curvicorne* Schmidt 1901)
- **Ceratium brevearcuatum* Böhm 1976
- 768 *Ceratium brunellii* Rampi 1942 (= ?*C. incisum* (Karsten 1905) Jørgensen 1911)
- 769 *Ceratium candelabrum* (Ehrenberg 1860) Stein 1883
- 770 *Ceratium carnegiei* Graham *et* Bronikowsky 1944
- 771 *Ceratium carriense* Gourret 1883 (= *C. massiliense* Pavillard 1907, *C. volans* Cleve 1900, *C. hundhausenii* Schröder 1906, non *C. volans* Pavillard 1905)
- 772 *Ceratium cephalotum* (Lemmermann 1900) Jørgensen 1911 (= *C. gravidum* var. *cephalotum* Lemmermann)
- 773 *Ceratium compressum* Gran 1912 (non *C. compressum* Gran 1902) [see Balech (1988: 141) for synonymy with *C. platycorne* Daday 1888]
- 774 *Ceratium concilians* Jørgensen 1920
- 775 *Ceratium contortum* (Gourret 1883) Cleve 1900 (= *C. contortum* var. *robustum* (Karsten 1907) Sournia 1966, *C. karstenii* f. *robustum* (Karsten) Jørgensen 1911, *C. karstenii* Pavillard 1927 partim, *C. longinum* (Karsten 1907) Jørgensen 1911, *C. saltans* Schröder 1906)
- 776 *Ceratium contrarium* (Gourret 1883) Pavillard 1905 (= *C. trichoceros* var. *contrarium* (Gourret) Schiller 1937)
- 777 *Ceratium declinatum* (Karsten 1907) Jørgensen 1911 (= *C. tripos declinatum* Karsten)
- 778 *Ceratium deflexum* (Kofoid 1907) Jørgensen 1911 (= *C. californiense* Karsten 1907, *C. recurvatum* Schröder 1906, *C. deflexum* var. *recurvatum* (Schröder) Jørgensen 1911)
- 779 *Ceratium dens* Ostenfeld *et* Schmidt 1901 (non *C. tripos* var. *ponticum*, non *C. divaricatum*) [see *C. divaricatum*]
- 780 *Ceratium digitatum* Schütt 1895
- 781 *Ceratium divaricatum* (Lemmermann 1900) Kofoid 1908 (= *C. tripos* var. *divaricatum* Lemmermann) [confused with *C. dens*]
- **Ceratium egyptiacum* Halim 1963 (= ?*C. tripos* var. *pulchellum* (Schröder 1906) López 1966 *ex* Sournia 1973)
- **Ceratium ehrenbergii* Kofoid 1907 (= ?*C. pentagonum* Gourret 1883)
- 782 *Ceratium euarcuratum* Jørgensen 1920 (= *C. arcuatum* Pavillard 1905, non *C. arcuatum* Cleve 1900)
- 783 *Ceratium extensum* (Gourret 1883) Cleve 1901 (= *C. strictum* Kofoid 1907, *C. biceps* Claparède *et* Lachmann 1859, *C. strictum* (Okamura *et* Nishikawa 1904) Kofoid 1907, *C. extensum* f. *strictum* Okamura *et* Nishikawa)

Tab. 1. – continued

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- 784 *Ceratium falcatiforme* Jørgensen 1920 (= *C. inflatum falcatiforme* Peters 1934)
 785 *Ceratium falcatum* (Kofoid 1907) Jørgensen 1920 (= *C. inflatum falcatum* Peters 1934)
 **Ceratium filicorne* Steemann Nielsen 1934
 786 *Ceratium furca* (Ehrenberg 1834) Claparède et Lachmann 1859 (= *C. biceps* Claparède et Lachmann 1859)
 787 *Ceratium fusus* (Ehrenberg 1834) Dujardin 1841 (= *C. seta* (Ehrenberg 1859) Jørgensen 1911)
 788 *Ceratium geniculatum* (Lemmermann 1900) Cleve 1911 (= *C. tricarinatum* Kofoid 1907)
 789 *Ceratium gibberum* Gourret 1883
 790 *Ceratium gravidum* Gourret 1883
 791 *Ceratium hexacanthum* Gourret 1883 (= *C. reticulatum* (Pouchet 1883) Cleve 1903)
 792 *Ceratium hircus* Schröder 1909 (= *C. furca* var. *hircus* (Schröder) Margalef 1961)
 793 *Ceratium horridum* (Cleve 1897) Gran 1902 (= *C. tripos* var. *horridum* Cleve, *C. intermedium* (Jørgensen 1905) Jørgensen 1911,
 C. claviger Kofoid 1907, *C. tenue* (Ostenfeld et Schmidt 1901) Jørgensen 1911, *C. inclinatum* Kofoid 1907, *C. tenuissimum* Kofoid 1907,
 C. mollis Kofoid 1907, *C. batavum* Paulsen 1908, *C. leptosomum* Jørgensen 1911)
 794 *Ceratium humile* Jørgensen 1911
 795 *Ceratium incisum* (Karsten 1906) Jørgensen 1911 (= ?*C. brunellii* Rampi 1942)
 796 *Ceratium inflatum* (Kofoid 1907) Jørgensen 1911 (= *C. nipponicum* Okamura 1912, *C. pennatum* f. *inflata* Kofoid 1907)
 797 *Ceratium karstenii* Pavillard 1907 (= *C. arcuatum* (Gourret 1883) Cleve 1900)
 798 *Ceratium kofoidii* Jørgensen 1911 (= *C. boehmii* Graham et Bronikovsky 1944)
 **Ceratium lanceolatum* Kofoid 1907
 799 *Ceratium limulus* Gourret 1883 (= *C. tripos* var. *limulus* Gourret in Pouchet 1883)
 800 *Ceratium lineatum* (Ehrenberg 1854) Cleve 1899
 801 *Ceratium longipes* (Bailey 1850) Gran 1902
 802 *Ceratium longirostrum* Gourret 1883 (= *C. scapiforme* Kofoid 1907, *C. pennatum* var. *scapiforme* (Kofoid) Jørgensen 1911)
 803 *Ceratium longissimum* (Schröder 1900) Kofoid 1907
 804 *Ceratium lunula* (Schimper ex Karsten 1905) Jørgensen 1911 (= *C. tripos lunula* Schimper in Karsten, *C. arcuatum* Okamura et Nishikawa 1904)
 805 *Ceratium macroceros* (Ehrenberg 1840) Vanhöffen 1897 (= *C. californiense* Kofoid 1907)
 806 *Ceratium massiliense* (Gourret 1883) Jørgensen 1911 (= *C. ostenfeldii* Kofoid 1907, *C. protuberans* (Karsten 1905) Paulsen 1930,
 C. undulatum Schröder 1906)
 807 *Ceratium minutum* Jørgensen 1920
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Tab. 1. – continued

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- **Ceratium pacificum* Wood 1963 (non *C. pacificum* Schröder 1906)
- 808 *Ceratium paradoxides* Cleve 1900
- 809 *Ceratium pavillardii* Jørgensen 1911 (= *C. vultur* Pavillard 1905, non *C. vultur* Cleve 1900)
- 810 *Ceratium pentagonum* Gourret 1883 (= *C. subrobustum* (Jørgensen) Steemann Nielsen 1934)
- 811 *Ceratium petersii* Steemann Nielsen 1934
- 812 *Ceratium platycorne* Daday 1888 (= *C. lamellicorne* Kofoid 1908) [see Balech (1988: 141) for synonymy with *C. compressum* Gran 1902/1912]
- 813 *Ceratium praeolongum* (Lemmermann 1900) Kofoid 1907 ex Jørgensen 1911 (= *C. gravidum* var. *praeolongum* Lemmermann)
- 814 *Ceratium pulchellum* Schröder 1906
- **Ceratium ramakrishnii* Subrahmanyam 1968 (= ?*C. trichoceros* (Ehrenberg 1860) Kofoid 1908)
- 815 *Ceratium ranipes* Cleve 1900 (= *C. palmatum* (Schröder 1901) Schröder 1906)
- 816 *Ceratium reflexum* Cleve 1900
- 817 *Ceratium schrankii* Kofoid 1907
- 818 *Ceratium schroeteri* Schröder 1906
- 819 *Ceratium setaceum* Jørgensen 1911
- 820 *Ceratium symmetricum* Pavillard 1905 (= *C. coarctatum* Pavillard 1905, *C. gracile* (Gourret 1883) Jørgensen 1911)
- **Ceratium tasmaniae* Wood 1963
- 821 *Ceratium teres* Kofoid 1907
- 822 *Ceratium trichoceros* (Ehrenberg 1860) Kofoid 1908 (= *C. flagelliferum* Cleve 1900)
- 823 *Ceratium tripos* (O.F. Müller 1777) Nitzsch 1817 (= *C. schroederi* Nie 1936, *C. neglectum* Ostenfeld 1903, *C. tripodoides* (Jørgensen 1920) Steemann Nielsen 1934)
- **Ceratium uncinus* Sournia 1972
- **Ceratium uteri* A.S. Campbell 1934
- 824 *Ceratium vultur* Cleve 1900 (= *C. sumatranum* (Karsten 1907) Jørgensen 1911, *C. recurvum* (Jørgensen) Reinecke 1973, non *C. vultur* Pavillard 1905, *C. japonicum* Schröder 1906, *C. vultur* f. *japonicum* (Schröder) Wood 1955)
- Ceratocorythaceae Lindemann 1928
- 54 *Ceratocorys*** Stein 1883 (12 species)
- 825 *Ceratocorys anacantha* Carbonell-Moore 1996 [Carbonell-Moore (1996a)]
- 826 *Ceratocorys armata* (Schütt 1895) Kofoid 1910 (= *C. spinifera* Murray et Whitting 1899, *Goniodoma fimbriatum* Murray et Whitting 1899)
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Tab. 1. – continued

- 827 *Ceratocorys aultii* Graham 1942
 828 *Ceratocorys bipes* (Cleve 1903) Kofoid 1910 (= *C. asymmetrica* Karsten 1907)
 829 *Ceratocorys gourretii* Paulsen 1931 (= *C. allenii* Osorio-Tafall 1942, *Phalacroma jourdanii* (Gourret 1883) Schütt 1895)
 830 *Ceratocorys grahamii* Carbonell-Moore 1996 [Carbonell-Moore (1996a)]
 831 *Ceratocorys horrida* Stein 1883 (= *C. hirsuta* Matzenauer 1933, *Dinophysis jourdanii* Gourret 1883)
 832 *Ceratocorys indica* Wood 1963
 833 *Ceratocorys kofoidii* Paulsen 1931 [probably *C. gourretii* Paulsen 1931]
 834 *Ceratocorys magna* Kofoid 1910 (= *C. spinifera* Murray et Whitting 1899 partim)
 835 *Ceratocorys reticulata* Graham 1942 [resembles *C. armata* (Schütt 1895) Kofoid 1910]
 836 *Ceratocorys skogsbergii* Graham 1942

Cladopyxidaceae Poche 1913

Cladopyxidaceae Stein 1883 emend. Balech 1967

- 55** *Cladopyxis* Stein 1883 (= *Micracanthodinium* Deflandre 1937 partim)
 837 *Cladopyxis brachiolata* Stein 1883 (= *C. spinosa* (Kofoid 1907) Schiller 1937, *C. steinii* Zacharias 1906)
 838 *Cladopyxis caryophyllum* (Kofoid 1907) Pavillard 1931 (= *Acanthodinium caryophyllum* Kofoid)
 839 *Cladopyxis hemibranchiata* Balech 1964
 **Cladopyxis quadrispina* Pavillard 1931 (= *Micracanthodinium quadrispinum* (Pavillard) Margalef 1969)
56 *Micracanthodinium* Deflandre 1937 (= *Cladopyxis* Stein 1883 partim) [thecal plates not reported]
 840 *Micracanthodinium bacilliferum* (Schiller 1937) Deflandre 1937 (= *C. bacillifera* Schiller)
 841 *Micracanthodinium claytonii* (R.W. Holmes 1956) Dodge 1982 (= *C. claytonii* R.W. Holmes)
 842 *Micracanthodinium setiferum* (Lohmann 1902) Deflandre 1937 (= *C. setifera* Lohmann)
57 *Palaeophalacroma* Schiller 1928
 843 *Palaeophalacroma connectens* (Nie 1945) Loeblich III 1980 (= *Sinodinium connectens* Nie)
 844 *Palaeophalacroma unicinctum* Schiller 1928 (= *Heterodinium detonii* Rampi 1943, *Epiperidinium michaelsarsii* Gaarder 1954)
 845 *Palaeophalacroma sphaericum* F.J.R. Taylor 1976
 846 *Palaeophalacroma verrucosum* Schiller 1928
58 *Peridiniella* Kofoid et Michener 1911 emend. Balech 1977
 847 *Peridiniella catenata* (Levander 1894) Balech 1977 (= *Gonyaulax catenata* (Levander) Kofoid 1911, *Peridinium catenatum* Levander, *Amylax catenata* Meunier 1910)

Tab. 1. – continued

- 848 *Peridiniella danica* (Paulsen 1907) Okolodkov *et* Dogde 1995 (= *Glenodinium danicum* Paulsen 1907 *ex* Braarud 1935 partim)
[Okolodkov and Dogde (1995)]
- 849 *Peridiniella sphaeroidea* Kofoid *et* Michener 1911

Crypthecodiniaceae Biecheler *ex* Chatton 1952**59** *Crypthecodinium* Biecheler 1938

- 850 *Crypthecodinium cohnii* (Seligo 1886) Chatton *in* Grassé 1952 (= *Glenodinium cohnii* Seligo *in* Cohn 1887,
Gyrodinium cohnii (Seligo) Schiller 1933, *C. setense* Biecheler 1938, *Gymnodinium fucorum* Küster 1908,
Gyrodinium fucorum (Küster) Kofoid *et* Swezy 1921)

Goniodomataceae Lindemann 1928

60 *Gambierdiscus* Adachi *et* Fukuyo 1979 (6 species)

- 851 *Gambierdiscus australes* Chinain *et* Faust 1999 [Chinain *et al.* (1999)] (A suffix is lacking in the epithet, »australesanus« or »australesensis«)
- 852 *Gambierdiscus belizeanus* Faust 1995 [Faust (1995)] (the epithet »belizianus« is orthographically correct, ICBN Art. 60.1)
- 853 *Gambierdiscus pacificus* Chinain *et* Faust 1999 [Chinain *et al.* (1999)]
- 854 *Gambierdiscus polynesiensis* Chinain *et* Faust 1999 [Chinain *et al.* (1999)]
- 855 *Gambierdiscus toxicus* Adachi *et* Fukuyo 1979
- 856 *Gambierdiscus yasumotoi* M.J. Holmes 1998 [Holmes (1998)]

61 *Goniodoma* Stein 1883 (= *Triadinium* Dodge 1981, *Heteraulacus* Diesing 1850 partim)

- 857 *Goniodoma acuminatum* (Ehrenberg 1838) Stein 1883 (= *Peridinium acuminatum* Ehrenberg, non *Peridinium polyedricum* Pouchet 1883)
**Goniodoma crassum* Kofoid *et* Michener 1911
- 858 *Goniodoma polyedricum* (Pouchet 1883) Jørgensen 1899 (= *Peridinium polyedricum* Pouchet, *Triadinium polyedricum* (Pouchet) Dodge 1981,
Goniodoma acuminata Stein 1883 partim, non *Peridinium acuminatum* Ehrenberg 1838)
- 859 *Goniodoma sphaericum* Murray *et* Whitting 1899 (= *Triadinium sphaericum* (Murray *et* Whitting) Dodge 1981,
Heteraulacus sphaericum (Murray *et* Whitting) Loeblich III 1970)

62 *Pyrodinium* Plate 1906

- 860 *Pyrodinium bahamense* Plate 1906 (= *P. bahamense* Plate 1906 var. *bahamense* var. *compressum* (Böhm 1931) Steidinger,
Tester *et* F.J.R. Taylor 1980,
P. bahamense f. *compressa* Böhm 1931, *P. schilleri* (Matzenauer 1933) Schiller 1935, *Gonyaulax schilleri* Matzenauer 1933)
**Pyrodinium phoneus* Woloszyńska *et* Conrad 1939 (= *Gonyaulax phoenus* (Woloszyńska *et* Conrad) F.J.R. Taylor 1975,
=?*Alexandrium ostenfeldii* (Paulsen) Balech *et* Tangen, *Gonyaulax phoneus* (Woloszyńska *et* Conrad) Loeblich Jr. *et* Loeblich III 1975)

Tab. 1. – continued

Gonyaulacaceae Lindemann 1928

- 63** *Alexandrium* Halim emend. Balech 1989 (= *Gonyaulax* Diesing 1866 partim, *Protogonyaulax* F.J.R. Taylor 1976, *Gessnerium* Halim 1967 ex Halim 1969, *Goniodoma* Stein 1883 partim) (28 species)
- 861 *Alexandrium acatenella* (Whedon et Kofoid 1936) Balech 1985 (= *G. acatenella* Whedon et Kofoid, *Protogonyaulax acatenella* (Whedon et Kofoid) F.J.R. Taylor 1979)
- 862 *Alexandrium affine* (Inoue et Fukuyo 1985) Balech 1985 (= *A. fukuyoi* Balech 1985, *Protogonyaulax affinis* Inoue et Fukuyo) [related to *A. concavum*]
- 863 *Alexandrium andersonii* Balech 1990
- 864 *Alexandrium balechii* (Steidinger 1971) Balech 1995 (= *G. balechii* Steidinger) [Balech (1995)]
- 865 *Alexandrium camurascutulum* MacKenzie et Todd 2002 [MacKenzie and Todd (2002)]
- 866 *Alexandrium catenella* (Whedon et Kofoid 1936) Balech 1985 (= *G. catenella* Whedon et Kofoid 1936, *G. washingtonensis* Hsu 1967)
- 867 *Alexandrium cohorticula* (Balech 1967) Balech 1985 (= *G. cohorticula* Balech)
- 868 *Alexandrium compressum* (Fukuyo, Yoshida et Inoue 1985) Balech 1995 (= *Protogonyaulax compressa* Fukuyo, Yoshida et Inoue) [Balech (1995)]
- 869 *Alexandrium concavum* (Gaarder 1942) Balech 1985 (= *Goniodoma concavum* Gaarder, *Gonyaulax concava* sensu Balech 1967) [related to *A. affine*]
- 870 *Alexandrium depressum* (Gaarder 1954) Balech et Tangen 1985 (= *Goniodoma depressum* Gaarder, *Gonyaulax depressum* (Gaarder) Balech 1979)
- 871 *Alexandrium foedum* Balech 1990
- 872 *Alexandrium fraterculus* (Balech 1964) Balech 1985 (= *G. fratercula* Balech)
- 873 *Alexandrium fundyense* Balech 1985 (= *G. excavata* (Braarud 1945) Balech 1971 sensu L.A. Loeblich et Loeblich III 1975, non Balech 1971)
- 874 *Alexandrium hiranoi* Kita et Fukuyo 1988 (= *Goniodoma pseudogoniaulax* Biecheler sensu Kita et al. 1985)
- 875 *Alexandrium insuetum* Balech 1985
- 876 *Alexandrium kutnerae* (Balech 1979) Balech 1985 (= *G. kutnerae* Balech)
- 877 *Alexandrium leei* Balech 1985
- 878 *Alexandrium margalefii* Balech 1994 [Balech (1994b)]
- 879 *Alexandrium minutum* Halim 1960 (= *A. ibericum* Balech 1985, *A. lusitanicum* Balech 1985, *A. angustitabulatum* F.J.R. Taylor in Balech 1995)
- 880 *Alexandrium monilatum* (Howell 1953) Balech 1985 (= *G. monilata* Howell, *Gessnerium mochimaensis* Halim 1967 ex Halim 1969)
- 881 *Alexandrium ostenfeldii* (Paulsen 1904) Balech et Tangen 1985 (= *Goniodoma ostenfeldii* Paulsen, *Gonyaulax ostenfeldii* (Paulsen) Paulsen 1949, *Protogonyaulax ostenfeldii* (Paulsen) Fraga et Sánchez 1985, *Heteraulacus ostenfeldii* (Paulsen) Loeblich III 1970, *Gessnerium ostenfeldii* (Paulsen) Loeblich III et L.A. Loeblich,

Tab. 1. – continued

- Triadinium ostensfeldii* (Paulsen) Dodge in Parke et Dodge 1976, *G. globosa* (Braarud 1945) Balech,
Protogonyaulax globosa (Braarud) F.J.R. Taylor 1976, ?*Gonyaulax trygveii* Dodge in Parke et Dodge 1976)
- 882 *Alexandrium peruvianum* (Balech et Mendiola 1977) Balech et Tangen 1985 (= *G. peruviana* Balech et Mendiola)
- 883 *Alexandrium pseudogoniaulax* (Biecheler 1952) Horiguchi 1983 ex Kita et Fukuyo 1992 (= *Goniodoma pseudogoniaulax* Biecheler, non »pseudogonyaulax«)
- 884 *Alexandrium satoanum* Yuki et Fukuyo 1992 (For the epithets commemorating persons, substantive epithets »satoi« are more commonly applied than adjectival epithets, ICBN Art. 60.11)
- 885 *Alexandrium tamarense* (Lebour 1925) Balech 1985 (= *G. tamarensis* Lebour, *A. excavatum* (Braarud 1945) Balech et Tangen 1985)
- 886 *Alexandrium tamiyavanichii* Balech 1994 (= *A. cohorticula* (Balech 1967) Balech 1985 sensu Ogata et al. 1990, non Balech 1985, *Protogonyaulax cohorticula* (Balech) F.J.R. Taylor 1979) [Balech (1994b)]
- 887 *Alexandrium taylorii* Balech 1994 [Balech (1994b)]
- 888 *Alexandrium tropicale* Balech 1985 (= *Gonyaulax excavata* (Braarud 1945) Balech 1971)
- 64** *Amylax* Meunier 1910 (= *Gonyaulax* Diesing 1866 partim)
- 889 *Amylax buxus* (Balech 1967) Dodge 1989 (= *Gonyaulax buxus* Balech)
- 890 *Amylax triacantha* (Jørgensen 1899) Sournia 1984 (= *G. triacantha* Jørgensen, *G. hyperborea* (Cleve 1900) Paulsen 1903, *Amylax lata* Meunier 1910)
 **Amylax verrucosa* Rampi 1943
- 65** *Gonyaulax* Diesing 1866 (= *Amylax* Meunier 1910 partim) [taxonomic junior of *Spiniferites* Mantell 1850] (60 species)
- 891 *Gonyaulax acuta* Kofoid et Michener 1911 (= ?*G. birostris* Stein 1883)
- 892 *Gonyaulax africana* Schiller 1929
- 893 *Gonyaulax alaskensis* Kofoid 1911
- 894 *Gonyaulax apiculata* (Pénard 1891) Entz 1904 (= *G. apiculata* var. *clevei* Ostensfeld 1908)
- 895 *Gonyaulax areolata* Kofoid et Michener 1911
- 896 *Gonyaulax baltica* Ellegaard, J. Lewis et Harding 2002 [Ellegaard et al. (2002)]
- 897 *Gonyaulax birostris* Stein 1883 (= *G. glyptorhynchus* Murray et Whitting 1899, *G. highlei* Murray et Whitting 1899)
 **Gonyaulax bispinosa* Kofoid et Michener 1911
- 898 *Gonyaulax borealis* Nordli 1951
- 899 *Gonyaulax braarudii* Hasle 1960
- 900 *Gonyaulax brevisulcata* P. Dangeard 1927 (= *G. paulsenii* Gaarder 1954)

Tab. 1. – continued

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- 901 *Gonyaulax bruunii* F.J.R. Taylor 1976 [close to *G. taylorii* Carbonell-Moore 1996]
- 902 *Gonyaulax ceratocoroides* Kofoid 1910 (= *Ceratocorys spinifera* Murray et Whitting 1899, *Acanthogonyaulax spinifera* (Murray et Whitting) Graham 1942)
- 903 *Gonyaulax cochlea* Meunier 1919
 **Gonyaulax conjuncta* Wood 1954
 **Gonyaulax dangeardii* (P. Dangeard 1927) Schiller 1935 (= *G. pavillardii* P. Dangeard 1927, non *G. pavillardii* Kofoid et Michener 1911)
- 904 *Gonyaulax diegensis* Kofoid 1911
- 905 *Gonyaulax digitalis* (Pouchet 1883) Kofoid 1911 (= *Protoperidinium digitale* Pouchet, *Peridinium digitale* Lemmermann 1899)
- 906 *Gonyaulax dimorpha* Biecheler 1952 [resembles *Alexandrium peruvianus* (Balech et Mendiola 1977) Balech et Tangen 1985]
- 907 *Gonyaulax elegans* Rampi 1951
- 908 *Gonyaulax elongata* (Reid 1974) Ellegaard, Daugbjerg, Rochon, J. Lewis et Harding 2003 (= *Spiniferites elongatus* Reid) [Ellegaard et al. (2003)]
- 909 *Gonyaulax expansa* Kofoid et Michener 1911 [probably *G. birostris* Stein 1883]
- 910 *Gonyaulax fragilis* (Schütt 1895) Kofoid 1911 (= *Steiniella fragilis* Schütt)
- 911 *Gonyaulax fusiformis* Graham 1942 (non *G. birostris* Stein 1883, non *G. joliffei* Murray et Whitting 1899)
- 912 *Gonyaulax globosa* (Braarud 1945) Balech 1971 (= *G. tamarensis* Lebour var. *globosa* Braarud, ?*G. trygvei* Parke in Parke et Dodge 1976)
 **Gonyaulax gabrielae* Schiller 1935
- 913 *Gonyaulax gracilis* Schiller 1935
- 914 *Gonyaulax helensis* Woloszyńska 1928
- 915 *Gonyaulax hyalina* Ostenfeld et Schmidt 1901
 **Gonyaulax inclinata* Kofoid et Michener 1911
- 916 *Gonyaulax inflata* (Kofoid 1907) Kofoid 1911 (= *G. pavillardii* P. Dangeard 1927, non *G. pavillardii* (P. Dangeard) Schiller 1935)
- 917 *Gonyaulax kofoidii* Pavillard 1909 [related to *G. pacifica* Kofoid 1907]
- 918 *Gonyaulax lebourae* Balech 1979 (= *G. orientalis* Lindemann 1924 sec Lebour 1925, non *G. orientalis* Lindemann, *Goniodoma orientale* (Lindemann) Balech 1979)
- 919 *Gonyaulax ligustica* Rampi 1951
 **Gonyaulax loculata* Meunier 1919
 **Gonyaulax longicornu* P.H. Campbell 1973
- 920 *Gonyaulax macroporus* Mangin 1922
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Tab. 1. – continued

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- **Gonyaulax matkovichii* Schiller 1929
- 921 *Gonyaulax membranacea* (Rossignol 1964) Ellegaard, Daugbjerg, Rochon, J. Lewis *et* Harding 2003
(=*Hystrichosphaera furcata* var. *membranacea* Rossignol) [Ellegaard *et al.* (2003)]
- 922 *Gonyaulax milneri* (Murray *et* Whitting 1899) Kofoid 1911
- 923 *Gonyaulax minuta* Kofoid *et* Michener 1911 (= *G. minima* Matzenauer 1933)
- 924 *Gonyaulax monacantha* Pavillard 1916
- 925 *Gonyaulax monospina* Rampi 1951
- 926 *Gonyaulax nigricans* (Schiller 1937) Balech 1988 (= *Melanodinium nigricans* Schiller)
- 927 *Gonyaulax nivicola* (Meunier 1910) Kofoid 1911
- 928 *Gonyaulax obliqua* Lemmernann 1899
- 929 *Gonyaulax orientalis* Lindemann 1924 (= *Goniodoma orientale* (Lindemann) Balech 1979,
Triadinium orientale (Lindemann) Dodge 1981, *G. lebourae* Balech 1980 partim, non *G. orientalis* sensu Lebour 1925)
- 930 *Gonyaulax ovalis* Schiller 1929 (= ?*G. ovata* Matzenauer 1933)
- 931 *Gonyaulax ovata* Matzenauer 1933
- 932 *Gonyaulax parva* Ramsfjell 1959
- 933 *Gonyaulax pacifica* Kofoid 1907 (= *Steiniella cornuta* Karsten 1907, *Pavillardinium brianii* (Rampi 1941) Sournia 1973, ?*G. kofoidii* Pavillard 1909]
**Gonyaulax paucula* Kofoid *et* Michener 1911
- 934 *Gonyaulax pavillardii* Kofoid *et* Michener 1911 (non *G. pavillardii* P. Dangeard 1927)
- 935 *Gonyaulax perpusilla* (Meunier 1910) Kofoid 1911
- 936 *Gonyaulax polygramma* Stein 1883 (= *G. schuettii* Lemmernann 1899, non *Gonyaulax polygramma* Meunier 1910)
- 937 *Gonyaulax reticulata* Kofoid *et* Michener 1911 (= *G. polygramma* sensu F.J.R. Taylor 1962)
- 938 *Gonyaulax rostratum* P. Dangeard 1927, “? rostrata”
- 939 *Gonyaulax rotundata* Rampi 1951
**Gonyaulax rugosa* Wailes 1928
- 940 *Gonyaulax scrippsae* Kofoid 1911
**Gonyaulax senta* Kofoid *et* Michener 1911
- 941 *Gonyaulax sousae* Balech 1959
- 942 *Gonyaulax subulata* Kofoid *et* Michener 1911 (non *G. subulata* sensu F.J.R. Taylor 1976)
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Tab. 1. – continued

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- 943 *Gonyaulax sphaeroidea* Kofoid 1911 (= *G. globosum* Schiller 1929)
 944 *Gonyaulax spinifera* (Claparède et Lachmann 1859) Diesing 1866 (= *G. levanderi* (Lemmermann) Paulsen 1907, non *G. spinifera* Stein 1883)
 945 *Gonyaulax striata* Mangin 1922
 946 *Gonyaulax taylorii* Carbonell-Moore 1996 (= *G. monacantha* var. *minor* sensu Balech 1971) [Carbonell-Moore (1996b)]
 947 *Gonyaulax trottii* Rampi 1951
 948 *Gonyaulax turbynei* Murray et Whitting 1899
 949 *Gonyaulax unicornis* Lebour 1925
 950 *Gonyaulax verior* Sournia 1973 (= *Amylax diacantha* Meunier 1919, *G. diacantha* sensu Schiller 1937, *G. longispina* Lebour 1925)
66 *Lingulodinium* Wall 1967 emend. Dodge 1989
 951 *Lingulodinium milneri* (Murray et Whitting 1899) Dodge 1989 (= *Gonyaulax milneri* (Murray et Whitting) Kofoid 1911)
 952 *Lingulodinium polyedra* (Stein 1883) Dodge 1989 (= *Gonyaulax polyedra* Stein 1883) [reported frequently as »polyedrum«]
67 *Protoceratium* Bergh 1881 (= *Gonyaulax* Diesing 1866 partim)
 **Protoceratium aculeatum* (Stein 1883) Schiller 1937 (= *Clathrocysta aculeata* Stein)
 953 *Protoceratium areolatum* Kofoid 1907
 **Protoceratium cancellorum* Kofoid et Michener 1911
 **Protoceratium globosum* Kofoid et Michener 1911
 954 *Protoceratium pepo* Kofoid et Michener 1911
 **Protoceratium promissum* Kofoid et Michener 1911
 955 *Protoceratium reticulatum* (Claparède et Lachmann 1859) Bütschli 1885 (= *G. grindleyi* Reinecke 1967, *Protoceratium aceros* Bergh 1881, *Peridiniopsis reticulata* (Claparède et Lachmann) Starmach 1974)
 956 *Protoceratium spinulosum* (Murray et Whitting 1899) Schiller 1937
 **Protoceratium splendens* Meunier 1910 (= *P. reticulatum* (Claparède et Lachmann 1859) Bütschli 1885)
 Heterocapsaceae Fensome et al. 1993
68 *Heterocapsa* Stein 1883 emend. Iwataki et Fukuyo 2002 (= *Cachonina* Loeblich III 1968) [Iwataki (2002)] (12 species)
 957 *Heterocapsa arctica* Horiguchi 1997 [Horiguchi (1997)]
 **Heterocapsa chattonii* (Biecheler 1952) P.H. Campbell 1973 (= *Peridinium chattonii* Biecheler)
 958 *Heterocapsa circularisquama* Horiguchi 1995 [Horiguchi (1995b)]
 959 *Heterocapsa illdefina* (Herman et Sweeney 1976) Morrill et Loeblich III 1981 (= *Cachonina illdefina* Herman et Sweeney)
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Tab. 1. – continued

- 960 *Heterocapsa horiguchii* Iwataki, Takayama *et* Matsuoka 2002 [Iwataki *et al.* (2002)]
- 961 *Heterocapsa lanceolata* Iwataki *et* Fukuyo 2002 [Iwataki *et al.* (2002)]
**Heterocapsa kollmeriana* M.J. Swift *et* McLaughlin 1970 [freshwater]
- 962 *Heterocapsa minima* Pomroy 1989
- 963 *Heterocapsa niei* (Loeblich III 1968) Morrill *et* Loeblich III 1981
- 964 *Heterocapsa orientalis* Iwataki *et* Fukuyo 2003 [Iwataki *et al.* (2003)]
- 965 *Heterocapsa ovata* Iwataki *et* Fukuyo 2003 [Iwataki *et al.* (2003)]
**Heterocapsa pacifica* Kofoid 1907
**Heterocapsa pseudotriquetra* Iwataki, G. Hansen *et* Fukuyo 2002 [described in a PhD, Iwataki (2002)]
- 966 *Heterocapsa pygmaea* Loeblich III, R.J. Schmidt *et* Sherley 1981 (= *Cachonina pygmaea* (Loeblich III, R.J. Schmidt *et* Sherley 1981) Sournia 1984)
**Heterocapsa quinquecuspidata* Massart 1920 (= ?*Peridiniopsis cunningtonii* Lemmermann 1907)
- 967 *Heterocapsa rotundata* (Lohmann 1908) G. Hansen 1995 (= *Amphidinium rotundatum* Lohmann 1911, *A. pellucidum* Redeke 1935, *Gymnodinium minutum* Lebour 1925, *Massartia rotundata* (Lohmann) Schiller 1933, *Katodinium rotundatum* (Lohmann) Loeblich III 1965, *Katodinium redekei* (Conrad *et* Kufferath 1954) Loeblich III 1965, *Katodinium minutum* (Lebour) Sournia 1973) [Hansen (1995)]
- 968 *Heterocapsa triquetra* (Ehrenberg 1840) Stein 1883 (= *Glenodinium triquetrum* Ehrenberg, *Peridinium triquetrum* (Ehrenberg) Lebour 1925, *Properidinium heterocapsa* (Stein) Meunier 1919)
**Heterocapsa umbilicata* Stein 1883
- Heterodiniaceae Lindemann 1928
- 69** *Heterodinium* Kofoid 1906 (= *Peridinium* Ehrenberg 1830 partim) (42 species)
- 969 *Heterodinium agassizii* Kofoid 1907
- 970 *Heterodinium angulatum* Kofoid *et* Michener 1911
- 971 *Heterodinium asymmetricum* Kofoid *et* Adamson 1933
- 972 *Heterodinium australiae* Wood 1963
- 973 *Heterodinium balechii* Rampi 1951
- 974 *Heterodinium blackmanii* (Murray *et* Whitting 1899) Kofoid 1906 (= *H. curvatum* Kofoid 1907)
**Heterodinium calvum* Kofoid 1907
- 975 *Heterodinium crassipes* Schiller 1916

Tab. 1. – continued

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- 976 *Heterodinium debeauxii* Rampi 1941
 977 *Heterodinium deformatum* (Kofoid 1907) Kofoid et Adamson 1933 (= *H. gesticulatum* f. *deformata* Kofoid 1907)
 978 *Heterodinium dispar* Kofoid et Adamson 1933
 979 *Heterodinium doma* (Murray et Whitting 1899) Kofoid 1906
 980 *Heterodinium dubium* Rampi 1941
 981 *Heterodinium elongatum* Kofoid et Michener 1911
 982 *Heterodinium expansum* Kofoid 1907
 983 *Heterodinium extremum* (Kofoid 1907) Kofoid et Adamson 1933 (= *H. gesticulatum* f. *extrema* Kofoid 1907)
 984 *Heterodinium fenestratum* Kofoid 1907
 985 *Heterodinium fides* Kofoid 1907
 986 *Heterodinium gesticulatum* Kofoid 1907 (= *Peridinium tristylum* Hensen 1911)
 987 *Heterodinium globosum* Kofoid 1907 (= ? *H. gracile* Böhm 1936)
 988 *Heterodinium gracile* Böhm 1936 (= ? *H. globosum* Kofoid 1907)
 989 *Heterodinium grahamii* Rampi 1941
 990 *Heterodinium hindmarchii* (Murray et Whitting 1899) Kofoid 1906
 991 *Heterodinium inaequale* (Kofoid 1906) Schiller 1937 (= *H. laticinctum* Kofoid 1907, *H. kofoidii* Pavillard 1915)
 992 *Heterodinium kofoidii* Pavillard 1915 (= *H. pavillardii* Kofoid et Adamson 1933, non *H. kofoidii* Schiller 1916 = *H. schilleri* Pavillard 1932)
 **Heterodinium laeve* Kofoid et Michener 1911
 993 *Heterodinium laticeps* Léger 1972
 994 *Heterodinium leiorhynchum* (Murray et Whitting 1899) Kofoid 1906
 **Heterodinium lineatum* Kofoid et Michener 1911 (= *Dolichodinium lineatum* (Kofoid et Michener) Kofoid et Adamson 1933)
 995 *Heterodinium mediocre* (Kofoid 1907) Kofoid et Adamson 1933 (= *H. gesticulatum* f. *mediocris* Kofoid, ? *H. sinistrum* Kofoid et Adamson 1933)
 996 *Heterodinium mediterraneum* Pavillard 1932
 997 *Heterodinium milneri* (Murray et Whitting 1899) Kofoid 1906
 998 *Heterodinium minutum* Kofoid et Michener 1911
 999 *Heterodinium murrayi* Kofoid 1906 (= *Peridinium tripos* Murray et Whitting 1899)
 1000 *Heterodinium obesum* Kofoid 1907
 **Heterodinium praetextum* Kofoid 1907
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Tab. 1. – continued

- 1001 *Heterodinium rigdenae* Kofoid 1906 (= *H. longum* Kofoid 1907)
 1002 *Heterodinium schilleri* Pavillard 1932 (= *H. kofoidii* Schiller 1916, non *H. kofoidii* Pavillard 1915 = *H. pavillardii* Kofoid et Adamson 1933)
 1003 *Heterodinium scottii* Kofoid et Adamson 1933
 1004 *Heterodinium scrippsii* Kofoid 1906 (= *H. richardii* Pavillard 1932, *H. pulchrum* Böhm 1933, *Peridinium areolatum* Karsten 1906)
 1005 *Heterodinium sinistrum* Kofoid et Adamson 1933 (= *H. sinistrum* f. *sinistrum* (Kofoid et Adamson 1933) Schiller 1936)
 1006 *Heterodinium sphaeroideum* Kofoid 1906
 **Heterodinium spiniferum* Kofoid et Michener 1911
 1007 *Heterodinium superbum* Kofoid 1907
 1008 *Heterodinium triostre* (Murray et Whitting 1899) Kofoid 1906
 1009 *Heterodinium varicator* Kofoid et Adamson 1933
 1010 *Heterodinium whittingae* Kofoid 1906

Ostreopsidaceae Lindemann 1928

- 70** *Coolia* Meunier 1919 (= *Ostreopsis* Schmidt 1901 partim)
 1011 *Coolia areolata* Ten-Hage, Turquet, Quod et Couté 2000 [Ten-Hage et al. (2000a)]
 1012 *Coolia monotis* Meunier 1919 (= *Ostreopsis monotis* (Meunier) Lindemann 1928, *Glenodinium monotis* (Meunier) Biecheler 1952)
 1013 *Coolia tropicalis* Faust 1995 [Faust (1995)]
71 *Ostreopsis* Schmidt 1901
 1014 *Ostreopsis belizeana* Faust 1999 [Faust (1999)] (published as »belizeanum«, ICBN Art. 23.5 and 32.5; »beliziana« is orthographically correct, ICBN Art. 60.1)
 1015 *Ostreopsis caribbeana* Faust 1999 [Faust (1999)]
 (published as »caribbeanus«, ICBN Art. 23.5 and 32.5; »caribbeana« is orthographically correct, ICBN Art. 60.1)
 1016 *Ostreopsis heptagona* Norris, Bomber et Balech 1985
 1017 *Ostreopsis labens* Faust et Morton 1995 [Faust and Morton (1995)]
 1018 *Ostreopsis lenticularis* Fukuyo 1981
 1019 *Ostreopsis marina* Faust 1999 [Faust (1999)] (published as »marinus«, ICBN Art. 23.5 and 32.5)
 1020 *Ostreopsis mascarenensis* Quod 1994 [Quod (1994)]
 1021 *Ostreopsis ovata* Fukuyo 1981
 1022 *Ostreopsis siamensis* Schmidt 1901

Tab. 1. – continued

Oxytoxaceae Lindemann 1928

- 72 *Amphidiniopsis*** Woloszyńska 1929 (= *Thecadinium* Kofoid *et* Skogsberg 1928 partim) (11 species)
- 1023 *Amphidiniopsis arenaria* Hoppenrath 2000 [Hoppenrath (2000e)]
- 1024 *Amphidiniopsis cristata* Hoppenrath 2000 [Hoppenrath (2000e)]
- 1025 *Amphidiniopsis dentata* Hoppenrath 2000 [Hoppenrath (2000e)]
- 1026 *Amphidiniopsis galericulata* Hoppenrath 2000 [Hoppenrath (2000e)]
- 1027 *Amphidiniopsis hexagona* Yoshimatsu, Toriumi *et* Dodge 2000 [Yoshimatsu *et al.* (2000)]
- 1028 *Amphidiniopsis hirsuta* (Balech 1956) Dodge 1982 (= *Thecadinium hirsutum* Balech)
- 1029 *Amphidiniopsis kofoidii* Woloszyńska 1929 (non *Thecadinium kofoidii* (Herdman 1923) J. Larsen 1985)
- 1030 *Amphidiniopsis korewalensis* S. Murray *et* Patterson 2002 [Murray and Patterson (2002)]
- 1031 *Amphidiniopsis pectinaria* Toriumi, Yoshimatsu *et* Dodge 2002 [Toriumi *et al.* (2002)]
- 1032 *Amphidiniopsis swedmarkii* (Balech 1956) Dodge 1982 (= *Thecadinium swedmarkii* Balech)
**Amphidiniopsis urnaeformis* Gail 1950 (= ?*Spatulodinium pseudonociluca*)
- 1033 *Amphidiniopsis uroensis* Toriumi, Yoshimatsu *et* Dodge 2002 [Toriumi *et al.* (2002)]
- 73 *Centrodinium*** Kofoid 1907 (= *Pavillardinium* De-Toni 1936 partim, *Murrayella* Kofoid 1907 partim) (14 species)
- 1034 *Centrodinium biconicum* (Murray *et* Whitting 1899) F.J.R. Taylor 1976 (= *M. biconica* (Murray *et* Whitting) Pavillard 1931, *Pavillardinium biconicum* Rampi 1948)
- 1035 *Centrodinium complanatum* (Cleve 1903) Kofoid 1907 (= *Steiniella complanata* Cleve)
- 1036 *Centrodinium deflexum* Kofoid 1907
- 1037 *Centrodinium deflexoides* Balech 1962
- 1038 *Centrodinium elongatum* Kofoid 1907
- 1039 *Centrodinium eminens* Böhm 1933
**Centrodinium expansum* Kofoid 1911
- 1040 *Centrodinium intermedium* Pavillard 1930
- 1041 *Centrodinium maximum* Pavillard 1930
- 1042 *Centrodinium mimeticum* (Balech 1967) F.J.R. Taylor 1976 (= *M. mimetica* Balech)
- 1043 *Centrodinium pacificum* (Rampi 1950) F.J.R. Taylor 1976 (= *P. pacificum* Rampi)
- 1044 *Centrodinium pavillardii* F.J.R. Taylor 1976 (= *P. intermedium* (Pavillard 1916) de Toni 1936, *M. intermedia* Pavillard, non *C. intermedium* Pavillard 1930)

Tab. 1. – continued

- 1045 *Centrodinium porulosum* Kofoid 1911
- 1046 *Centrodinium punctatum* (Cleve 1900) F.J.R. Taylor 1976 (= *Steiniella punctata* Cleve, *M. punctata* (Cleve) Kofoid 1907, *P. punctatum* (Cleve) De Toni 1936, *Murrayella splendida* Rampi 1941, *P. splendidum* (Rampi) Rampi 1950)
- 1047 *Centrodinium pulchrum* Böhm 1933 (= *C. eminens* f. *pulchrum* (Böhm) Schiller 1933)
- 74 *Corythodinium* Loeblich Jr. et Loeblich III 1966 (= *Oxytoxum* Stein 1883 partim) (8 species)
- 1048 *Corythodinium belgicæ* (Meunier 1910) F.J.R. Taylor 1976
- 1049 *Corythodinium carinatum* (Gaarder 1954) F.J.R. Taylor 1976
- 1050 *Corythodinium compressum* (Kofoid 1907) F.J.R. Taylor 1976
- 1051 *Corythodinium cristatum* (Kofoid 1907) F.J.R. Taylor 1976
- 1052 *Corythodinium curvicaudatum* (Kofoid 1907) F.J.R. Taylor 1976
- 1053 *Corythodinium diploconus* (Stein 1883) F.J.R. Taylor 1976
- 1054 *Corythodinium globosum* (Kofoid 1907) F.J.R. Taylor 1976 (= *Murrayella globosa* Kofoid, non *O. globosum* Schiller 1937)
- 1055 *Corythodinium recurvum* (Kofoid et Michener 1911) F.J.R. Taylor 1976
- 75 *Oxytoxum* Stein 1883 (42 species)
- 1056 *Oxytoxum adriaticum* Schiller 1937
- 1057 *Oxytoxum biconicum* (Kofoid 1907) Dodge et Saunders 1984 (= *Amphidoma biconica* Kofoid, *C. biconicum* (Kofoid) F.J.R. Taylor 1976, *Murrayella kofoidii* Gaarder 1954, *Pavillardinium kofoidii* (Gaarder) Sournia 1973)
- 1058 *Oxytoxum brunellii* Rampi 1939
- 1059 *Oxytoxum caudatum* Schiller 1937 (= *O. nanum* Halldal 1953, *O. rampii* Sournia 1973, *O. ligusticum* Rampi 1969)
- 1060 *Oxytoxum challengeroides* Kofoid 1907 (= ? *O. minutum* Rampi 1941)
- 1061 *Oxytoxum constrictum* (Stein 1883) Bütschli 1885 (= *C. constrictum* (Stein) F.J.R. Taylor 1976)
- 1062 *Oxytoxum coronatum* Schiller 1937
- 1063 *Oxytoxum crassum* Schiller 1937 (= *O. globosum* Schiller 1937, non *C. globosum* (Kofoid 1907) F.J.R. Taylor 1976)
- 1064 *Oxytoxum cribosum* Stein 1883
- 1065 *Oxytoxum criophilum* Balech in Balech et El-Sayed 1965
- 1066 *Oxytoxum curvatum* (Kofoid 1907) Kofoid 1911 (= *Prorocentrum curvatum* Kofoid)
- 1067 *Oxytoxum depressum* Schiller 1937
- 1068 *Oxytoxum elegans* Pavillard 1916 (= *C. elegans* (Pavillard 1916) F.J.R. Taylor 1976)

Tab. 1. – continued

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- 1069 *Oxytoxum elongatum* Wood 1963
 1070 *Oxytoxum gladiolus* Stein 1883
 1071 *Oxytoxum laticeps* Schiller 1937
 1072 *Oxytoxum latum* Gaarder 1954
 1073 *Oxytoxum longum* Schiller 1937
 1074 *Oxytoxum michaelsarsii* Gaarder 1954
 1075 *Oxytoxum milneri* Murray *et* Whitting 1899 (= *O. subulatum* Kofoid 1907)
 1076 *Oxytoxum minutum* Rampi 1941 (= ? *O. challengeroides* Kofoid 1907, resembles *O. lativelatum* F.J.R. Taylor 1976)
 1077 *Oxytoxum mitra* Stein 1883
 1078 *Oxytoxum mucronatum* Hope 1954
 1079 *Oxytoxum obesum* Rampi 1969
 1080 *Oxytoxum obliquum* Schiller 1937
 1081 *Oxytoxum ovale* Schiller 1937 (= *O. mediterraneum* Schiller 1937, *O. punctulatum* Rampi 1951, *O. spinosum* Rampi 1941, *O. lativelatum* F.J.R. Taylor 1976)
 1082 *Oxytoxum ovum* Gaarder 1954 (= ? *C. globosum* (Kofoid 1907) F.J.R. Taylor 1976)
 1083 *Oxytoxum pachyderme* Schiller 1937 *ex* F.J.R. Taylor 1976
 1084 *Oxytoxum parvum* Schiller 1937 (= *O. tenuistriatum* Rampi 1943)
 1085 *Oxytoxum pyramidale* Dodge *et* Saunders 1985
 1086 *Oxytoxum radiosum* Rampi 1951
 1087 *Oxytoxum reticulatum* (Stein 1883) Schütt 1896 (= *C. reticulatum* (Stein) Loeblich Jr. *et* Loeblich III 1966, *O. areolatum* Rampi 1941, *C. frenguelli* (Rampi 1941) F.J.R. Taylor 1976, *O. latum* Gaarder 1954, *C. latum* (Gaarder) F.J.R. Taylor 1976)
 1088 *Oxytoxum robustum* Kofoid 1911
 1089 *Oxytoxum sceptrum* (Stein 1883) Schröder 1906 (= *O. longiceps* Schiller 1937, *O. aceratum* Rampi 1951)
 1090 *Oxytoxum scolopax* Stein 1883
 1091 *Oxytoxum semicollatum* F.J.R. Taylor 1976
 1092 *Oxytoxum sphaeroideum* Stein 1883 (= *Oxytoxum boehmii* Schiller 1937)
 1093 *Oxytoxum strophalatum* Dodge *et* Saunders 1985
 1094 *Oxytoxum tessellatum* (Stein 1883) Schütt 1895 (= *C. tessellatum* (Stein) Loeblich Jr. *et* Loeblich III 1966, *O. michaelsarsii* Gaarder 1954, *C. michaelsarsii* (Gaarder) F.J.R. Taylor 1976)
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Tab. 1. – continued

- 1095 *Oxytoxum turbo* Kofoid 1907
 1096 *Oxytoxum variabile* Schiller 1937 (= *O. gracile* Schiller 1937)
 1097 *Oxytoxum viride* Schiller 1937
 **Pavillardinium* De-Toni 1936 (= *Amphidoma* Stein 1883 partim, *Centrodinium* Kofoid 1907 partim, *Murrayella* Kofoid 1907)
 **Pavillardinium ovale* (Pavillard 1930) De-Toni 1936 (= *Murrayella ovalis* Pavillard)
 **Murrayella australica* Wood 1963
76 *Planodinium* Saunders et Dodge 1984
 1098 *Planodinium striatum* Saunders et Dodge 1984
77 *Sabulodinium* Saunders et Dodge 1984
 1099 *Sabulodinium inclinatum* (Balech 1956) Saunders et Dodge 1984 (= *Thecadinium inclinatum* Balech)
 1100 *Sabulodinium undulatum* Saunders et Dodge 1984 (= *Phalacroma kofoidii* var. (colourless variety) Herdman 1924)
78 *Schuettiella* Balech 1988 (= *Gonyaulax* Diesing 1866 partim, *Oxytoxum* Stein 1883 partim)
 1101 *Schuettiella mitra* (Schütt 1895) Balech 1988 (= *Steinella mitra* Schütt, *Oxytoxum gigas* Kofoid 1907, *Gonyaulax mitra* (Schütt) Kofoid 1911)
79 *Thecadinium* Kofoid et Skogsberg 1928 (5 species)
 **Thecadinium aureum* P.H. Campbell 1973
 1102 *Thecadinium acanthium* Hoppenrath 2000 [Hoppenrath (2000b)]
 1103 *Thecadinium dragescoi* Balech 1956
 1104 *Thecadinium kofoidii* (Herdman 1923) J. Larsen 1985 (= *Amphidinium kofoidii* var. *petasatum* Herdman 1922, *T. petasatum* (Herdman) Balech, *Phalacroma kofoidii* Herdman 1924, *Amphidinium sulcatum* Kofoid sensu Herdman 1921, *T. kofoidii* Kofoid et Skogsberg in Schiller 1931, *T. petasatum* Kofoid et Skogsberg 1928)
 1105 *Thecadinium neopetasatum* Saunders et Dodge 1984
 1106 *Thecadinium ornatum* Hoppenrath 2000 [Hoppenrath (2000b)]
- Insertae sedis*
- 80** *Amphidiniella* Horiguchi 1995
 1107 *Amphidiniella sedentaria* Horiguchi 1995 [Horiguchi (1995a)]
- Peridiniaceae Ehrenberg 1830
- 81** *Bysmatrum* Faust et Steidinger 1998 [Faust and Steidinger (1998)]
 1108 *Bysmatrum arenicola* Horiguchi et Pienaar 2000 (= *Scrippsiella arenicola* Horiguchi et Pienaar 1988, *B. arenicola* (Horiguchi et Pienaar) Faust et Steidinger 1998) [Faust and Steidinger (1998), Horiguchi and Pienaar (2000)]

Tab. 1. – continued

- 1109 *Bysmatrum granulosum* Ten-Hage, Quod, Turquet *et* Couté 2001 [Ten-Hage *et al.* (2001)]
- 1110 *Bysmatrum subsalsum* (Ostenfeld 1908) Faust *et* Steidinger 1998 (= *Peridinium subsalsum* Ostenfeld, *Scrippsiella subsalsa* (Ostenfeld) Steidinger *et* Balech 1977) [Faust and Steidinger (1998)]
- 82** *Calciodinellum* Deflandre 1947 [nomenclatural priority of fossil-encysted stage names does not have to be applied for dinoflagellate species (ICBN, Greuter *et al.* 2000)]
- 1111 *Calciodinellum albatrosianum* (Kamptner 1963) Janofske *et* Karwath 2000 [Janofske and Karwath (2000)]
- 1112 *Calciodinellum elongatum* (Hildebrand-Habel, Willems *et* Versteegh 1999) Meier, Janofske *et* Willems 2002 [Meier *et al.* (2002)]
- 1113 *Calciodinellum levantinum* Meier, Janofske *et* Willems 2002 [Meier *et al.* (2002)]
- 83** *Ensiculifera* Balech 1967 emend. Matsuoka, Kobayashi *et* Gaines 1990 (5 species)
- 1114 *Ensiculifera angulata* Balech 1988
- 1115 *Ensiculifera carinata* Matsuoka, Kobayashi *et* Gains 1990
- 1116 *Ensiculifera imariensis* Kobayashi *et* Matsuoka 1995 [Kobayashi and Matsuoka (1995)]
- 1117 *Ensiculifera loeblichii* Cox *et* Arnott 1971 (= *Pentapharsodinium trachodinium* Indelicato *et* Loeblich III 1986, *Peridinium loeblichii* (Cox *et* Arnott) Dale 1977)
- 84** *Kryptoperidinium* Lindemann 1924 (= *Glenodinium* Ehrenberg 1836 partim)
- 1119 *Kryptoperidinium foliaceum* (Stein 1883) Lindemann 1924 (= *G. foliaceum* Stein, ?*Peridinium cuneatum* van Goor 1925, *Phyllocladus scutellaris* Conrad 1926)
- 85** *Pentapharsodinium* Indelicato *et* Loeblich III 1986 (= *Peridinium* Ehrenberg 1830 partim)
- 1120 *Pentapharsodinium tyrrhenicum* (Balech 1990) Montresor, Zingone *et* Marino 1993 (= *Peridinium tyrrhenicum* Balech) [Montresor *et al.* (1993)]
- 1121 *Pentapharsodinium dalei* Indelicato *et* Loeblich 1986 (= *Peridinium faeroense* sensu Dale 1977, *Scrippsiella faeroense* sensu Dodge 1982, *Peridinium dalei* (Indelicato *et* Loeblich III) Balech 1990, non *Peridinium faeroense* Paulsen 1905)
- 86** *Peridinium* Ehrenberg 1830 [nearly all freshwater species]
- 1122 *Peridinium gregarium* Lombard *et* Capon 1971 (= *Bysmatrum caponii* (Horiguchi *et* Pienaar 1988) Faust *et* Steidinger 1998, *Scrippsiella caponii* Horiguchi *et* Pienaar 1988, non *S. gregaria* (Lombard *et* Capon 1971) Loeblich III, Sherley *et* R.J. Schmidt 1979 = *S. hexapraeicingula* Horiguchi *et* Chihara 1983) [Faust and Steidinger (1998)]
- 1123 *Peridinium quinquecorne* Abé 1927 (= *Protoperidinium quinquecorne* (Abé) Balech 1974, ?*Heterocapsa quadridentata* Stein 1883)
- 87** *Scrippsiella* Balech 1959 *ex* Loeblich III 1965 (19 species)
- 1124 *Scrippsiella crystallina* J. Lewis 1991
- 1125 *Scrippsiella faeroensis* (Paulsen 1905) Balech *et* Soares 1967 (= *Calciodinellum faeroense* (Paulsen 1905) Havskum 1991, non *Scrippsiella faeroense* Dickensheets *et* Cox 1971 = *S. trochoidea* (Stein 1883) Loeblich III 1976)

Tab. 1. – continued

- 1126 *Scrippsiella hangoei* (Schiller 1935) J. Larsen 1995 (= *Peridinium gracile* Lindemann 1924, ?*P. novascotiense* Gran et Braarud 1935) [Larsen et al. (1995)]
- 1127 *Scrippsiella hexapraeicingula* Horiguchi et Chihara 1983 (= *S. gregaria* (Lombard et Capon 1971) Loeblich III, Sherley et R.J. Schmidt 1979, non *Peridinium gregarium* Lombard et Capon)
**Scrippsiella iizukai* Kobayashi 1994 [described in a PhD, Kobayashi (1994)]
- 1128 *Scrippsiella infula* (Deflandre 1948) Montresor 2003 (= *Calcigonellum infula* Deflandre) [Montresor et al. (2003)]
- 1129 *Scrippsiella lachrymosa* J. Lewis 1991
- 1130 *Scrippsiella minima* Gao et Dodge 1991
- 1131 *Scrippsiella operosa* (Deflandre 1947) Montresor 2003 (= *Calciodinellum operosum* Deflandre) [Montresor et al. (2003)]
- 1132 *Scrippsiella patagonica* Akselman et Keupp 1990
- 1133 *Scrippsiella precaria* Montresor et Zingone 1988
- 1134 *Scrippsiella ramonii* Montresor 1995 [Montresor (1995)]
- 1135 *Scrippsiella regalis* (Gaarder 1954) Janofske 2000 (= *Discosphaera regalis* Gaarder) [Janofske (2000)]
- 1136 *Scrippsiella rotunda* J. Lewis 1991
- 1137 *Scrippsiella saladense* Balech 1963, “? saladensis”
- 1138 *Scrippsiella spinifera* Honsell et Cabrini 1991
- 1139 *Scrippsiella sweeneyae* Balech 1959 ex Loeblich III 1965 (= *S. sweeneyae* Wall et Dale 1968, *S. faeroense* sensu Dickensheets et Cox 1971)
- 1140 *Scrippsiella tinctoria* Indelicato et Loeblich III 1985
- 1141 *Scrippsiella trifida* J. Lewis 1991
**Scrippsiella triquetracapitata* Meier, Janofske et Willems 2002 [Meier et al. (2002)]
- 1142 *Scrippsiella trochoidea* (Stein 1883) Balech ex Loeblich III 1965 (= *Glenodinium trochoideum* Stein 1883, *G. acuminatum* Jørgensen 1899, *Peridinium trochoideum* (Stein 1883) Lemmermann 1910, *Peridinium faeroense* Paulsen 1905, *Scrippsiella faeroensis* (Paulsen 1905) Balech et Oliveira-Soares 1967, *Scrippsiella trochoidea* var. *aciculifera* Montresor 1999)
Protoperidiniaceae Balech 1988/*Protoperidiniaceae* J.P. Bujak et E.H. Davis 1998 (= *Kolkwitzziellaceae* Lindemann 1928, *Diplopsaliaceae* Matsuoka 1988)
- 88** *Boreadinium* Dodge et Hermes 1981 (= *Diplopsalis* Bergh 1881 partim)
- 1143 *Boreadinium breve* (Abé 1981) Sournia 1984 (= *Diplopsalis brevis* Abé)
- 1144 *Boreadinium pisiforme* Dodge et Hermes 1981
- 89** *Diplopetla* Stein 1883 ex Jørgensen 1912 (= *Dissodium* Abé 1941 partim, *Diplopsalis* Bergh 1881 partim)

Tab. 1. – continued

- 1145 *Diplopelta excentrica* (Nie 1943) Balech (= *Diplopsalis excentrica* Nie, *Dissodium excentricum* (Nie) Loeblich III, *Peridiniopsis excentrica* (Nie) F.J.R. Taylor 1976, *Gotoius excentricus* (Nie) Sournia 1973)
- 1146 *Diplopelta pusilla* Balech et Akselman 1988
- 1147 *Diplopelta steinii* (Abé 1941) Balech 1988 (= *Diplopsalopsis steinii* Abé)
- 90** *Diplopsalis* Bergh 1881 (= *Glenodinium* Ehrenberg 1836 partim, *Dissodium* Abé 1941 partim)
- 1148 *Diplopsalis lebourae* (Nie 1943) Balech 1967 (= *D. lenticula* var. *lebourae* Nie, non *Diplopsalis lebourae* Abé 1941, nec Abé 1981)
- 1149 *Diplopsalis lenticula* Bergh 1881 (= *Glenodinium lenticula* (Bergh) Schiller 1937, *Dissodium lenticulum* (Bergh) Loeblich III 1970, *Peridiniopsis lenticula* (Bergh) Starmach 1974)
- **Diplopsalis minuta* Mangin 1912
- **Diplopsalis sphaerica* Meunier 1910
- 91** *Diplopsalopsis* Meunier 1910 emend. Balech 1988 (= *Diplopsalis* Bergh 1881 partim, *Diplopelta* Stein ex Jørgensen 1912 partim)
- 1150 *Diplopsalopsis bomba* (Stein 1883) Dodge et Toriumi 1993 (= *Diplopelta bomba* Stein ex Jørgensen 1912, *Diplopsalis asymmetrica* (Mangin 1911) Lindemann 1928, ?*Diplopsalis asymmetrica* (Mangin) Abé 1941, *Peridiniopsis asymmetrica* Mangin 1911, *Dissodium asymmetricum* (Mangin) Loeblich III 1970, *Diplopelta symmetrica* Pavillard 1913) [Dodge and Toriumi (1993)]
- 1151 *Diplopsalopsis imitatio* (Balech 1979) Balech 1988 (= *Protoperidinium imitatio* Balech)
- 1152 *Diplopsalopsis globula* Abé 1941 (= *Diplopelta globulus* (Abé) Balech 1979, *Diplopsalopsis asymmetrica* (Mangin) var. *sphaerica* Mangin 1911, *Diplopsalopsis sphaerica* (Mangin) Balech 1962, *Dissodium globula* (Abé) Dodge et Hermes 1981)
- 1153 *Diplopsalopsis latipeltata* Balech et Borgese 1990
- 1154 *Diplopsalopsis orbicularis* (Paulsen 1907) Meunier 1910 (= *Peridinium orbiculare* Paulsen, *Diplopsalis orbicularis* (Paulsen) Paulsen 1930)
- 1155 *Diplopsalopsis ovata* (Abé 1941) Dodge et Toriumi 1993 (= *Diplopsalopsis orbicularis* (Paulsen 1907) var. *ovata* Abé 1941) [Dodge and Toriumi (1993)]
- 1156 *Diplopsalopsis pingii* (Nie 1943) Dodge et Toriumi 1993 (= *Diplopsalis pingii* Nie, *Peridiniopsis pingii* (Nie) F.J.R. Taylor 1976) [Dodge and Toriumi (1993)]
- 92** *Dissodium* Abé 1941 (= *Diplopsalis* Bergh 1881 partim, *Diplopelta* Stein 1883 ex Jørgensen 1912 partim)
- 1157 *Dissodium parvum* Abé 1941 (= *Diplopelta parva* (Abé) Matsuoka 1988, *Diplopsalis parvum* (Abé) Abé 1981)
- 93** *Gotoius* Abé 1981 ex Matsuoka 1988 (= *Diplopsalis* Bergh 1881 partim, *Dissodium* Abé 1941 partim)
- 1158 *Gotoius abei* Matsuoka 1988

Tab. 1. – continued

- 1159 *Gotoius excentricus* (Nie 1943) Sournia 1984 (= *Diplopsalis excentrica* Nie 1943, *Dissodium excentricum* (Nie) Loeblich III 1970, *Peridiniopsis excentrica* (Nie) F.J.R. Taylor 1976)
- 1160 *Gotoius mutsuensis* Abé 1981 ex Matsuoka 1988
- 1161 *Gotoius ostenfeldii* (Stemann Nielsen 1931) Dodge et Toriumi 1993 (= *Diplopsalis ostenfeldii* Steemann Nielsen) [Dodge and Toriumi (1993)]
- 94** *Lebouraia* Abé 1941 ex Sournia 1986 (= *Diplopsalis* Bergh 1881 partim, *Diplopelta* Stein ex Jørgensen 1912 partim)
- 1162 *Lebouraia minuta* Abé 1941 (= *Diplopsalis minuta* (Abé) Abé 1981)
- 1163 *Lebouraia pusilla* (Balech et Akselman 1988) Dodge et Toriumi 1993 (= *Diplopelta pusilla* Balech et Akselman) [Dodge and Toriumi (1993)]
- 95** *Oblea* Balech 1964 (= *Peridiniopsis* Lemmermann 1904 partim, *Diplopsalis* Bergh 1881 partim)
- 1164 *Oblea baculifera* Balech 1964 ex Loeblich Jr. et Loeblich III 1966
- 1165 *Oblea rotunda* (Lebour 1922) Balech 1964 ex Sournia 1973 (= *Peridiniopsis rotunda* Lebour, *Glenodinium rotundum* (Lebour) Schiller 1937, *Diplopsalis rotunda* (Lebour) Wood 1954, *Diplopsalis rotundata* Steidinger et Williams 1970)
- 1166 *Oblea torta* (Abé 1941) Balech 1964 ex Sournia 1973 (= *Diplopsalis torta* Abé, *Diplopsalis hainanensis* Nie 1943, *Peridiniopsis hainanensis* (Nie) F.J.R. Taylor 1976)
- 96** *Preperidinium* Mangin 1913 (= *Diplopeltopsis* Pavillard 1913, *Zygabikodinium* Loeblich Jr. et Loeblich III 1970)
- 1167 *Preperidinium granulolum* (Balech 1958) Elbrächter 1993 (= *Diplopeltopsis granulosa* Balech, *Zygabikodinium granulatum* (Balech) Loeblich III 1970) [Elbrächter (1993)]
- 1168 *Preperidinium meunieri* (Pavillard 1907) Elbrächter 1993 (= *Diplopsalis lenticula* Bergh f. *minor* Paulsen 1907, *Zygabikodinium lenticulatum* Loeblich Jr. et Loeblich III 1970, *Peridinium lenticulum* Mangin 1911, *Peridinium paulsenii* Mangin 1911, *Glenodinium lenticula* f. *minor* (Paulsen 1907) Pavillard 1913, *Diplopeltopsis minor* (Paulsen 1907) Pavillard 1913, *Peridiniopsis minor* (Paulsen) Starmach 1974) [Elbrächter (1993)]
- 1169 *Preperidinium perlatum* (Balech 1971) Elbrächter 1993 (= *Diplopeltopsis perlata* Balech 1971, *Zygabikodinium perlatum* (Balech) Elbrächter 1975) [Elbrächter (1993)]
- 1170 *Preperidinium pseudo-oblea* (Elbrächter 1975) Elbrächter 1993 (= *Zygabikodinium pseudo-oblea* Elbrächter) [Elbrächter (1993)]
- 97** *Protopteridinium* Bergh 1881 emend. Balech 1974 (= *Peridinium* Ehrenberg 1830 partim, *Minuscula* Lebour 1925) (264 species)
- 1171 *Protopteridinium abei* (Paulsen 1930) Balech 1974 (= *P. biconicum* Abé 1927, non *P. biconicum* P. Dangeard 1927)
- 1172 *Protopteridinium acanthophorum* (Balech 1962) Balech 1974 (= *P. rhomboidalis* Abé 1981, *P. cerassiformis* Abé 1981)
- 1173 *Protopteridinium achromaticum* (Levander 1902) Balech 1974 (= *P. achromaticum* Levander, related to *Protopteridinium finitimum* Balech 1976)
- 1174 *Protopteridinium acutipes* (P. Dangeard 1927) Balech 1974 (= *P. quadratum* Matzenauer 1933, *P. divergens* f. *acutipes* (P. Dangeard) Schiller 1937)
- 1175 *Protopteridinium acutum* (Fauré-Fremiet 1908) Balech 1974 (= *P. pellucidum* var. *acutum* Fauré-Fremiet)

Tab. 1. – continued

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- 1176 *Protoperidinium adeliense* (Balech 1959) Balech 1974
 1177 *Protoperidinium adense* (Matzenauer 1933) Balech 1974
 1178 *Protoperidinium adulterum* (Balech 1971) Balech 1974
 1179 *Protoperidinium aequatoriale* (Balech 1971) Balech 1974
 1180 *Protoperidinium affine* (Balech 1958) Balech 1974
 1181 *Protoperidinium aliferum* (Gaarder in Parke et Dixon 1968) Balech 1974 (= *P. matzenaueri* Gaarder 1954, non *P. matzenaueri* Böhm 1936)
 1182 *Protoperidinium americanum* (Gran et Braarud 1935) Balech 1974
 1183 *Protoperidinium amplum* (Matzenauer 1933) Balech 1974
 1184 *Protoperidinium ampulla* (Balech 1971) Balech 1974 (= *P. granii* var. *mite* f. *spirale* Gaarder 1954)
 1185 *Protoperidinium anceps* (Meunier 1910) Balech 1974
 1186 *Protoperidinium anguipes* (Balech 1967) Balech 1974
 1187 *Protoperidinium angustum* (P. Dangeard 1932) Balech 1974 (= ? *Protoperidinium wiesneri* (Schiller 1931) Balech 1974)
 1188 *Protoperidinium anomaloplaxum* (Balech 1964) Balech 1974
 1189 *Protoperidinium antarcticum* (Schimper in Karsten 1905) Balech 1974 (non *P. depressum* var. *parallelum* (Broch) Balech 1994) [Balech (1994a)]
 1190 *Protoperidinium anthonyi* (Fauré-Fremiet 1908) Balech 1974
 1191 *Protoperidinium applanatum* (Mangin 1914) Balech 1974 (= *P. obovatum* Wood 1954)
 1192 *Protoperidinium archiovatum* (Balech 1958) Balech 1974
 1193 *Protoperidinium arcticum* (Grøntved et Seidenfaden 1938) Okolodkov 1997 (= *P. ovatum* f. *arctica* Grøntved et Seidenfaden) [Okolodkov (1997)]
 1194 *Protoperidinium areolatum* (Peters 1928) Balech 1974
 1195 *Protoperidinium argentiniense* Balech 1979
 1196 *Protoperidinium asperum* (Wailes 1928) Balech 1974
 1197 *Protoperidinium aspidiotum* (Balech 1964) Balech 1974
 1198 *Protoperidinium asymmetricum* Balech 1974 (= *P. (Sphaeridinium) asymmetricum* (Abé 1927) Abé 1981, non *P. asymmetricum* Karsten 1907)
 1199 *Protoperidinium avellana* (Meunier 1919) Balech 1974 (= *Properidinium avellana* Meunier)
 1200 *Protoperidinium balechii* (Akselman 1972) Balech 1988
 1201 *Protoperidinium belizeanum* Faust 2003 (non *Peridinium belizense* Carty et Wujek 2003, published as »belizensis« ICBN Art. 23.5 and 32.5) [Faust (2003), Carty and Wujek (2003)] (the epithet »belizianum« is orthographically correct, ICBN Art. 60.1)
 1202 *Protoperidinium bellulum* (Balech 1971) Balech 1974
 1203 *Protoperidinium biconicum* (P. Dangeard 1927) Balech 1974 (non *P. biconicum* Abé 1936)
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Tab. 1. – continued

- 1204 *Protopteridinium bidentatum* (Abé 1981) Balech 1994 (= *P. bidentatum* Abé 1981) [Balech (1994a)]
- 1205 *Protopteridinium bipatens* Balech 1973
- 1206 *Protopteridinium bipes* (Paulsen 1904) Balech 1974 (= *Minuscula bipes* (Paulsen) Lebour 1925, *Glenodinium bipes* Paulsen 1904, *Peridinium minusculum* Pavillard 1905, non *Peridinium bipes* Stein 1883)
- 1207 *Protopteridinium bispinum* (Schiller 1937) Balech 1974 (= ? *P. bimucronatum* (Schiller 1937) Balech 1974, non *Protopteridinium sourniai* (F.J.R. Taylor 1976) Balech 1994) [Balech (1994a)]
- 1208 *Protopteridinium bourrellyi* Balech 1999 [Balech (1999)]
- 1209 *Protopteridinium braarudii* (Schiller 1937) Balech 1974
- 1210 *Protopteridinium brevipes* (Paulsen 1908) Balech 1974 (= *P. brevipes* Paulsen, *P. varicans* Paulsen 1911, *P. incurvum* Lindemann 1924)
- 1211 *Protopteridinium brochii* (Kofoid et Swezy 1921) Balech 1974 (= *P. adriaticum* Broch 1920, non *P. adriaticum* Schmarda 1846)
- 1212 *Protopteridinium bulbosum* (Gaarder 1954) Balech 1974
- 1213 *Protopteridinium bulla* (Meunier 1910) Balech 1974
- 1214 *Protopteridinium capdevillei* (Balech 1959) Balech 1974 (= ? *P. pacificum* Kofoid et Michener 1911)
- 1215 *Protopteridinium capurroi* (Balech 1959) Balech 1974 (= ? *P. brachypus* Abé 1981, non *P. brachypus* Schiller 1937)
- 1216 *Protopteridinium carinaeferum* (Gail 1950) Balech 1994 (= *P. arinaeferum* Gail) [Balech (1994a)]
- 1217 *Protopteridinium carum* (Abé 1981) Balech 1994 (= *P. carus* Abé) [Balech (1994a)]
- 1218 *Protopteridinium cassum* (Balech 1971) Balech 1974 (= *Protopteridinium cassum cassum* Balech 1988)
Protopteridinium cassum var. *decens* Balech 1988 (= *Protopteridinium decens* (Balech 1971) Balech 1974)
- 1219 *Protopteridinium castaneiforme* (Mangin 1922) Balech 1974
- 1220 *Protopteridinium cavispinum* (Mangin 1922) Balech 1974
- 1221 *Protopteridinium cepa* (Balech 1971) Balech 1974
- 1222 *Protopteridinium cerasus* (Paulsen 1907) Balech 1973
- 1223 *Protopteridinium charcotii* (Balech 1958) Balech 1974
- 1224 *Protopteridinium claudicans* (Paulsen 1907) Balech 1974
- 1225 *Protopteridinium claudum* Balech 1994 (= *P. asymmetricum* Karsten sensu Böhm 1936, non Karsten 1907) [Balech (1994a)]
- 1226 *Protopteridinium colombonense* (Matzenauer 1933) Balech 1974
- 1227 *Protopteridinium compressum* (Abé 1927) Balech 1974 (= *Congruentidium compressum* Abé 1927, *P. compressum* Abé 1981, non *P. stellatum* Wall et Dale 1968)
- 1228 *Protopteridinium concavum* (Mangin 1926) Balech 1974 (= ? *Protopteridinium granii* (Ostenfeld 1906) Balech 1974, *P. petersii* Balech 1958)

Tab. 1. – continued

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- 1229 *Protoperidinium conicoides* (Paulsen 1905) Balech 1973
 1230 *Protoperidinium conicum* (Gran 1900) Balech 1974 (= *P. divergens* var. *conica* Gran)
 1231 *Protoperidinium consimile* (Abé 1981) Balech 1994 (= *P. consimilis* Abé) [Balech (1994a)]
 1232 *Protoperidinium corniculum* (Kofoid et Michener 1911) F.J.R. Taylor et Balech in Balech 1979
 1233 *Protoperidinium cornutum* (Karsten 1907) Balech 1974
 1234 *Protoperidinium crassipes* (Kofoid 1907) Balech 1974 [see Balech (1988:110) for synonymy with *Protoperidinium curtipes* (Jørgensen 1912) Balech 1974]
 1235 *Protoperidinium crassipyrum* (Balech 1961) Balech 1974 (= *P. crassum* Balech (1959) Balech 1974, non *P. crassum* P. Dangeard 1927)
 1236 *Protoperidinium cristatum* Balech 1979
 1237 *Protoperidinium cruciferum* (Balech 1971) Balech 1973 (= ? *P. parvum* Abé 1981)
 1238 *Protoperidinium curtipes* (Jørgensen 1912) Balech 1974 (= *P. curtipes* Jørgensen 1912, *P. crassipes* Paulsen 1907 partim, non *P. crassipes* Paulsen 1930, nec Schiller 1937)
 1239 *Protoperidinium curtum* (Balech 1958) Balech 1973
 1240 *Protoperidinium curvipes* (Ostenfeld 1906) Balech 1974
 1241 *Protoperidinium cuspidatum* Balech 1979
 1242 *Protoperidinium dakariense* (P. Dangeard 1927) Balech 1974 (= *P. gibbosum* Matzenauer (1933) Balech 1974, *P. parvispinum* Gaarder 1954)
 1243 *Protoperidinium decipiens* (Jørgensen 1899) Parke et Dodge 1976
 1244 *Protoperidinium decollatum* (Balech 1971) Balech 1974
 1245 *Protoperidinium defectum* (Balech in Balech et El-Sayed 1965) Balech 1974
 1246 *Protoperidinium deficiens* (Meunier 1919) Balech 1974
 1247 *Protoperidinium denticulatum* (Gran et Braarud 1935) Balech 1974 (= *P. clavus* Abé 1936)
 1248 *Protoperidinium depressum* (Bailey 1850) Balech 1974 (= *P. parallelum* Broch 1906, non *P. antarcticum* Schimper, *P. marinum* Lindemann 1925, *P. claudicanoides* Graham 1942), *Protoperidinium depressum* subsp. *convexius* (Graham 1941) Balech 1994 [Balech (1994a)]
 1249 *Protoperidinium diabolus* (Cleve 1900) Balech 1974 (= *P. longipes* Karsten 1907)
 1250 *Protoperidinium discoides* (Wailes 1928) Balech 1974
 1251 *Protoperidinium divaricatum* (Meunier 1919) Parke et Dodge 1976 (= *P. gainii* (P. Dangeard 1927) Balech 1974, *P. divaricatum* (Meunier) Balech 1988)
 1252 *Protoperidinium divergens* (Ehrenberg 1841) Balech 1974
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Tab. 1. – continued

- **Protoperidinium dodgei* Okolodkov 1997 [Okolodkov (1997), not included in Okolodkov and Dodge (1997)]
- 1253 *Protoperidinium dolichoporum* Borgese 1987
- 1254 *Protoperidinium elegans* (Cleve 1900) Balech 1974 (= *P. annulatum* Kofoid et Michener 1911, ?*P. elegans* Matzenauer 1933)
- 1255 *Protoperidinium elegantissimum* (Balech 1958) Balech 1974
- 1256 *Protoperidinium ellipticum* Halim 1969
- 1257 *Protoperidinium elongatum* (Meunier 1910) Balech 1974
- 1258 *Protoperidinium exageratum* Balech 1979 (= *P. globulus* var. *quarnerense* f. *spirale* Gaarder 1954)
- 1259 *Protoperidinium excentricum* (Paulsen 1907) Balech 1974 (= *P. excentricum* Paulsen, *Peridinium perrieri* Fauré-Frémient 1909)
- 1260 *Protoperidinium exiguiipes* (Mangin 1930 ex Halim 1968) Dodge 1985
- 1261 *Protoperidinium exiguum* (Cleve 1900) Balech 1974
- 1262 *Protoperidinium exile* Balech 1994 (= *P. gracile* Meunier 1910) [Balech (1994a)]
- **Protoperidinium falk-petersenii* Okolodkov 1999 [Okolodkov (1999)]
- 1263 *Protoperidinium fastum* Balech 1979
- 1264 *Protoperidinium faurei* Balech 1994 (= *P. ovatum* Pouchet var. ? Fauré-Fremiet 1908) [Balech (1994a)]
- 1265 *Protoperidinium fimbriatum* (Meunier 1919) Balech 1974
- 1266 *Protoperidinium finitimum* Balech 1976 [related to *P. achromaticum* (Levander 1902) Balech 1974]
- 1267 *Protoperidinium formosum* (Pavillard 1909) Balech 1974 (= *P. diabolus* var. *formosum* (Pavillard) F.J.R. Taylor 1976)
- 1268 *Protoperidinium furcatum* (Abé 1981) Balech 1994 (= *P. furcatum* Abé) [Balech (1994a)]
- 1269 *Protoperidinium gaarderae* (Balech 1967) Balech 1974
- 1270 *Protoperidinium gibberum* (Abé 1981) Balech 1994 (= *P. gibberum* Abé, non *P. okamurai* Abé 1927, non *P. okamurai* Yoneda et Marukawa in Marukawa 1921) [Balech (1994a)]
- 1271 *Protoperidinium globiferum* (Abé 1981) Balech 1994 (= *P. globifera* Abé) [Balech (1994a)]
- 1272 *Protoperidinium globulus* (Stein 1883) Balech 1974 (= *P. ovatum* (Pouchet) Schütt 1895)
- 1273 *Protoperidinium glyptopterum* Balech 1973
- 1274 *Protoperidinium grahamii* (Sournia 1973) Balech 1994 (= *P. grahamii* Sournia, *P. truncatum* Graham 1942, non *P. truncatum* Zacharias 1903) [Balech (1994a)]
- 1275 *Protoperidinium grande* (Kofoid 1907) Balech 1974 (= *P. elegans* Matzenauer 1933, non *P. grande* P. Dangeard 1927)
- 1276 *Protoperidinium granii* (Ostenfeld 1906) Balech 1974 (non *Peridinium gracile* Gran et Braarud 1935) [Balech (1994a)]
- 1277 *Protoperidinium grenlandicum* (Woloszyńska 1916) Balech 1974

Tab. 1. – continued

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- 1278 *Protopteridinium hamatum* Balech 1979
 1279 *Protopteridinium helix* (Balech 1962) Balech 1974
 1280 *Protopteridinium hemisphaericum* (Abé 1936) Balech 1988
 1281 *Protopteridinium heteracanthum* (P. Dangeard 1927) Balech 1974 (non *Protopteridinium norpacense* Balech 1974)
 1282 *Protopteridinium heteroconicum* (Matzenauer 1933) Balech 1974
 1283 *Protopteridinium heterospinum* (Gaarder 1954) Balech 1974
 1284 *Protopteridinium hidemitii* (Paulsen 1949) Balech 1994 (= *P. rotundatum* Abé 1936, non *P. rotundatum* Karsten 1907) [Balech (1994a)]
 1285 *Protopteridinium hirobis* (Abé 1927) Balech 1974
 1286 *Protopteridinium huberi* (Schiller 1929) Balech 1974
 1287 *Protopteridinium humile* (Schiller 1937) Balech 1974 (= *P. perbreve* Balech et Soares 1967)
 1288 *Protopteridinium hyalinum* (Meunier 1910) Balech 1974
 1289 *Protopteridinium illepidum* Balech 1994 (= *P. pellucidum* var. *crassum* Fauré-Fremiet 1908) [Balech (1994a)]
 1290 *Protopteridinium incertum* (Balech 1958) Balech 1973
 1291 *Protopteridinium inclinatum* (Balech 1964) Balech 1974 (= *P. sphaericum* Okamura 1912)
 1292 *Protopteridinium incognitum* (Balech 1959) Balech 1974
 1293 *Protopteridinium inflatiforme* (Böhm 1936) Balech 1974
 1294 *Protopteridinium inflatum* (Okamura 1912) Balech 1974 (= *P. inflatum* Okamura, *P. brochii* (Okamura) f. *inflatum* Schiller 1937, *P. crassum* P. Dangeard 1927)
 1295 *Protopteridinium islandicum* (Paulsen 1904) Balech 1973
 1296 *Protopteridinium isthmus* (Abé 1981) Balech 1994
 1297 *Protopteridinium joergensenii* (Balech 1971) Balech 1974 (= *P. pedunculatum* Jørgensen 1905, non *P. pedunculatum* Schütt 1895)
 1298 *Protopteridinium joubinii* (P. Dangeard 1927) Balech 1974
 **Protopteridinium knipowitschii* (Usachev 1927) Balech 1974
 1299 *Protopteridinium lacinosum* Balech 1994 (= *P. petersii* Abé 1981, non *P. petersii* Balech 1958) [Balech (1994a)]
 1300 *Protopteridinium laticeps* (Grøntved et Seidenfaden 1938) Balech 1974 (= *P. laticeps* Grøntved et Seidenfaden) [= ? *P. consimile* (Abé 1981) Balech 1994]
 1301 *Protopteridinium latidorsale* (P. Dangeard 1927) Balech 1974 (= *P. oblongum* var. *latidorsale* P. Dangeard)
 1302 *Protopteridinium latipyrum* (Balech 1959) Balech 1974
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Tab. 1. – continued

- 1303 *Protoperidinium latispinum* (Mangin 1926) Balech 1974 (= *P. africanoides* (P. Dangeard 1927) Balech 1974, *P. angusticollum* Abé 1981, ?*P. sylvanae* P. Dangeard 1927)
- 1304 *Protoperidinium latissimum* (Kofoid 1907) Balech 1974 (= *P. pentagonoides* Balech 1949, *P. pentagonum* var. *latissimum* (Kofoid) Schiller 1937, *Protoperidinium exiquipes* (Mangin 1930) Dodge 1985)
- 1305 *Protoperidinium latistriatum* (Balech 1958) Balech 1974
- 1306 *Protoperidinium leonis* (Pavillard 1916) Balech 1974 (= *P. conicum* Meunier 1919)
- 1307 *Protoperidinium ligusticum* (Rampi 1951) Balech 1974
- 1308 *Protoperidinium lipopodium* (Balech 1964) Balech 1974 (= *P. subcurvipes* Balech 1959, non *P. subcurvipes* Lebour 1923)
- 1309 *Protoperidinium longipes* Balech 1974 (= *Protoperidinium longipes* (Karsten 1907) Balech 1974, *P. diabolus* var. *longipes* (Karsten) F.J.R. Taylor 1976)
- 1310 *Protoperidinium longispinum* (Kofoid 1907) Balech 1974 (= *P. michaelis* Ehrenberg 1840 partim, non *P. longispinum* Mangin 1930)
- 1311 *Protoperidinium macrapicatum* (Balech 1971) Balech 1973 (= ?*P. gracile* Gran et Braarud 1935)
- 1312 *Protoperidinium magnum* (Schiller 1929) Balech 1974 (= ?*P. crassipes* Kofoid 1907)
- 1313 *Protoperidinium majus* (P. Dangeard 1927) Balech 1974 (= *P. ovatum* var. *majus* P. Dangeard)
- 1314 *Protoperidinium manginii* (Balech 1971) Balech 1974 (= *P. pyriforme* Peters 1928)
- 1315 *Protoperidinium maranense* Tolomio 1981
- 1316 *Protoperidinium mariebourae* (Paulsen 1931) Balech 1974 (= *P. obtusum* (Karsten 1906) Lebour 1925, non *P. obtusum* (Karsten) Fauré-Fremiet 1980)
- 1317 *Protoperidinium marukawai* (Abé 1936) Balech 1974
- 1318 *Protoperidinium mastophorum* (Balech 1971) Balech 1974 (= *P. granii* Matzenauer 1933, non *P. granii* Ostefeld 1906)
- 1319 *Protoperidinium mediocre* (Balech 1958) Balech 1974
- 1320 *Protoperidinium mediterraneum* (Kofoid 1909) Balech 1974 (= *P. longicollum* Pavillard 1916, *P. steinii* subsp. *mediterraneum* Kofoid)
- 1321 *Protoperidinium melo* (Balech 1971) Balech 1974
- 1322 *Protoperidinium mendiolae* Balech 1978
- 1323 *Protoperidinium metanatum* (Balech in Balech et El-Sayed 1965) Balech 1974
 **Protoperidinium minus* (Mangin 1926) Balech 1974
 **Protoperidinium minutissimum* (Mangin 1926) Balech 1974
- 1324 *Protoperidinium minutum* (Kofoid 1907) Loeblich III 1970 [see *P. monospinum* (Paulsen 1907) Zonneveld et Dale 1994] [Zonneveld and Dale (1994)]

Tab. 1. – continued

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- 1325 *Protoperidinium mite* (Pavillard 1916) Balech 1974 (= *P. granii* Ostefeld f. *mite* (Pavillard) Schiller 1937)
- 1326 *Protoperidinium monacanthum* (Broch 1910) Balech 1973 (= *P. complanatum* Meunier 1910)
- 1327 *Protoperidinium monospinum* (Paulsen 1907) Zonneveld *et* Dale 1994 (= *P. constrictum* (Abé 1936) Balech 1974, *P. constricta* Abé) [the synonymy with *Protoperidinium minutum* is debatable] [Zonneveld and Dale (1994)]
- 1328 *Protoperidinium monovelum* (Abé 1936) Balech 1974
- 1329 *Protoperidinium multipunctatum* (Fauré-Fremiet 1908) Balech 1994 (= *P. multipunctatum* Fauré-Fremiet) [Balech (1994a)]
- 1330 *Protoperidinium munobis* (Abé 1927) Balech 1974
- 1331 *Protoperidinium murrayi* (Kofoid 1907) Hernández-Becerril 1991 (= *P. murrayi* Kofoid 1907, *P. murrayi* var. *occidentalis* Pavillard 1930, *P. murrayi* var. *orientalis* Matzenauer) [synonym of *P. oceanicum* (Vanhöffen 1897) Balech 1974 sec Balech (1988)]
- 1332 *Protoperidinium mutsuense* (Abé 1936) Balech 1974 (= *P. mutsuensis* Abé)
- 1333 *Protoperidinium nanum* (Balech 1962) Balech 1974
- 1334 *Protoperidinium norpacense* (Balech 1962) Balech 1974 (= *P. heteracanthum* P. Dangeard *sec* Matzenauer 1933, non *P. heteracanthum* P. Dangeard 1927)
- 1335 *Protoperidinium novascotiense* (Gran *et* Braarud 1935) Balech 1974 (= ?*Scrippsiella hangoei* (Schiller 1935) J. Larsen 1995) [Larsen *et al.* (1995)]
- 1336 *Protoperidinium nudum* (Meunier 1910) Balech 1974
**Protoperidinium nux* (Schiller 1937) Balech 1974 (= *P. levanderi* Abé 1927, *P. aequilimbus* Abé 1981)
- 1337 *Protoperidinium obesum* (Matzenauer 1933) Balech 1974
- 1338 *Protoperidinium oblongum* (Aurivillius 1898) Parke *et* Dodge 1976 (= *P. divergens* var. *oblongum* Aurivillius)
- 1339 *Protoperidinium obtusipes* (Mangin 1930) Balech 1974
- 1340 *Protoperidinium obtusum* (Karsten 1906) Parke *et* Dodge 1976 (= *Protoperidinium obtusum* (Karsten) Balech 1988, *P. divergens* Ehrenberg var. *obtusum* Karsten, *P. okamurai* Marukawa 1921, non *P. okamurai* Abé 1927, *P. obtusum* Schiller 1937, non *P. obtusum* Fauré-Fremiet 1908)
- 1341 *Protoperidinium oceanicum* (Vanhöffen 1897) Balech 1974 (= *P. oceanicum* Vanhöffen) [also *Peridinium murrayi* Kofoid 1907 *sec* Balech (1988)]
- 1342 *Protoperidinium okamurai* Yoneda *et* Marukawa *in* Marukawa 1921 (non *Protoperidinium gibberum* (Abé 1981) Balech 1994) [Balech (1994a)]
- 1343 *Protoperidinium orientale* (Matzenauer 1933) Balech 1974
- 1344 *Protoperidinium ovatoides* (Meunier 1910) Balech 1974
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Tab. 1. – continued

- 1345 *Protopteridinium ovatum* Pouchet 1883 (= *P. lenticulatum* Fauré-Fremiet 1908), *Protopteridinium ovatum* ssp. *asymmetricum* (P. Dangeard 1927) Balech 1988)
- 1346 *Protopteridinium oviforme* (P. Dangeard 1927) Balech 1974
- 1347 *Protopteridinium ovum* (Schiller 1911) Balech 1974 (= *Protopteridinium nipponicum* (Abé 1927) Balech 1974, *P. ovum* Schiller 1911, ?*P. ellipsoides* P. Dangeard 1927, *P. ellipsoideum* P. Dangeard 1927, non *P. ovum* Mangin 1912)
- 1348 *Protopteridinium pacificum* (Kofoid et Michener 1911) F.J.R. Taylor et Balech ex Balech 1988 (= *P. capdevillei* Balech 1959) Balech 1974)
- 1349 *Protopteridinium pallidum* (Ostenfeld 1899) Balech 1973
- 1350 *Protopteridinium paradoxum* (F.J.R. Taylor 1976) Balech 1994 (= *P. paradoxum* F.J.R. Taylor) [Balech (1994a)]
- 1351 *Protopteridinium parapyriforme* (Hermosilla 1968) Balech 1974
- 1352 *Protopteridinium parcum* (Balech 1971) Balech 1974
- 1353 *Protopteridinium parthenopes* Zingone et Montresor 1988
- 1354 *Protopteridinium parvicollum* (Balech 1958) Balech 1973
- 1355 *Protopteridinium parvispinum* (Gaarder 1954) Balech 1974
- 1356 *Protopteridinium parviventor* Balech 1978 (= ?*P. gracile* Gran et Braarud 1935)
- 1357 *Protopteridinium paulsenii* (Pavillard 1909) Balech 1974 (non *P. paulsenii* Mangin 1911, non *P. paulsenii* Abé 1981 = *P. subinermis* Paulsen 1931)
- 1358 *Protopteridinium pedunculatum* (Schütt 1895) Balech 1974
- 1359 *Protopteridinium pellucidum* Bergh 1881 ex Loeblich Jr. et Loeblich III 1966 (= *P. pellucidum* (Bergh) Schütt 1895, non Pouchet 1883, nec Vanhöffen 1897), *P. pellucidum* ssp. *asteriferum* Balech 1994 (= *P. pellucidum* ssp. *stellatum* Balech 1978, non *Peridinium stellatum* Wall 1968) [Balech (1994a)]
- 1360 *Protopteridinium penitum* (Balech 1971) Balech 1974 (= *P. ovatum* Peters 1928)
- 1361 *Protopteridinium pentagonum* (Gran 1902) Balech 1974 (= *P. divergens* var. *sinuosum* Lemmermann 1899, *P. sinuosum* Lemmermann 1905, *P. parapentagonum* Wang 1936, *P. expansum* Abé 1981, non *P. pentagonum* P. Dangeard 1926)
- 1362 *Protopteridinium perplexum* (Balech 1971) Balech 1974
- 1363 *Protopteridinium perradiatum* Balech 1978
- 1364 *Protopteridinium persicum* Schiller 1937 (= *P. schilleri* Böhm 1931, *P. matzenaueri* Böhm 1936, *P. margalefii* E.S. Silva 1965)
- 1365 *Protopteridinium peruvianum* (Balech 1961) Balech 1974
- 1366 *Protopteridinium pietschmannii* (Böhm 1931) Balech 1974
- 1367 *Protopteridinium planiceps* (Abé 1981) Balech 1988 (= *P. thorianum* var. *planiceps* Abé)
- 1368 *Protopteridinium platifrons* Balech 1999 [Balech (1999)]

Tab. 1. – continued

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- 1369 *Protoperidinium porosum* Balech 1978
 1370 *Protoperidinium pouchetii* (Kofoid *et* Michener 1911) F.J.R. Taylor *et* Balech *ex* Balech 1988 (= *P. brintonii* Balech 1962)
 1371 *Protoperidinium pseudoantarcticum* (Balech 1958) Balech 1974
 1372 *Protoperidinium pseudogranii* (Peters 1930) Balech 1994 (= *P. pseudogranii* Peters) [Balech (1994a)]
 1373 *Protoperidinium pseudopallidum* (Peters 1930) Balech 1994 (= *P. pseudopallidum* Peters) [Balech (1994a)]
 1374 *Protoperidinium punctulatum* (Paulsen 1908) Balech 1974 (non *Peridinium punctulatum* Paulsen 1931 = *P. multistriatum* Kofoid 1907)
 1375 *Protoperidinium pyriforme* (Paulsen 1907) Balech 1974 (= *P. steinii* var. *pyriformis* Paulsen 1905,
P. pyriforme spp. *pyriforme* (Paulsen) Balech 1988) *Protoperidinium pyriforme* ssp. *breve* (Paulsen 1907) Balech 1988
 (= *P. breve* (Paulsen 1907) Balech)
 1376 *Protoperidinium pyrum* (Balech 1959) Balech 1974
 1377 *Protoperidinium quadratum* (Matzenauer 1933) Balech 1974
 1378 *Protoperidinium quarnerense* (Schröder 1900) Balech 1974 (= *P. globulus* var. *quarnerense* Schröder)
 1379 *Protoperidinium radius* (Balech 1971) Balech 1976 (= *Peridinium concavum* subsp. *radius* Balech)
 1380 *Protoperidinium rampii* (Balech 1959) Balech 1974
 1381 *Protoperidinium raphanus* (Balech 1958) Balech 1974
 1382 *Protoperidinium rectius* (Graham 1942) Balech 1994 (= *P. depressum* var. *rectius* Graham) [Balech (1994a)]
 1383 *Protoperidinium rectum* (Kofoid 1907) Balech 1974
 1384 *Protoperidinium retiferum* (Matzenauer 1933) Balech 1978
 1385 *Protoperidinium rhombiforme* (Abé 1981) Balech 1994 (= *P. rhombiformis* Abé) [Balech (1994a)]
 1386 *Protoperidinium robustum* (Meunier 1910) Hernández-Becerril 1991
 1387 *Protoperidinium rosaceum* (Balech 1958) Balech 1974
 1388 *Protoperidinium roscoffiense* (Balech 1962) Balech 1974
 1389 *Protoperidinium roseum* (Paulsen 1904) Balech 1974
 1390 *Protoperidinium saltans* (Meunier 1910) Balech 1973 (= *P. valgus* Abé 1981)
 1391 *Protoperidinium schilleri* (Paulsen 1930) Balech 1974 (= *P. pallidum* var. *schilleri* (Paulsen) Schiller 1937, non *P. schilleri* Böhm 1931)
 **Protoperidinium schuettii* Halim 1969
 1392 *Protoperidinium simulum* (Paulsen 1931) Balech 1931
 1393 *Protoperidinium sinaicum* (Matzenauer 1933) Balech 1974
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Tab. 1. – continued

- 1394 *Protoperidinium solidicorne* (Mangin 1922) Balech 1974 (= *Protoperidinium spiniferum* (Schiller 1937) Balech 1974, *P. spinosum* Schiller 1937)
- 1395 *Protoperidinium solitarium* (Abé 1936) Balech 1974
- 1396 *Protoperidinium somma* (Matzenauer 1933) Balech 1974
- 1397 *Protoperidinium sourniai* (F.J.R. Taylor 1976) Balech 1994 (non *P. bimucronatum* (Schiller 1937) Balech 1974, *P. bispinum* Schiller 1937)[Balech (1994a)]
- 1398 *Protoperidinium sphaericum* (Murray et Whitting 1899) Balech 1974 (non *P. sphaericum* Okamura 1912, *P. sphaericum* Meunier)
- 1399 *Protoperidinium sphaeroides* (P. Dangeard 1927) Balech 1974 (= ? *Protoperidinium globulus* (Stein 1883) Balech 1974)
- 1400 *Protoperidinium sphaeroideum* (Mangin 1922) Balech 1974 (= ? *P. breve* Paulsen 1907) [Sournia (1978) considered *P. sphaeroides* P. Dangeard and *P. sphaeroideum* Mangin as orthographical variants]
- 1401 *Protoperidinium spirale* (Gaarder 1954) Balech 1974 (= *P. granii* f. *spirale* Gaarder)
- 1402 *Protoperidinium spitzbergense* (Broch 1910) Balech 1994 (= *P. spitzbergense* Broch, non *P. globulus* sensu Schiller 1937) [Balech (1994a)]
- 1403 *Protoperidinium steidingerae* Balech 1979 (= *P. oblongum* (Aurivillus) sec. Steidinger et Williams 1970, non *P. oblongum* (Aurivillus) Cleve)
- 1404 *Protoperidinium steinii* (Jørgensen 1899) Balech 1974 (= *P. michaelis* Stein 1883)
- 1405 *Protoperidinium stellatum* (Wall 1968) Balech 1994 (= *P. stellatum* (Wall in Wall et Dale 1968, non *Peridinium compressum* Abé 1981) [Balech (1994a)]
- 1406 *Protoperidinium subcrassipes* Balech 1988 (= ? *P. asymmetricum* Karsten 1907)
- 1407 *Protoperidinium subcurvipes* (Lebour 1923) Balech 1974 (non *P. subcurvipes* Balech 1959 = *Protoperidinium lipopodium* (Balech 1959) Balech 1974)
- 1408 *Protoperidinium subinerme* (Paulsen 1904) Loeblich III 1970
- 1409 *Protoperidinium subpyriforme* (P. Dangeard 1927) Balech 1974
- 1410 *Protoperidinium subsphaericum* (Balech 1959) Balech 1974
- 1411 *Protoperidinium symmetricum* (Halim 1968) Balech 1974 (non *P. symmetricum* Gaarder 1954)
- 1412 *Protoperidinium taeningii* (Rampi 1950) Balech 1974
- 1413 *Protoperidinium tatihouense* (Fauré-Fremiet 1908) Balech 1994 (= *P. minutum* var. *tatihouensis* Fauré-Fremiet 1908) [Balech (1994a)]
- 1414 *Protoperidinium tenuissimum* (Kofoid 1907) Balech 1974 (= *P. crassiformis* Abé 1981)
- 1415 *Protoperidinium thorianum* (Paulsen 1905) Balech 1973 (= *P. thorianum* Paulsen, *Properidinium thorianum* Meunier 1919)
- 1416 *Protoperidinium thulesense* (Balech 1958) Balech 1973 (= *P. conicum* f. *islandica* Braarud 1935, *P. sympholis* Hermosilla et Balech 1969)
- 1417 *Protoperidinium tohrui* Balech 1994 (= *P. paulsenii* Abé 1981) [Balech (1994a)]
- **Protoperidinium tregouboffii* (Halim 1955) Balech 1974 (= ? *P. brachypus* Schiller 1937, non *P. brachypus* Abé 1981)

Tab. 1. – continued

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- 1418 *Protoperidinium tristylum* (Stein 1883) Balech 1974
 1419 *Protoperidinium truncum* (Abé 1936) Balech 1974
 1420 *Protoperidinium tuba* (Schiller 1937) Balech 1974
 1421 *Protoperidinium tumidum* (Okamura 1907) Balech 1988 (= *P. (divergens) tessellatum* Karsten) [see Balech 1988: 191]
 1422 *Protoperidinium turbinatum* (Mangin 1926) Balech 1974
 1423 *Protoperidinium turgidum* (Meunier 1910) Balech 1974
 1424 *Protoperidinium unipes* (Balech 1962) Balech 1974
 1425 *Protoperidinium variegatum* (Peters 1928) Balech 1974
 1426 *Protoperidinium ventrale* (Abé 1936) Balech 1974 (= ? *P. ventricum* Abé 1927)
 1427 *Protoperidinium ventricum* (Abé 1927) Balech 1974 [strongly resembles *P. platifrons*]
 1428 *Protoperidinium venustum* (Matzenauer 1933) Balech 1974 (= *P. claudicans* sec Abé 1981)
 1429 *Protoperidinium verrucosum* (Meunier 1910) Balech 1974
 1430 *Protoperidinium volsella* (Margalef 1968) Balech 1974
 1431 *Protoperidinium vulgare* Balech 1978 (= ? *P. aliferum* Gaarder in Parke et Dixon 1968)
 1432 *Protoperidinium wiesneri* ssp. *wiesneri* (Schiller 1911) Balech 1988 (= *P. wiesneri* (Schiller) Balech 1974,
P. angustum (P. Dangeard 1927) Balech 1974, *Protoperidinium wiesneri* ssp. *patagonicum* Balech 1979
 (= *P. patagonicum* (Balech 1959) Balech 1974)
 1433 *Protoperidinium woloszynskae* (Conrad 1940) Parke et Dodge 1976
 **Protoperidinium yonedai* (Abé 1981) Balech 1994 [= ? *P. alispinum* Mangin 1926] [Balech (1994a)]
 1434 *Protoperidinium yserense* (Meunier 1919) Balech 1974

Podolampadaceae Lindemann 1928

- 98** *Blepharocysta* Ehrenberg 1873
 1435 *Blepharocysta denticulata* Nie 1939
 1436 *Blepharocysta hermosillai* Carbonell-Moore 1992
 1437 *Blepharocysta okamurai* Abé 1966 (= ? *Blepharocysta splendor-maris* (Ehrenberg 1860) Ehrenberg 1873)
 1438 *Blepharocysta paulsenii* Schiller 1937
 1439 *Blepharocysta splendor-maris* (Ehrenberg 1860) Ehrenberg 1873 (= ? *Blepharocysta okamurai* Abé 1966)
99 *Gaarderia* Carbonell-Moore 1994 [genus pre-occupied by the extant coccolithophorid *Gaarderia* (Lecal 1966) Kleijne 1993]
 [Carbonell-Moore (1994)]
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Tab. 1. – continued

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- 1440 *Gaarderia angusta* Carbonell-Moore 1994 [Carbonell-Moore (1994)]
- 1441 *Gaarderia armata* Carbonell-Moore 1994 [Carbonell-Moore (1994)]
- 1442 *Gaarderia compressa* Carbonell-Moore 1994 [Carbonell-Moore (1994)]
- 1443 *Gaarderia lata* Carbonell-Moore 1994 [Carbonell-Moore (1994)]
- 100** *Heterobractum* Carbonell-Moore 1994 [Carbonell-Moore (1994)]
- 1444 *Heterobractum striatum* Carbonell-Moore 1994 [Carbonell-Moore (1994)]
- 101** *Lessardia* Saldarriaga et F.J.R. Taylor 2003 [Saldarriaga et al. (2003)] [scarce morphological similarities with Podolampadaceae]
- 1445 *Lessardia elongata* Saldarriaga et F.J.R. Taylor 2003 [Saldarriaga et al. (2003)]
- 102** *Lissodinium* Matzenauer 1933 emend. Carbonell-Moore 1991 (18 species)
- 1446 *Lissodinium australe* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
- 1447 *Lissodinium balechii* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
- 1448 *Lissodinium corrugatum* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
- 1449 *Lissodinium fryxelliae* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
- 1450 *Lissodinium heteracanthum* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
- 1451 *Lissodinium heteroporum* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
- 1452 *Lissodinium homacanthum* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
- 1453 *Lissodinium longisulcus* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
- 1454 *Lissodinium magnum* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
- 1455 *Lissodinium matzenaueri* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
- 1456 *Lissodinium orcadense* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
- 1457 *Lissodinium ovatum* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
- 1458 *Lissodinium parvum* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
- 1459 *Lissodinium schilleri* Matzenauer 1933 (= *Blepharocysta matzenaueri* f. *gibba* Gaarder 1954, *B. matzenaueri* (Matzenauer) Gaarder, *B. compressa* Gaarder 1954)
- 1460 *Lissodinium steidingerae* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
- 1461 *Lissodinium taylorii* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
- 1462 *Lissodinium thompsonii* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
- 1463 *Lissodinium zondervanii* Carbonell-Moore 1993 [Carbonell-Moore (1993)]
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Tab. 1. – continued

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- 103 *Mysticella*** Carbonell-Moore 1994 [Carbonell-Moore (1994)]
 1464 *Mysticella spinosa* Carbonell-Moore 1994 [Carbonell-Moore (1994)]
 1465 *Mysticella striata* (Schütt 1895) Carbonell-Moore 1994 (= *Blepharocysta striata* Schütt) [Carbonell-Moore (1994)]
- 104 *Podolampas*** Stein 1883 (7 species)
 1466 *Podolampas antarctica* Balech in Balech *et* El-Sayed 1965
 1467 *Podolampas bipes* Stein 1883
 1468 *Podolampas curvata* Schiller 1937
 1469 *Podolampas elegans* Schütt 1895
 1470 *Podolampas palmipes* Stein 1883
 1471 *Podolampas reticulata* Kofoid 1907 (= *P. bipes* var. *reticulata* (Kofoid) F.J.R. Taylor 1976)
 1472 *Podolampas spinifera* Okamura 1912
- 105 *Roscoffia*** Balech 1956
 1473 *Roscoffia capitata* Balech 1956
 1474 *Roscoffia minor* Horiguchi *et* Kubo 1997 [Horiguchi and Kubo (1997)]
- Pyrophacaceae Lindemann 1928
- 106 *Fragilidium*** Balech *ex* Loeblich III 1965 (= *Helgolandicum* Stosch 1969, *Goniodoma* Stein 1883 partim)
 1475 *Fragilidium fissile* Balech 1990
 1476 *Fragilidium heterolobum* Balech 1959 *ex* Loeblich III 1965
 1477 *Fragilidium lacustre* (Lindemann 1924) Balech 1988 (= *Goniodoma lacustris* Lindemann)
 1478 *Fragilidium mexicanum* Balech 1988
 1479 *Fragilidium subglobosum* (Stosch 1969) Loeblich III 1980 (= *Helgolandicum subglobosum* Stosch)
- 107 *Pyrophacus*** Stein 1883
 1480 *Pyrophacus horologium* Stein 1883 emend. Wall *et* Dale 1971
 1481 *Pyrophacus steinii* (Schiller 1935) Wall *et* Dale 1971 (= *P. horologicum* var. *steinii* Schiller 1935, *P. vancampoae* (Rossignol 1962) Wall *et* Dale 1971)
- Peridinales *incertae sedis*
- 108 *Adenoides*** Balech 1956
 1482 *Adenoides eludens* (Herdman 1922) Balech 1956 (= *Amphidinium eludens* Herdman)
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Tab. 1. – continued

1483 *Adenoides kofoidii* (Herdman 1922) Dodge 1982 (= *Amphidinium kofoidii* Herdman, non *Amphidinium kofoidii* var. *petasatum* Herdman 1924)

109 *Herdmania* Dodge 1981 [preoccupied]

1484 *Herdmania litoralis* Dodge 1981 emend. Hoppenrath 2000 [= *Gymnodinium agile* Herdman 1922, non *G. agile* Kofoid *et* Swezy 1921][Hoppenrath (2000d)]

**Microceratium* Sournia 1972

**Microceratium orstomii* Sournia 1972

110 *Spiraulax* Kofoid 1911 emend. Carbonell-Moore 1996 (= *Gonyaulax* Diesing 1866 partim) [Carbonell-Moore (1996b)]

1485 *Spiraulax jolliffei* (Murray *et* Whitting 1899) Kofoid 1911 (= *Gonyaulax jolliffei* Murray *et* Whitting, *Spiraulax kofoidii* Graham 1942, *Spiraulaxina kofoidii* (Graham) Loeblich III 1970)

1486 *Spiraulax kofoidii* Graham 1942

Prorocentrales Lemmermann 1910

*Haplodiniaceae Lindemann 1928

**Haplodinium* Klebs 1912 [related to *Prorocentrum* according to McLachlan *et al.* (1997)]

**Haplodinium antjoliense* Klebs 1912

**Haplodinium indicum* Subrahmanyam 1966

**Haplodinium iyengaricum* Subrahmanyam 1966

**Haplodinium jonesianum* Subrahmanyam 1966

Prorocentraceae Stein 1883

111 *Mesoporos* Lillick 1937 (= *Porella* Schiller 1928)

**Mesoporos parthasarathicus* Subrahmanyam 1966

1487 *Mesoporos perforatus* (Gran 1915) Lillick 1937 (= *Porella adriatica* Schiller 1928, *P. asymmetrica* Schiller 1933, *P. bisimpresa* Schiller 1928, *P. globulus* Schiller 1928, *Mesoporos globulus* (Schiller) Lillick, *Porothea perforata* (Gran) P.C. Silva 1960)

112 *Plagiodinium* Faust *et* Balech 1993

1488 *Plagiodinium belizeanum* Faust *et* Balech 1993 [Faust and Balech (1993)] (the epithet »belizianum« is orthographically correct, ICBN Art. 60.1)

113 *Prorocentrum* Ehrenberg 1834 (= *Exuviella* Cienkowski 1881) (56 species)

1489 *Prorocentrum aporum* (Schiller 1928) Dodge 1975 (= *P. antarcticum* (Hada 1970) Balech 1976, *E. granii* Gaarder 1938)

1490 *Prorocentrum arabianum* Morton *et* Faust 2002 [Morton *et al.* (2002)] (the epithet »arabicum« is orthographically correct, ICBN Art. 60.1)

1491 *Prorocentrum arcuatum* Issel 1928

1492 *Prorocentrum arenarium* Faust 1994 [Faust *et al.* (1994)]

Tab. 1. – continued

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- 1493 *Prorocentrum balticum* (Lohmann 1908) Loeblich III 1970 (= *P. pomoideum* Bursa 1959, ?*E. aequatorialis* Hasle 1960, ?*P. ponticus* Krachmalny *et* Terenko 2002)
- 1494 *Prorocentrum belizeanum* Faust 1993 [Faust (1993a)] (the epithet »belizeanum« is orthographically correct, ICBN Art. 60.1)
- 1495 *Prorocentrum borbonicum* Ten-Hage, Turquet, Quod, Puiseux-Dao *et* Couté 2000 [Ten-Hage *et al.* (2000b)]
- 1496 *Prorocentrum caribbaeum* Faust 1993 [Faust (1993a)] (the epithet »caribbaeum« is orthographically correct, ICBN Art. 60.1)
- 1497 *Prorocentrum cassubicum* (Woloszyńska 1928) Dodge 1975
- 1498 *Prorocentrum clipeus* Hoppenrath 2000 [Hoppenrath (2000a)] (?»clipeum«)
- 1499 *Prorocentrum compressum* (Bailey 1850) Abé *ex* Dodge 1975 (= *E. oblonga* Schiller 1928, *E. elongata* Rampi 1951, *E. compressa* Ostenfeld 1899, *P. bidens* Schiller 1928, non *P. lenticulatum* (Matzenauer) F.J.R. Taylor 1976, nec *P. lebourae* Schiller 1928)
- 1500 *Prorocentrum concavum* Fukuyo 1981
- 1501 *Prorocentrum cordatum* (Ostenfeld 1901) Dodge 1975 [= *E. cordata* Ostenfeld, *E. pyriformis* Schiller 1928, ?*P. minimum* (Pavillard 1916) Schiller 1931]
- 1502 *Prorocentrum dactylus* (Stein 1883) Dodge 1975 (= *E. dactylus* (Stein) Schütt 1895, *Dinopyxis dactylus* Stein)
- 1503 *Prorocentrum dentatum* Stein 1883 (= ?*P. obtusidens* Schiller 1928, ?*P. monacense* Kufferath 1957, non *P. veloi* Osorio-Tafall 1942, non *P. shikokuense* Hada 1975)
- 1504 *Prorocentrum elegans* Faust 1993 [Faust (1993a)]
- 1505 *Prorocentrum emarginatum* Fukuyo 1981
- 1506 *Prorocentrum faustiae* Morton 1998 [Morton (1998)]
- 1507 *Prorocentrum foraminosum* Faust 1993 [Faust (1993b)]
- 1508 *Prorocentrum formosum* Faust 1993 [Faust (1993b)]
- 1509 *Prorocentrum gracile* Schütt 1895 (= *P. diamantinae* Wood 1963, non *P. sigmoides* Böhm 1933)
- 1510 *Prorocentrum hoffmannianum* Faust 1990 (= *E. hoffmannianum* (Faust) McLachlan *et* Boalch 1997) [McLachlan *et al.* (1997), Morton (1998)]
- 1511 *Prorocentrum lebourae* Schiller 1928 (non *P. compressum* (Bailey 1850) Abé *ex* Dodge 1975)
- 1512 *Prorocentrum lenticulatum* (Matzenauer 1933) F.J.R. Taylor 1976 (= *E. lenticulata* Matzenauer, non *P. compressum* (Bailey 1850) Abé *ex* Dodge 1975)
- 1513 *Prorocentrum lima* (Ehrenberg 1860) Dodge 1975 (= *Cryptomonas lima* Ehrenberg 1860, *E. marina* Cienkowski 1881, *E. caspica* Kiselev 1940, *E. lima* (Ehrenberg) Bütschli 1885), *Dinopyxis laevis* Stein 1883, *E. laevis* (Stein) Schröder 1900, *E. chathamensis* Lemmermann 1907, *E. cincta* Schiller 1918, *E. ostensfeldii* Schiller 1931, *Prorocentrum marinum* Dodge *et* Bibby 1973)
- 1514 *Prorocentrum maculosum* Faust 1993 (= *E. maculosum* (Faust) McLachlan *et* Boalch 1997) [Faust (1993b)]
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Tab. 1. – continued

- **Prorocentrum magnum* (Gaarder 1954) Dodge 1975
- 1515 *Prorocentrum maximum* (Gourret 1883) Schiller 1937 (= *P. brochii* Schiller 1918, non *P. mexicanum* Osorio-Tafall 1942)
- 1516 *Prorocentrum mexicanum* Osorio-Tafall 1942 (non *P. rhathymum* Loeblich III, Sherley et R.J. Schmidt 1979)
- 1517 *Prorocentrum micans* Ehrenberg 1834 (= *P. schilleri* Böhm in Schiller 1933, *P. gibbosum* (Schiller 1929) Schiller 1933, *P. levantoides* Bursa 1959, *P. pacificum* Wood 1963)
- 1518 *Prorocentrum minimum* (Pavillard 1916) Schiller 1931 (= *P. mariae-lebourae* (Parke et Ballantine 1957) Loeblich III 1970, *P. triangulatum* Martin 1929, *P. cordiformis* Bursa 1959, ?*P. cordatum* (Ostenfeld) Dodge 1975)
- 1519 *Prorocentrum nanum* Schiller 1918 (non *P. pusillum* (Schiller 1928) Loeblich III 1976) [Puigserver and Zingone (2002)]
- 1520 *Prorocentrum norrisianum* Faust 1997 [Faust (1997)] (For the epithets commemorating persons, substantive epithets »norrisii« are more commonly applied than adjectival epithets, ICBN Art. 60.11)
- 1521 *Prorocentrum nux* Puigserver et Zingone 2002 [Puigserver and Zingone (2002)]
- 1522 *Prorocentrum obtusidens* Schiller 1928 (= ?*P. dentatum* Stein 1883, *P. shikokuense* sensu Adachi 1972)
- 1523 *Prorocentrum obtusum* Ostenfeld 1908
- 1524 *Prorocentrum ovum* (Schiller 1918) Dogde 1975
- 1525 *Prorocentrum panamense* Grzebyk, Sako et Berland 1998 [Grzebyk et al. (1998)] (published as »panamensis«, ICBN Art. 23.5 and 32.5)
- 1526 *Prorocentrum ponticus* Krachmalny et Terenko 2002 (= ?*P. balticum* (Lohmann 1908) Loeblich III 1970) [Krachmalny and Terenko (2002)]
- 1527 *Prorocentrum pusillum* (Schiller 1928) Loeblich III 1976 (= *E. pusilla* Schiller 1928, non *P. nanum* Schiller 1918)
- 1528 *Prorocentrum rhathymum* Loeblich III, Sherley et R.J. Schmidt 1979 (non *P. mexicanum* Osorio-Tafall 1942)
- 1529 *Prorocentrum redfieldii* Bursa 1959 (= ?*P. triestinum* Schiller 1918)
- 1530 *Prorocentrum reticulatum* Faust 1997 [Faust (1997)]
- 1531 *Prorocentrum robustum* Osorio-Tafall 1942 (non *P. scutellum* Schröder 1900)
- 1532 *Prorocentrum rostratum* Stein 1883 (= *P. styliferum* Lohmann 1920, *P. tenue* Lohmann 1920)
- 1533 *Prorocentrum rotundatum* Schiller 1928 (= *P. cornutum* Schiller 1918)
- 1534 *Prorocentrum ruetzlerianum* Faust 1990 (For the epithets commemorating persons, substantive epithets »ruetzleri« are more commonly applied than adjectival epithets, Art. 60.11)
- 1535 *Prorocentrum sabulosum* Faust 1994 [Faust (1994)]
- 1536 *Prorocentrum sculptile* Faust 1994 [Faust (1994)]
- 1537 *Prorocentrum scutellum* Schröder 1900 (= *P. sphaeroideum* Schiller 1928, non *P. robustum* Osorio-Tafall 1942)
- 1538 *Prorocentrum shikokuense* Hada 1975 (= ?*P. donghaiense* Lu 2001, non *P. dentatum* Stein 1883) [Lu and Goebel (2001)]

Tab. 1. – continued

- 1539 *Prorocentrum sigmoides* Böhm 1933 (non *P. gracile* Schütt 1895)
 1540 *Prorocentrum triestinum* Schiller 1918 (= *P. setouti* Hada 1975, non *P. shikokuense* Hada 1975, ?*P. redfieldii* Bursa 1959, *P. pyrenoideum* Bursa 1959)
 1541 *Prorocentrum tropicale* Faust 1997 [Faust (1997)] (published as »tropicalis«, ICBN Art. 23.5 and 32.5)
 1542 *Prorocentrum vaginula* (Stein 1883) Dodge 1975 (= *P. adriaticum* Schiller 1918)
 1543 *Prorocentrum veloi* Osorio-Tafall 1942 (non *P. dentatum* Stein 1883)
 1544 *Prorocentrum venetum* Tolomio et Cavolo 1985 (resembles *P. rhathymum* Loeblich III, Sherley et R.J. Schmidt / *P. mexicanum* Osorio-Tafall)

Pyrocystales Apstein 1909

Pyrocystaceae (Schütt 1896) Lemmermann 1899

- 114** *Dissodinium* Klebs in Pascher 1916 emend. Elbrächter et Drebes 1978 (= *Diplodinium* Klebs 1912, *Sporodinium* Gönner 1936)
 [a parasite in a part of the life cycle, ?Phytodiniales]
 1545 *Dissodinium pseudolunula* E. Swift 1973 ex Elbrächter et Drebes 1978 (= *D. lunula* (Schütt 1895) Pascher 1976 partim, *Pyrocystis lunula* (Schütt) Schütt 1896 partim, *Gymnodinium lunula* Schütt 1895 partim)
115 *Pyrocystis* J. Murray 1876 ex Haeckel 1890 (= *Gymnodinium* Stein 1878 partim, *Murracystis* Haeckel 1890, *Diplodinium* Klebs 1912, *Dissodinium* Klebs in Pascher 1916 emend. Elbrächter et Drebes 1978 partim) (8 species)
 1546 *Pyrocystis acuta* Kofoid 1907
 1547 *Pyrocystis apiculata* F.J.R. Taylor 1976
 1548 *Pyrocystis elegans* Pavillard 1931
 1549 *Pyrocystis fusiformis* (Wyville Thomson 1876 ex Haeckel 1890) Blackman 1902 (= *Murracystis fusiformis* Wyville Thomson in J. Murray 1885 ex Haeckel 1890, *Dissodinium fusiformis* (Thomson ex J. Murray) Matzenauer 1933)
 **Pyrocystis gerbaultii* Pavillard 1935 (= *Dissodinium gerbaultii* (Pavillard) F.J.R. Taylor 1976)
 1550 *Pyrocystis hamulus* Cleve 1900
 **Pyrocystis lanceolata* Schröder 1900 (= *P. fusiformis* f. *lanceolata* (Schröder) F.J.R. Taylor 1976)
 1551 *Pyrocystis lunula* (Schütt 1895) Schütt 1896 (= *Gymnodinium lunula* Schütt 1895, *Diplodinium lunula* (Schütt) Klebs 1912 in Pascher 1916, *Dissodinium lunula* (Schütt) F.J.R. Taylor, E. Swift et Meunier 1976)
 **Pyrocystis margalefii* Léger 1973 (= ?*Dissodinium pseudolunula* E. Swift ex Elbrächter et Drebes 1978)
 **Pyrocystis minima* (Matzenauer 1933) Schiller 1937 (= *Dissodinium minimum* Matzenauer)
 1552 *Pyrocystis noctiluca* J. Murray 1885 ex Haeckel 1890 (= *P. pseudonoctiluca* Wyville Thomson ex J. Murray 1876, *P. noctiluca* J. Murray 1885 ex Schütt 1896)

Tab. 1. – continued

**Pyrocystis obtusa* Pavillard 1931 (= *Gymnodinium lunula* Schütt 1895)

1553 *Pyrocystis robusta* Kofoid 1907

**Pyrocystis rhomboides* (Matzenauer 1933) Schiller 1937 (= *Dissodinium rhomboides* Matzenauer)

Suessiales Fensome et al. 1993

Suessiaceae Fensome *et al.* 1993

116 *Polarella* Montresor, Procaccini *et* Stoecker 1999

1554 *Polarella glacialis* Montresor, Procaccini *et* Stoecker 1999 [Montresor *et al.* (1999)]

Thoracosphaerales Tangen in Tangen et al. 1982

Thoracosphaeraceae Schiller 1930 emend. Tangen *in* Tangen *et al.* 1982

117 *Thoracosphaera* Kamptner 1927

1555 *Thoracosphaera heimii* (Lohmann 1920) Kamptner 1944 (= *Syracosphaera heimii* Lohmann)

Dinoflagellates of uncertain classification

**Adinimonas* Schiller 1928 »Adiniomonas«

**Adinimonas oviforme* Schiller 1928

**Archaeosphaerodiniopsis* Rampi 1943

**Archaeosphaerodiniopsis verrucosa* Rampi 1943

**Pachydinium* Pavillard 1915 (= ?*Protoceratium* Bergh 1881, ?*Goniodoma* Stein 1883,
non *Pachydinium* Kofoid *et* Swezy 1921 = *Balechina* Loeblich Jr. *et* Loeblich III 1968)

**Pachydinium indicum* Matzenauer 1933

**Pachydinium mediterraneum* Pavillard 1915

**Berghiella* Kofoid *et* Michener 1911

**Berghiella josephinae* F.J.R. Taylor 1976

**Berghiella perplexa* Kofoid 1911
