

**Nomenclatural notes on algae. V. New names for various algal taxa, mostly at the species rank**

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The present article is the fifth instalment on our series on the illegitimacy of algal names. For the general framework for our paper, please see the first number of the series (Molinari & al. 2021). We here correct some nomenclatural issues at the species rank arising from non-compliance with the provisions of the ICN (Turland & al. 2018): a new species is validated, and 49 replacement names and five new combinations are proposed. Additionally, seven varieties are combined under a new name, and a new name for the generic name *Pseudocodium* Pratulon is validated.

***Achnanthes undulans*** Molinari & Guiry, *nom. nov.*

Replaced name: *Achnanthes undulata* Sreenivasa, *Phycologia* 10: 81, 1971 (*Ochrophyta*, *Achnanthaceae*), *nom. illeg.*, non *Achnanthes undulata* De Toni (1891: 471), *Achnanthaceae*.

***Actidesmium sphaericum*** Molinari & Guiry, *nom. nov.*

Replaced name: *Actidesmium globosum* Steinecke, *Botanisches Archiv* 3: 316, 1923 (*Chlorophyta*, *Characiaceae*), *nom. illeg.*, non *Actidesmium globosum* (Richter) Kuntze (1898: 394), = *Dictyosphaerium globosum* Richter (1884: 65) *Chlorellaceae*.

***Actinocyclus abscheronica*** Molinari & Guiry, *nom. nov.*

Replaced name: *Actinocyclus paradoxus* Makarova, *Notulae systematicae e sectione cryptogamica instituti botanici nomine V.L. Komarovi academiae scientiarum URSS* 12: 83, 1959 (*Ochrophyta*, *Hemidiscaceae*), *nom. illeg.*, non *Actinocyclus ? paradoxus* Ehrenberg (1854: 7, pl. XX, sect. I: fig. 41), *Hemidiscaceae*.

Notes: The species is renamed after the type locality, Absheron Peninsula, in the Azerbaijani coast of the Caspian Sea. The Latin adjective “*abscheronica*” was employed by Eichwald (1831: 5). *Actinocyclus paradoxus* Ehrenberg was validated by an illustration (Arts 38.5, 38.7-10) of an incomplete valve with a distinctive perforation pattern (Ehrenberg 1854).

***Actinoptychus juriljii*** Molinari & Guiry, *nom. nov.*

Replaced name: *Actinoptychus reticulatus* Jurilj, *Jugoslavenska Akademija Znanosti i Umjetnosi, Zagreb (Acta Biologica 1)* 28: 28, 1957 (*Ochrophyta*, *Heliopeltaceae*), *nom. illeg.*, non *Actinoptychus reticulatus* Pantocsek (1886: 63), nec *Actinoptychus reticulatus* Leuduger-Fortmorel (1898: 17), *nom. illeg.*, *Heliopeltaceae*.

Notes: The species is renamed for the original author, Croatian phycologist Anto Jurilj (1910–1981).

***Amphidinium adriaticum*** Molinari & Guiry, *nom. nov.*

Replaced name: *Amphidinium aculeatum* Schröder, *Sitzungsberichte. Kaiserliche Akademie der Wissenschaften in Wien, Mathematisch-Naturwissenschaftliche Klasse* 120: 650, 1911 (*Miozoa*, *Amphidiniaceae*), *nom. illeg.*, non *Amphidinium aculeatum* Daday (1888: 81), *Amphidiniaceae*.

Notes: The species is renamed for the type locality, the Adriatic Sea. It has been also reported from the Black Sea (Krakhmalnyi & al. 2018) and the Mexican Pacific (Okolodkov & Gárate-Lizárraga 2006).

***Amphora hajosiae*** Molinari & Guiry, *nom. nov.*



Replaced name: *Amphora striata* Hajós, *Geologica Hungarica, Series Paleontologica, Institutum Geologicum Hungaricum, Budapestini* 37: 189, 1968 (*Ochrophyta, Catenulaceae*), *nom. illeg., non Amphora striata* Eichwald (1852: 501), *nec Amphora striata* Pantocsek (1889: 39), *nom. illeg., Catenulaceae*.

Notes: The species is renamed after the original author, Hungarian diatom palaeontologist Márta Hajós (1916-2000).

***Anabaena swakopensis*** Molinari & Guiry, *nom. nov.*

Replaced name: *Anabaena minuta* H. Welsh, *Nova Hedwigia* 7: 18, 1964 (*Cyanobacteria, Nostocaceae*), *nom. illeg., non Anabaena minuta* Borzi (1892: 40), *Nostocaceae*.

Notes: The species is renamed for its type locality, the ephemeral Swakop River of central western Namibia.

***Anabaena welshii*** Molinari & Guiry, *nom. nov.*

Replaced name: *Anabaena cylindrospora* H. Welsh, *Nova Hedwigia* 10: 133, 1965 (*Cyanobacteria, Nostocaceae*), *nom. illeg., non Anabaena cylindrospora* Tschernov [Chernov] (1950: 121), *Nostocaceae*.

Notes: The species is renamed after the original author, British musician and phycologist Henry Welsh (1906–1967).

***Appeninocodium*** Dragastan ex Molinari & Guiry, *nom. nov.*

Replaced name: *Pseudocodium* Pratulron, *Geologica Romana* 3: 193, 1964 (*Chlorophyta, Codiaceae*), *nom. illeg., non Pseudocodium* Weber-van Bosse (1896: 209), *Pseudocodiaceae*.

Type: *Pseudocodium convolvens* Pratulron (monotypic genus at the time of publication).

Notes: Dragastan (1985) assigned the genus to the *Codiaceae* and proposed a replacement name, *Appeninocodium*, for *Pseudocodium* Pratulron (1964) and a combination of its only species, *P. convolvens* (as ‘*convolens*’) without citing the place of publication, rendering his nomenclatural acts invalid.

Species: ***Appeninocodium convolvens*** (Pratulron) Molinari & Guiry, *comb. nov.* Basionym: *Pseudocodium convolvens* Pratulron, *Geologica Romana* 3: 193, 1964.

***Brassicophycus sisymbrioides*** (Kützing) Molinari & Guiry, *comb. nov.*

Basionym: *Pycnophycus sisymbrioides* Kützing, *Tabulae phycologicae* 4: 9, 1854 (*Ochrophyta, Sargassaceae*).

Notes: *Pycnophycus sisymbrioides* Kützing has priority over *P. brassiciformis* (Kützing 1860), and thus a new combination is proposed here to replace *Brassicophycus brassiciformis* (Kützing) Draisma & al. (2010). The original epithet of the latter, “*brassicaeformis*”, is corrected in accordance with Art. 60.1 and following Art. 60.10 with respect to the correct formation of adjectival epithets that combine elements derived from two or more Greek or Latin words.

***Bryopsis chapmanii*** Molinari & Guiry, *nom. nov.*

Replaced name: *Bryopsis pseudoplumosa* V.J.Chapman, *Journal of the Linnean Society of London, Botany* 55: 484, 1956 (*Chlorophyta, Bryopsidaceae*), *nom. illeg., non Bryopsis pseudoplumosa* Ardissonne (1864: 409), *Bryopsidaceae*.

Notes: The species is renamed for the original author, British and New Zealand phycologist Valentine Jackson Chapman (1910-1980).

***Calothrix sinica*** Molinari & Guiry, *nom. nov.*

Replaced name: *Calothrix compacta* C.-C.Jao, *Sinensia* 10: 223, 1940 (*Cyanobacteria*, *Calothricaceae*), *nom. illeg.*, *non Calothrix compacta* (Bornet & Flahault) Hansgirg (1891: 126), *nec Calothrix compacta* (Bornet & Flahault) Margalef (1953: 234), isonym, *Rivulariaceae*.

Notes: The species is renamed for China, the country in which it was originally found. The name proposed by Margalef (1953) is an isonym with no nomenclatural standing (Art. 6.3, note 2,) of that of Hansgirg (1891), since both are based on *Dichothrix compacta* Bornet & Flahault (1886: 378), a genus currently considered to belong to the *Rivulariaceae*

***Chaetoceros reyssaciae*** Molinari & Guiry, *nom. nov.*

Replaced name: *Chaetoceros manguinii* Reyssac, *Revue Algologique, Nouvelle Série* 8: 146, 1968 (*Ochrophyta*, *Chaetocerotaceae*), *nom. illeg.*, *non Chaetoceros manguinii* Gayral (1954: 193), *Chaetocerotaceae*.

Notes: The species is renamed to honour the original author, French phycologist Josette Sevrin-Reyssac (formerly Josette Reyssac).

***Chaetomorpha chapmanii*** Molinari & Guiry, *nom. nov.*

Replaced name: *Chaetomorpha pallida* V.J.Chapman, *Journal of the Linnean Society of London, Botany* 55: 461, 1956 (*Chlorophyta*, *Cladophoraceae*), *nom. illeg.*, *non Chaetomorpha pallida* Zanardini ex Fraunfeld (1855: 9), *Cladophoraceae*.

Notes: The species is renamed after the original author, British and New Zealand phycologist Valentine Jackson Chapman (1910–1980).

***Chlamydomonas harbinensis*** Molinari & Guiry, *nom. nov.*

Replaced name: *Chlamydomonas pyriformis* Skvortsov, *Philippine Journal of Science* 86: 143, 1958 (*Chlorophyta*, *Chlamydomonadaceae*), *nom. illeg.*, *non Chlamydomonas pyriformis* J.Schiller (1913: 624), *nec Chlamydomonas pyriformis* J.Schiller (1952: 115), *nom. illeg.*, *nec Chlamydomonas pyriformis* M.O.P.Iyengar (1981: 294), *nom. illeg.*, *Chlamydomonadaceae*.

Notes: The species is renamed after its type locality, Harbin, Heilongjiang Province, People's Republic of China.

***Chlamydomonas maderaspatana*** Molinari & Guiry, *nom. nov.*

Replaced name: *Chlamydomonas pseudostellata* M.O.P.Iyengar (in Iyengar & Desikachary), *Volvocales*: 281, 484, 1981 (*Chlorophyta*, *Chlamydomonadaceae*), *nom. illeg.*, *non Chlamydomonas pseudostellata* Ettl (1976: 599), *Chlamydomonadaceae*.

Notes: The species is renamed after the type locality, the city of Chennai, Tamil Nadu, India, formerly Madras and known as “*Maderaspatanum*” in botanical tradition (cf. Linnaeus 1743: 1012).

***Chlamydomonas similaris*** Molinari & Guiry, *nom. nov.*

Replaced name: *Gloeomonas simulans* Fott, *Preslia* 29: 293, 1957, ≡ *Chlamydomonas simulans* (Fott) Huber-Pestalozzi (1961: 405), (*Chlorophyta*, *Chlamydomonadaceae*), *nom. illeg.*, *non Chlamydomonas simulans* Pascher (1949: 81), *Chlamydomonadaceae*.

***Chlamydomonas triplicanensis*** Molinari & Guiry, *nom. nov.*

Replaced name: *Chlamydomonas pyriformis* M.O.P.Iyengar in Iyengar & Desikachary, *Volvocales*: 294, 484, 1981, (*Chlorophyta*, *Chlamydomonadaceae*), *nom. illeg.*, *non Chlamydomonas pyriformis* Schiller (1913: 624), *nec Chlamydomonas pyriformis* Schiller (1952: 115), *nom. illeg.*, *nec Chlamydomonas pyriformis* Skvortsov (1958: 143), *nom. illeg.*, *Chlamydomonadaceae*.

Notes: The species is renamed after the type locality, the neighborhood of Triplicane, in the city of Chennai, Tamil Nadu, India.

***Chroomonas butcheri*** Molinari & Guiry, *nom. nov.*

Replaced name: *Chroomonas nana* Butcher, *Fisheries Investigations, London, series IV* 4: 31, 1967 (*Cryptophyta, Hemiselmidaceae*), *nom. illeg., non Chroomonas nana* Schiller (1957: 11), *Hemiselmidaceae*.

Notes: The species is renamed after the original author, British phycologist and aquaculturalist Roger William Butcher (1897-1971).

***Chrysocapsa haebudum*** Molinari & Guiry, *nom. nov.*

Replaced name: *Phaeococcus planctonicus* West & G.S.West, *Transactions of the Royal Society of Edinburgh* 41: 496, 1905, ≡ *Chrysocapsa planctonica* (West & G.S.West) F.E.Fritsch in West & Fritsch (1927: 331), (*Ochrophyta, Chrysocapsaceae*), *nom. illeg., non Chrysocapsa planktonica* Pascher (1913: 86), *Chrysocapsaceae*.

Notes: The species is renamed after the Hebrides (“*Haebudēs*”, in Latin, genitive “*Haebudum*”) of Scotland, where this alga was originally found.

***Chrysocapsa haebudum* var. *ovale*** (G.M.Smith) Molinari & Guiry, *comb nov.*

Basionym: *Phaeococcus planctonicus* var. *ovalis* G.M.Smith *Transactions of the Wisconsin Academy of Sciences Arts and Letters*, 20: 330, 1922

***Cladophora fruticosa*** Molinari & Guiry, *nom. nov.*

Replaced name: *Cladophora arbuscula* Möbius & Reinbold, *Wissenschaftliche Ergebnisse der Deutschen Tiefsee-Expedition auf dem Dampfer 'Valdivia' 1898-1899 II* 2(2): 559, 1907 (*Chlorophyta, Cladophoraceae*), *nom. illeg., non Cladophora arbuscula* Kjellman (1897: 27).

***Cladophoropsis phamhoanghoii*** Molinari & Guiry, *nom. nov.*

Replaced name: *Cladophoropsis adhaerens* Phạm Hoàng Hộ, *Rong biển Việt Nam*: 446, 1969 (*Chlorophyta, Boodleaceae*), *nom. illeg., non Cladophoropsis adhaerens* Gilbert (1962: 136).

Notes: The species is renamed for the original author, Vietnamese botanist Phạm Hoàng Hộ (1931-2017).

***Cocconeis belgica*** Molinari & Guiry, *nom. nov.*

Replaced name: *Cocconeis japonica* var. *antarctica* H.F.Van Heurck, *Expédition Antarctique Belge, Résultats du Voyage du S.Y. Belgica en 1897-1898-1899. Rapports Scientifiques. Botanique, Diatomées*: 17. 1909, ≡ *Cocconeis antarctica* (Van Heurck) Frenguelli & H.A.Orlando (1958: 81), (*Ochrophyta, Cocconeidaceae*), *nom. illeg., non Cocconeis antarctica* Brown (1920: 220), *Cocconeidaceae*.

Notes: The species is renamed for the steam yacht *R.V. Belgica*, the vessel of the 19<sup>th</sup> century Belgian Antarctic Expedition (1897-1899) that recovered the samples for Van Heurck’s taxon.

***Dasya nodae*** Molinari & Guiry, *nom. nov.*

Replaced name: *Dasya elongata* Noda, *Science Reports of Niigata University Series D, (Biology)* 9: 12, 1972 (*Rhodophyta, Delesseriaceae*), *nom. illeg., non Dasya elongata* Sonder (1845: 53), *Delesseriaceae*.

Notes: The species is renamed after the original author, Japanese phycologist Mitsuzo Noda (1909-1995).

***Dictyotidium hagenfeldtii*** Molinari & Guiry, *nom. nov.*

Replaced name: *Dictyotidium microreticulatum* Hagenfeldt, *Stockholm Contributions in Geology* 41: 198, 1989 (*Chlorophyta*, *Pterosphaeridiaceae*), *nom. illeg.*, non *Dictyotidium microreticulatum* Z.Song, C.He, Z.Qian, Z.Pan, G.Zheng & Y.Zheng (1978: 111), *Pterosphaeridiaceae*.

Notes: The species is renamed in honour of the original author, Swedish palaeontologist Stefan E. Hagenfeldt (Swedish Museum of Natural History, Stockholm). Song & al. (1978) used the collective name “Jiabo” as the authority of the new taxa proposed in their work, as pointed out by Sun (1994), who corrected the citations replacing the pseudonym with “Song & al.” The referred book, which title translates as “On the Paleogene dinoflagellates and acritarchs from the coastal region of Bohai”, has been erroneously credited to “Jiabo” in palynological literature, and even some species have been renamed with the epithet “*jiaboi*” after the supposed author (cf. Lentin & Williams 1989, Fensome & al. 1990).

***Euglena skvortsovii*** Molinari & Guiry, *nom. nov.*

Replaced name: *Euglena pringsheimii* Skvortsov, *Nova Hedwigia* 14: 382, 1968 (*Euglenophyta*, *Euglenaceae*), *nom. illeg.*, non *Euglena pringsheimii* M.O.P.Iyengar (1962: 323), *Euglenaceae*.

Notes: The species is renamed for the original author, prolific Russian phycologist Boris Vassilievich Skvortsov (1896-1980). According to the taxonomical treatment of Alves-da-Silva & Menezes (2010), there are six varieties besides the nominal variety, thus, the following combinations are thus required for this Brazilian endemic.

*Euglena skvortsovii* var. *armata* (Skvortsov) Molinari & Guiry, *comb. nov.* Basionym: *Euglena pringsheimii* var. *armata* Skvortsov *Nova Hedwigia* 14: 383, 1968.

*Euglena skvortsovii* var. *punctatostrata* (Skvortsov) Molinari & Guiry, *comb. nov.* Basionym: *Euglena pringsheimii* var. *punctatostrata* Skvortsov *Nova Hedwigia* 14: 383, 1968 (as ‘*punctato-striata*’).

*Euglena skvortsovii* var. *rubra* (Skvortsov) Molinari & Guiry, *comb. nov.* Basionym: *Euglena pringsheimii* var. *rubra* Skvortsov *Nova Hedwigia* 14: 384, 1968.

*Euglena skvortsovii* var. *subconstricta* (Skvortsov) Molinari & Guiry, *comb. nov.* Basionym: *Euglena pringsheimii* var. *subconstricta* Skvortsov *Nova Hedwigia* 14: 385, 1968.

*Euglena skvortsovii* var. *trichita* (Skvortsov) Molinari & Guiry, *comb. nov.* Basionym: *Euglena pringsheimii* var. *trichita* Skvortsov *Nova Hedwigia* 14: 384, 1968.

*Euglena skvortsovii* var. *vacuolaria* (Skvortsov) Molinari & Guiry, *comb. nov.* Basionym: *Euglena pringsheimii* var. *vacuolaria* Skvortsov *Nova Hedwigia* 14: 383, 1968.

***Fortiea shaanxiensis*** (Q.M.Li) Molinari & Guiry, *comb. nov.*

Basionym: *Leptobasis shaanxiensis* Q.M.Li in H.J.Chu et al., *Flora algarum sinicarum aquae dulcis Tomus IX Cyanophyta Hormogonophyceae*: 71, 2007 (*Cyanobacteria*, *Microchaetaceae*).

Notes: *Leptobasis* Elenkin (1915) is an illegitimate homonym of *Leptobasis* Dulac (1867), described under the *Brassicaceae*, and was replaced by *Fortiea* G.De Toni (1936).

***Fragilaria kamchadal*** Molinari & Guiry, *nom. nov.*

Replaced name: *Synedra arctica* Grunow, *Verhandlungen der kaiserlich-königlichen zoologisch-botanischen Gesellschaft in Wien* 12: 401, 1862 ≡ *Fragilaria arctica* (Grunow) M. Poulin, L. Bérard-Therriault & A. Cardinal, *Le Naturaliste Canadien* 111: 351, 1984 (*Ochrophyta*, *Fragilariaceae*), *nom. illeg.*, non *Fragilaria arctica* Grunow in Cleve & Grunow (1880: 110), *Bacillariaceae*.

Notes: the species is renamed using a noun in apposition “Kamchadal”, a name referring to the native peoples of the Kamchatka Peninsula.

***Halysis silurica*** (Lipina) Molinari & Guiry, *comb. nov.*

Basionym: *Syniella silurica* Lipina, *Doklady Akademii Nauk SSSR* 128(4): 824, 1959 (*Corallinales incertae sedis*).

Notes: This species has been referred to *Halysis* Høeg by Riding & Braga (2005) and Shen & Neuweiler (2015), but the combination has not previously been validated.

***Hapalosiphon santannae*** Lemes da Silva, Zanini & Necchi ex Molinari & Guiry, *sp. nov.*

Replaced designation: “*Hapalosiphon santannae* Lemes da Silva, Zanini & Necchi”, *Acta Botanica Brasiliensis* 24: 920, 2010 (*Cyanobacteria, Hapalosiphonaceae*), *nom. inval.*

Diagnosis: Most similar to *Hapalosiphon fontinalis* Bornet, but with cells longer than wide and being found in aerophytic rather than aquatic habitats.

Description: Tangled filaments forming caespitose mats. Lateral branches of dissimilar length, (12.0-)14.0-16.0 µm diam., similar to the primary filament. Sheath yellow. Cells 8.0-12.0 µm wide, 4.8-9.6 µm long. Heterocytes intercalary or lateral, (8.0-)10.0-12.0 µm long. Aerophytic.

Iconography: Lemes da Silva & al. (2010: 922, fig. 2 E-F), Lemes da Silva & al. (2012: 172, fig. 11).

Type: Brasil: São Paulo: Planalto (21.00139 S, 49.97388W); 26 April 2007, *Lemes da Silva s. n.*, (SJRP 28275).

Notes: The intended publication of the species (Lemes da Silva & al. 2010) did not include a type designation, rendering the nomenclatural act invalid (Art. 40.1). A later article (Lemes da Silva & al. 2012) included a new description, direct references to the previously published protologue, a new photograph of the alga showing its differential characteristics and cited a voucher specimen, but did not explicitly designate it as the type, as it is required by Art. 40.6. The epithet honours the Brazilian phycologist Célia Romano Leite Sant’Anna (Universidade de São Paulo).

***Hemiaulus magnificus*** Molinari & Guiry, *nom. nov.*

Replaced name: *Hemiaulus giganteus* H.-J. Schrader & J. Fenner, *Deep Sea Drilling Project Initial Reports* 38: 984, 1976 (*Ochrophyta, Hemiaulaceae*), *nom. illeg., non Hemiaulus giganteus* N.I.Strelnikova (1974: 97), *Hemiaulaceae*.

***Klebsormidium korshikovii*** (Hollerbach) Molinari & Guiry, *comb. nov.*

Basionym: *Chlorhormidium korshikovii* Hollerbach in Moshkova & Hollerbach, *Opredelitel’ presnovodnykh vodoroslei SSSR* 10(1): 343, 1986 (*Charophyta, Klebormidiaceae*).

Notes: The basionym is a new name for *Hormidium mucosum* Korshikov (1941: 40), a later homonym of *Hormidium mucosum* J.B.Petersen (1915: 340). This alga was originally collected in the Karelian section of the Kovda River (Korshikov 1941), in western Russia. Named in honour of the Ukrainian mycologist and phycologist Aleksandr Arkadievich Korshikov (1889-1945).

***Klebsormidium montanum*** (Hansgirg) Watanabe ex Molinari & Guiry, *comb. nov.*

Basionym: *Hormiscia flaccida* var. *montana* Hansgirg, *Beihefte zum Botanischen Centralblatt* 18(II): 444, 1905 (*Charophyta, Klebormidiaceae*).

Notes: The combination was invalidly introduced by Watanabe (1983: 257), who did not cite the place of publication (Art. 41.5). Nevertheless, it is an accepted species according to current taxonomic opinion, and has been included in taxonomic (e.g., Sluiman & al. 2008), floristic (e.g., Czerwic-Marcinkowska & Mrozińska 2009) and ecological studies (e.g., Borchhardt & Gründling-Pfaff 2020).

***Kephyrion khmelevae*** Molinari & Guiry, *nom. nov.*

Replaced name: *Kephyrion campanuliforme* Khmeleva, *Novosti sistematiki nizshikh rasteniy* 1: 18, 1964 (as ‘*campanulaeforme*’, *Ochrophyta, Hemiaulaceae*), *nom. illeg., non Kephyrion campanuliforme* Conrad (1941: 3), *Dinobryaceae*.

Notes: The species is renamed for the original author, Russian hydrobiologist Nina Nikolaevna Khmeleva (1932–2012).

***Lagerheimia schilleri*** Molinari & Guiry, *nom. nov.*

Replaced name: *Lagerheimia minor* J.Schiller, *Österreichische Botanische Zeitschrift* 101: 242, 1954 (*Chlorophyta, Oocystaceae*), *nom. illeg., non Lagerheimia minor* Fott (1933: 580), *Oocystaceae*.

Notes: The species is renamed after the original author, Austrian phycologist, hydrobiologist and melittologist Josef Schiller (1877-1960).

***Lagynion mackii*** Molinari & Guiry, *nom. nov.*

Replaced name: *Lagynion globosum* B.Mack, *Österreichische Botanische Zeitschrift* 98: 163, 1951 (*Ochrophyta, Stylococcaceae*), *nom. illeg., non Lagynion globosum* (Matvienko) Pascher (1949: 59).

Notes: The species is renamed for the original author, Austrian phycologist, Bruno Mack (*fl.* 1951–1954). Matvienko’s (1938: 157) original species, *Chrysotylos globosus*, has a complicated nomenclatural history addressed by Schoonoord & Ellis-Adam (1984). It is currently considered a member of the genus *Kybotion* Pascher (Bourrelly 1957, Schoonoord & Ellis-Adam 1984)

***Lepocinclis shupingchui*** Molinari & Guiry, *nom. nov.*

Replaced name: *Lepocinclis hispidula* S.P.Chu, *Sinensia* 7: 278, 1936 (*Euglenophyta, Phacaceae*), *nom. illeg., non Lepocinclis hispidula* (Eichwald) Daday (1905: 32), *Phacaceae*.

Notes: The species is renamed after the original author, Chinese hydrobiologist and chemist Shu Ping Chu [Zhu Shuping] (1907–1976) originator of the “Chu No.10 Medium” widely used in aquaculture and kelp seedling production method.

***Lyngbya chernovii*** Molinari & Guiry, *nom. nov.*

Replaced name: *Lyngbya splendens* Tschernov, *Botanicheskoye materialy otdela sporovykh rasteniy Botanicheskogo instituta imeni V.L. Komarova, Akademii Nauk SSSR* 6: 125, 1950 (*Cyanobacteria, Oscillatoriaceae*), *nom. illeg., non Lyngbya splendens* N.L.Gardner (1927: 50), *Oscillatoriaceae*.

Notes: The species is renamed after the original author, Russian botanist Vladimir Konstantinovich Chernov [Tschernov] (1896–1954).

***Lyngbya jaoi*** Molinari & Guiry, *nom. nov.*

Replaced name: *Lyngbya cladophorae* C.-C.Jao, *Botanical Bulletin of Academia Sinica* 2: 41, 1948a (*Cyanobacteria, Oscillatoriaceae*), *nom. illeg., non Lyngbya cladophorae* Tilden (1910: 116), *Oscillatoriaceae*.

Notes: The species is renamed after the original author, Chinese phycologist, hydrobiologist and art critic Ching-Chih Jao [Rao Qinzhi] (1900–1998).

***Navicula belacholnokyi*** Molinari & Guiry, *nom. nov.*

Replaced name: *Navicula alpha* Cholnokyi, *Hydrobiologia* 7: 173, 1955 (*Ochrophyta, Naviculaceae*), *nom. illeg., non Navicula alpha* Cleve (1893: 13), *Naviculaceae*.

Notes: The species is renamed after the original author, Hungarian hydrologist and phycologist Béla Jenő Cholnokyi (1899–1972).

***Navicula lavasensis*** Molinari & Guiry, *nom. nov.*

Replaced name: *Navicula adumbrata* M.H.Hohn & Hellerman, *Transactions of the American Microscopical Society* 82: 288, 1963 (*Ochrophyta, Naviculaceae*), *nom. illeg., non Navicula adumbrata* Cholnoky (1961: 302), *Naviculaceae*.

Notes: The species is renamed after La Vase River, Canada, from which this diatom was originally described.

***Nitella septentrionalis*** Molinari & Guiry, *nom. nov.*

Replaced name: *Nitella borealis* F.S.Han & W.Q.Chen (in Han & al.) *Acta Phytotaxonomica Sinica* 16: 89, 1978 (*Charophyta, Characeae*), *nom. illeg., non Nitella borealis* Wallman (1853: 620), *Characeae*.

***Oedogonium rajpureense*** Molinari & Guiry, *nom. nov.*

Replaced name: *Oedogonium gonzalvesiae* M.Khan & B.C.Kukreti, *Phykos* 16: 6, 1978 (as ‘gonsalvii’, *Chlorophyta, Oedogoniaceae*), *nom. illeg., non Oedogonium gonzalvesiae* Islam & Sarma (1966: 177, as ‘gonzalvesae’).

Notes: The species is renamed after Rajpur, India, where this species was originally found.

***Oedogonium niranjanpureense*** Molinari & Guiry, *nom. nov.*

Replaced name: *Oedogonium desikacharyi* M.Khan & B.C.Kukreti, *Phykos* 16: 5, 1978 (as “desikacharii”, *Chlorophyta, Oedogoniaceae*), *nom. illeg., non Oedogonium desikacharyi* Gonzalves & Jain (1968: 7).

Notes: The species is renamed after Niranjanpur, India, where this species was originally found.

***Oocystis meunieri*** Molinari & Guiry, *nom. nov.*

Replaced name: *Oocystis sphaerica* Meunier, *Microplancton des Mers de Barents et de Kara. Duc d'Orleans Campagne Arctique de 1907*: 77, 1910 (*Chlorophyta, Oocystaceae*), *nom. illeg., non Oocystis sphaerica* W.B.Turner (1893: 155), *Oocystaceae*.

Notes: The species is renamed for the original author, French botanist and abbot Alphonse François Meunier (1857–1918).

***Oscillatoria brasiliensis*** Molinari & Guiry, *nom. nov.*

Replaced name: *Oscillatoria gracilis* Azevedo & Sant’Anna, *Cryptogamic Botany* 3: 210, 1993 (as ‘gracile’, *Cyanobacteria, Oscillatoriaceae*), *nom. illeg., non Oscillatoria gracilis* Böcher (1949: 16).

Notes: The species is renamed after Brazil, the country from which it was originally described.

***Oscillatoria kolhapurensis*** Molinari & Guiry, *nom. nov.*

Replaced name: *Oscillatoria bourrellyi* Kamat, *Hydrobiologia* 22: 282, 1963, (*Cyanobacteria, Oscillatoriaceae*), *nom. illeg., non Oscillatoria bourrellyi* J.W.G.Lund (1955: 225), *Microcoleaceae*.

Notes: The species is renamed after the sacred city of Kolhapur, Maharashtra, India, a Hindu pilgrimage site, where this species was originally found.

***Phormidium salgadense*** Molinari & Guiry, *nom. nov.*

Replaced name: *Phormidium variabile* Azevedo & Sant’Anna, *Cryptogamic Botany* 3: 212, 1993 (as ‘variabilis’, *Cyanobacteria, Oscillatoriaceae*), *nom. illeg., non Phormidium variabile* (Wille) Anagnostidis & Komárek (1988: 406), *Oscillatoriaceae*.

Notes: The species is renamed after the General Salgado Municipality in São Paulo State, Brazil, where this species was originally found.

***Phormidium anagnostidis*** Molinari & Guiry, *nom. nov.*

Replaced name: *Lyngbya woronichinii* Ponomarev, *Uchenye Zapiski Kazanskogo Universiteta* 89(2): 299, 1929 (*Cyanobacteria*, *Oscillatoriaceae*), ≡ *Phormidium woronichinii* (Ponomarev) Anagnostidis (2001: 371), *nom. illeg.*, *Oscillatoriaceae*, non *Phormidium woronichinii* De Toni fil. (1934: 7), *Oscillatoriaceae*, nec *Phormidium woronichinii* Anissimova in Elenkin (1949: 1467), *nom. illeg.*, *Leptolyngbyaceae*.

Notes: The species is renamed honouring Greek phycologist Konstantinos Anagnostidis [Κωνσταντίνος Αναγνωστίδης] (1924–1994). The patronymic suffix “-ίδης” (“-ίδης”, “-idis” in Modern Greek) is translated into Latin as “-ides”, with a genitive case declension “-idis”. Since it is a Latin translation of a Greek name, the present epithet falls under Rec. 60C.1 and is not subject to standardization under Art. 60.8 (see Art. 60.9 Note 5).

***Rhaphoneis jouseae*** Molinari & Guiry, *nom. nov.*

Replaced name: *Rhaphoneis elliptica* A.Jousé, *Botanicheskiye materialy otdela sporovykh rasteniy Botanicheskogo instituta imeni V.L. Komarova, Akademii Nauk SSSR* 7: 40, 1951 (*Ochrophyta*, *Rhaphoneidaceae*), *nom. illeg.*, non *Rhaphoneis elliptica* Castracane (1886: 49), *Rhaphoneidaceae*, nec *Rhaphoneis elliptica* Schrader in Schrader & Fenner (1976: 995), *nom. illeg.*, *Rhaphoneidaceae*.

Notes: The species is renamed for the original author, Russian phycologist and hydrobiologist Anastasia Jousé [Anastasiya Zhuse] (1905–1981).

***Rhaphoneis fennerae*** Molinari & Guiry, *nom. nov.*

Replaced name: *Rhaphoneis elliptica* H.-J.Schrader in Schrader & Fenner, *Deep Sea Drilling Project Initial Reports* 38: 995, 1976 (*Ochrophyta*, *Hemiaulaceae*), *nom. illeg.*, non *Rhaphoneis elliptica* Castracane (1886: 49), *Rhaphoneidaceae*, nec *Rhaphoneis elliptica* A.Jousé (1951: 40), *nom. illeg.*, *Rhaphoneidaceae*.

Notes: The species is renamed in honour of German micropalaeontologist and phycologist Juliane Mathilde Fenner (Bundesanstalt für Geowissenschaften und Rohstoffe, Hanover, Germany).

***Scenedesmus gonzalez-guerreroi*** Molinari & Guiry, *nom. nov.*

Replaced name: *Scenedesmus verrucosus* P.González-Guerrero, *Anales del Jardín Botánico de Madrid* 1: 153, 1940 (*Chlorophyta*, *Scenedesmaceae*), *nom. illeg.*, non *Scenedesmus verrucosus* Y.V.Roll (1925: 145), *Scenedesmaceae*.

Notes: The species is renamed after the original author, Spanish phycologist Pedro González Guerrero (1901–1984).

***Synechococcus revillagigedo*** Molinari & Guiry, *nom. nov.*

Replaced name: *Synechococcus marinus* C.-C.Jao, *Botanical Bulletin of Academia Sinica* 2: 164, 1948b (*Cyanobacteria*, *Synechococcaceae*), *nom. illeg.*, non *Synechococcus marinus* Ercegović (1932: 138), *Aphanothecaceae*.

Notes: The species is renamed after Juan Vicente de Güemes y Pacheco de Padilla Horcasitas Aguayo, 2<sup>nd</sup> Count Revillagigedo (1738–1799), patron of the Malaspina Scientific and Sessé Botanical Expeditions, for whom San Juan Island, Washington, USA, where it was originally collected, is named.

***Trachelomonas chunamensis*** Molinari & Guiry, *nom. nov.*

Replaced name: *Trachelomonas hirsuta* Conforti & L.Ruiz, *Archiv für Hydrobiologie Supplement* 138: 130, 2001 (*Euglenozoa*, *Euglenaceae*), *nom. illeg.*, non *Trachelomonas hirsuta* Frenguelli (1929: 565), *Euglenaceae*.

Notes: The species is renamed after its type locality, Chunam Reservoir in South Korea, where it was originally collected.

***Triplos woodii*** Molinari & Guiry, *nom. nov.*

Replaced name: *Ceratium pacificum* E.J.F.Wood, *Technical Papers, Division of Fisheries and Oceanography [CSIRO]* 14: 42, 1963 (*Miozoa, Ceratiaceae*), *nom. illeg., non Ceratium pacificum* Schröder (1906: 368), ≡ *Triplos pacificus* (Schröder) F.Gómez (2013: 17), *Ceratiaceae*.

Notes: The species is renamed for the original author, Australian marine microbiologist Edward James Ferguson Wood (1904–1972). The name was validly published under the ICZN with an English description and without a designation of a type, a requirement only for names published after 1999 (Art. 16.4, International Commission on Zoological Nomenclature 1999); the name is accepted as validly published under Art. 45.1 of the ICN; however, is still illegitimate under Art/54.1.b. It was combined under *Neoceratium* by Gómez & al. (2010), a superfluous name for *Triplos* Bory.

***Ulva chapmanii*** Molinari & Guiry, *nom. nov.*

Replaced name: *Ulva crassa* V.J.Chapman, *Journal of the Linnean Society of London, Botany* 55: 391, 1956 (*Chlorophyta, Ulvaceae*), *nom. illeg., non Ulva crassa* Kjellman (1877: 44), *Ulvaceae*.

Notes: The species is renamed after the original author, British and New Zealand phycologist Valentine Jackson Chapman (1910–1980).

Many thanks to Dr Dmitry Kapustin for his advice.

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