

Generic names of diatoms affected by ICN Art. 20.2

Saúl Blanco, *Departamento de Biodiversidad y Gestión Ambiental, Universidad de León, León, Spain*

Current address: Laboratorio de Diatomología, Instituto de Investigación de Medio Ambiente, Recursos Naturales y Biodiversidad, La Serna 58 – E24007 León, Spain (correspondence: sblal@unileon.es)

Art. 20.2 of the ICN (Turland *et al.* 2018) specifies that in order to be valid, “the name of a genus may not coincide with a Latin technical term in use in morphology at the time of publication unless it was published before 1 January 1912 and was accompanied by a species name published in accordance with the binary system of Linnaeus.”

A cross-check of algal generic names against a “vocabulary” of “... terms and expressions used in describing plants” (Stearn 1973) revealed the existence of a number of diatom generic names that need to be validated with appropriate replacement names. Names published before 1912 [e.g., *Auricula* Castracane 1873, name conserved in Lanjow (1956) against *Auricula* Hill 1756, *Capsula* Brun 1896, or *Tetraspora* Link ex Desvaux 1818] were excluded despite coincident with botanical terms.

***Fennerbicornis*, gen. nov.**

Description: Fenner (1994: 109).

Replaced designation: “*Bicornis* Fenner”, *Aarhus Geoscience* 1: 109, 1994, *nom. inval.*

Type: *Fennerbicornis kittonii* (Grunow) *comb. nov.*

Basionym: *Hemiaulus kittonii* Grunow, *Synopsis des Diatomées de Belgique*: 106, 1884.

Invalid designation: “*Bicornis kittonii* Fenner”, *Aarhus Geoscience* 1: 109, pl. 6: fig. 9 a, b. 1994, *nom. inval.*

Note: “*bicornis*” means “two-horned” (Stearn 1973: 406).

Fennerbicornis incisus* (Hajós) *comb. nov.

Basionym: *Hemiaulus incisus* Hajós in Hollister *et al.*, *Initial Reports of the Deep Sea Drilling Project* 35: 829, pl. 23, figs 4-9. 1976.

Invalid designation: “*Bicornis incisus* Fenner” *Aarhus Geoscience* 1: 109, 1994, *nom. inval.*

***Fennerbicornis pyxilloides*, sp. nov.**

Description: Fenner (1994: 109).

Holotype: **DSDP** 338-19-3 coll. H.-J. Schrader.

Type locality: Norwegian Sea, 67° 47.11' N, 5° 23.26' E.

Replaced designation: “*Bicornis pyxilloides* Fenner”, *Aarhus Geoscience* 1: 109, 1994, *nom. inval.*

***Fossilarcus*, gen. nov.**

Description: Olshtynskaja (1978: 77).

Replaced name: “*Arcus* Olshtynskaja”, *Paleontologicheskii sbornik. Moscow, Leningrad* 15: 77, 1978, *nom. inval.*

Type: *Fossilarcus kasjanicus*, *sp. nov.*

Description: Olshtynskaja (1978: 77).

Holotype: Akad. Nauk SSSR, IGN, Prep. #74191.

Type locality: North-east Ukraine: Kiev strata. Upper Eocene.

Replaced designation: “*Arcus kasjanicus* Olshtynskaja”, *Paleontologicheskii sbornik. Moscow, Leningrad* 15: 77, pl. 1, fig. 1, 1978 *nom. inval.*

Note: An “*arcus*” is a curve or arc (Stearn 1973: 388).

***Fossilaphycus*, gen. nov.**

Description: Hasle *et al.* (1996: 296).

Replaced designation: “*Fossula* Hasle *et al.*”, *Diatom Research* 11: 296, 1996, *nom. inval.*

Type: *Fossilaphycus arcticus*, *sp. nov.*

Description: Hasle *et al.* (1996: 296).

Holotype: **IMBB** 106.

Type locality: Arctic Ocean, 76° 45' N, 30° 4' E

Replaced designation: “*Fossula arctica* Hasle *et al.*”, *Diatom Research* 11: 269; figs 1-21, 1996, *nom. inval.*

Notes: A “*Fossula*” is a little furrow (Stearn 1973: 431).

***Paleotertiarius*, gen. nov.**

Description: Hasle *et al.* (1996: 296).

Replaced designation: “*Tertiarius* Håkansson & Khursevich”, *Diatom Research* 12: 21, 1997, *nom. inval.*

Type: *Paleotertiarius pygmaeus* (Pantocsek) *comb. nov.*

Basionym: *Cyclotella pygmaea* Pantocsek, *Beiträge zur Kenntniss der fossilen Bacillarien Ungarns* 3: pl. 2: fig. 22, pl. 4: fig. 59, 1892.

Replaced designation: “*Tertiarius pygmaeus* Håkansson & Khursevich”, *Diatom Research* 12: 22, figs 5-15, 1997, *nom. inval.*

Note: “*tertiarius*” means tertiary (Stearn 1973, p. 528).

***Paleotertiarius agunensis*, sp. nov.**

Description: Tanaka (2014: 9).

Holotype: coll. H. Tanaka, Micropaleontology collection, National Museum of Nature and Science, Japan.

Type locality: Japan: Okinawa: Aguni Island: Fudenzaki Formation.

Replaced designation: “*Tertiarius agunensis* H. Tanaka”, *Atlas of freshwater fossil diatoms in Japan*: 9, figs 118, 119, 2014, *nom. inval.*

***Paleotertiarius baicalensis*, sp. nov.**

Description: Khursevich & Fedenya (2003: 306).

Holotype: **MSK** 966a, BDP-96-1, core 52-1.

Type locality: Russia: Lake Baikal: Academician Ridge, 53° 41' 48" N, 108° 21' 6" E.

Replaced designation: “*Tertiarius baicalensis* Khursevich & Fedenya”, *Algologia* 13: 306, pl. 1, figs 1, 2, 4, 5, 14, 2003, *nom. inval.*

***Paleotertiarius chernomoricus*, sp. nov.**

Description: Khursevich & Kociolek (2012: 322).

Holotype: slide # 10 BS, Site 381, sample 23-3 (46 – 53 cm), deposited in G. K. Khursevich Collection, Minsk, Belarus.

Type locality: Pliocene sediments of the Black Sea (the south-western part), recovered at the Site 381 (41° 40.25' N, 29° 24.96' E), water depth 1750.5 m.

Replaced designation: “*Tertiarius chernomoricus* Khursevich & Kociolek”, *Nova Hedwigia Beihefte* 141: 322, 2012 *nom. inval.*

***Paleotertiarius distinctus*, sp. nov.**

Description: Khursevich & Kociolek (2002: 333).

Holotype: CAS 425089.

Type locality: USA: Oregon: Klamath County.

Replaced designation: “*Tertiarius distinctus* Khursevich & Kociolek”, *Proceedings of the Fifteenth International Diatom Symposium*: 333, figs 1-5, 12-22, 2002, *nom. inval.*

Paleotertiarius elgeri (Hustedt) *comb. nov.*

Basionym: *Cyclotella elgeri* Hustedt, *Botaniska Notiser* 4: 374, fig. 31, 1952.

Replaced designation: “*Tertiarius elgeri* Houk *et al.*”, *Fottea* 10: 46, pl. 300, figs 1-7, pl. 301, figs 1-6, pl. 302, figs 1-6, 2010, *nom. inval.*

Paleotertiarius hidalgensis, *sp. nov.*

Description: Khursevich & Kociolek (2009: 24)

Holotype: MEXU 185.

Type locality: Mexico: Hidalgo, Municipio de Atotonilco el Grande (20° 18.290' N, 98° 46.865' W). Early-middle Pliocene.

Replaced designation: “*Tertiarius hidalgensis* Khursevich & Kociolek”, *Diatom Research* 24: 24, figs 2-19, 2009 *nom. inval.*

Paleotertiarius indigenus, *sp. nov.*

Description: Khursevich & Kociolek (2002: 336)

Holotype: CAS 372070.

Type locality: USA: California: Siskiyou County: Willow Creek NW of Hammond Ranch. Pliocene.

Replaced designation: “*Tertiarius indigenus* Khursevich & Kociolek”, *Proceedings of the Fifteenth International Diatom Symposium*: 336; figs 6-11, 23-32, 2002, *nom. inval.*

Paleotertiarius juriljii, *sp. nov.*

Description: Ognjanova-Rumenova *et al.* (2015: 52).

Holotype: slide MaB-I/02 in coll. Ognjanova-Rumenova, Institute of Geology, Bulgarian Academy of Sciences, Sofia.

Type locality: Macedonia: Mariovo Basin: north of Manastir (41° 10' 3" N, 21° 43' 42" E); Pliocene.

Replaced designation: “*Tertiarius juriljii* Ognjanova-Rumenova *et al.*”, *Fottea* 15: 52, figs 36-105, 2015, *nom. inval.*

Paleotertiarius kabutoiwaensis, *sp. nov.*

Description: Tanaka & Nagumo (2019: 49).

Holotype: MPC-42186. Micropaleontology collection, National Museum of Nature and Science, Japan.

Type locality: Japan: Gunma Prefecture: Nanmoku Village: Hoshio.

Replaced designation: “*Tertiarius kabutoiwaensis* Tanaka & Nagumo”, *Diatom* 35: 49, figs 3-13, 2019, *nom. inval.*

Paleotertiarius mariovensis, *sp. nov.*

Description: Ognjanova-Rumenova *et al.* (2015: 56).

Holotype: MKNDC 008531/A.

Type locality: Macedonia: Mariovo Basin: near Zovich (41° 5' 19" N, 21° 41' 58" E).

Replaced designation: “*Tertiarius mariovensis* Ognjanova-Rumenova *et al.*”, *Fottea* 15: 56, figs 1-35, 2015, *nom. inval.*

Paleotertiarius minimus, *sp. nov.*

Description: Tanaka & Nagumo (2019: 52).

Holotype: MPC-42187. Micropaleontology collection, National Museum of Nature and Science, Japan.

Type locality: Japan: Gunma Prefecture: Nanmoku Village: Hoshio.

Replaced designation: “*Tertiarius minimus* H.Tanaka & Nagumo” *Diatom* 35: 52, figs 14-26, 2019, *nom. inval.*

Paleotertiarius pantocsekii (Fricke) *comb. nov.*

Basionym: *Stephanodiscus pantocsekii* Fricke, *Atlas der Diatomaceen-kunde* 5(58): pl. 229, figs 12-14, 1902.

Replaced designation: “*Tertiarius pantocsekii* Khursevich & Kociolek [as ‘*pantocseki*’]”, *Nova Hedwigia Beihefte* 141: 323, 2012, *nom. inval.*

Paleotertiarius oitaensis (H.Tanaka) *comb. nov.*

Basionym: *Cyclotella oitaensis* H.Tanaka, *Atlas of freshwater fossil diatoms in Japan*: 6, figs 61, 62, 2014.

Replaced designation: “*Tertiarius oitaensis* Tanaka & Nagumo”, *Diatom* 35: 55, 2019, *nom. inval.*

Paleotertiarius porosus, *sp. nov.*

Description: Khursevich & Kociolek (2002: 340)

Holotype: CAS 433005.

Type locality: USA: Oregon: Crystal Hill Rd. (42° 11' N, 121° 36' W).

Replaced designation: “*Tertiarius porosus* Khursevich & Kociolek”, *Proceedings of the Fifteenth International Diatom Symposium*: 340, figs 48-58, 2002, *nom. inval.*

Paleotertiarius roddae, *sp. nov.*

Description: Kociolek & Khursevich (2002: 340).

Holotype: CAS 755069.

Type locality: USA: California: Napa County: North Avenue east of Napa. Pliocene.

Replaced designation: “*Tertiarius roddae* Kociolek & Khursevich [as ‘*roddai*’]”, *Proceedings of the Fifteenth International Diatom Symposium*: 340, figs 33-47, 2002, *nom. inval.*

Paleotertiarius satsumaensis (H.Tanaka & Houk) *comb. nov.*

Basionym: *Cyclotella satsumaensis* H.Tanaka & Houk, *Fottea* 10: 28, pl. 211, figs 1-20, pl. 212, figs 1-7, 2010.

Replaced designation: “*Tertiarius satsumaensis* Nakov”, *Phytotaxa* 217: 259, 2015, *nom. inval.*

Paleotertiarius tempereiformicus (Khursevich) *comb. nov.*

Basionym: *Cyclotella tempereiformica* Khursevich, *Micropaleontology* 47: 54, pl. 6, figs 1-3, pl. 7, figs 1-6, 2001.

Replaced designation: “*Tertiarius tempereiformicus* Nakov [as ‘*tempereiformica*’]”, *Phytotaxa* 217: 259, 2015, *nom. inval.*

Paleotertiarius transylvanicus (Pantocsek) *comb. nov.*

Basionym: *Cyclotella transylvanica* Pantocsek, *Beiträge zur Kenntniss der fossilen Bacillarien Ungarns* 3: 38, pl. 11, fig. 177, 1892.

Replaced designation: “*Tertiarius transylvanicus* Håkansson & Khursevich”, *Diatom Research* 12: 24, figs 16-27, 1997, *nom. inval.*

Paleotertiarius transylvanicus* var. *disseminatepunctatus (Pantocsek) *comb. nov.*

Basionym: *Cyclotella transylvanica* var. *disseminatopunctata* Pantocsek, *Beiträge zur Kenntniss der fossilen Bacillarien Ungarns* 3: pl. 36, fig. 511, 1892.

Replaced designation: “*Tertiarius transylvanicus* var. *disseminatepunctatus* Håkansson & Khursevich”, *Diatom Research* 12: 29, figs 28-34, 1997, *nom. inval.*

***Phycostilus*, gen. nov.**

Description: Paddock (1998: 95).

Replaced name: “*Stilus* Paddock”, *Bibliotheca Diatomologica* 16: 95, 1988, *nom. inval.*

Type: *Phycostilus subulatus* (Simonsen) *comb. nov.*

Basionym: *Tropidoneis subulata* Simonsen, “*Meteor*” *Forschungsergebnisse. Reihe D: Biologie, D. 19: 44*, 1974.

Replaced designation: “*Stilus subulatus* Paddock”, *Bibliotheca Diatomologica* 16: 95-96, pl. 35, fig. 1-4, 1988, *nom. inval.*

Note: “*stilus*” or “*stylus*” is the style, a well-known anatomical feature of flowering plants.

***Phycavernosa*, gen. nov.**

Description: Stidolph (1990: 99).

Replaced name: “*Cavernosa* Stidolph”, *Nova Hedwigia* 50: 99, 1990, *nom. inval.*

Type: *Phycavernosa kapitiana*, *sp. nov.*

Description: Stidolph (1990: 99).

Holotype: Stidolph coll. no. FW-217A/8 in NIWA.

Type locality: New Zealand: Kapiti Island: Te Rere Stream.

Replaced designation: “*Cavernosa kapitiana* Stidolph”, *Nova Hedwigia* 50: 99, figs 1-29, 1990, *nom. inval.*

Note: “*cavernosa*” means “full of hollows or cavities” (Stearn 1973: 399).

***Phycorona*, gen. nov.**

Description: Lefébure & Chenevière (1938: 9).

Replaced name: “*Corona* Lefébure & Chenevière”, *Bulletin de la Société Française de Microscopie* 7: 9, 1938, *nom. inval.*

Type: *Phycorona magnifica*, *sp. nov.*

Description: Lefébure & Chenevière (1938: 10).

Holotype: **BM** 63387.

Type locality: Kazakhstan: Ouralsk: Kamischev. Miocene.

Replaced designation: “*Corona magnifica* Lefébure & Chenevière” *Bulletin de la Société Française de Microscopie* 7: 10, pl. 1, fig. 1, 1938, *nom. inval.*

Notes: “*corona*” is a Latin term (Stearn 1973: 408), “an appendage adhering to the top of many seeds, serving them as wings, which enables them to be dispersed by the wind” (Lloyd 1826).

The diatom genus *Corona* is a later homonym of *Corona* Fischer ex Graham (1836) (*Liliaceae*), this however being a *nomen nudum* (Blanco & Wetzel 2016). By transferring *Corona*’s generitype to *Craspedoporus* Grev., Hendey and Sims (1987) intended to synonymize both genera, but *Craspedoporus magnificus* (P.Leféb. & Chenev.) Hendey & Sims (‘*magnifica*’) is invalid because it is based on an invalid name.

***Phycorona retinervis*, sp. nov.**

Description: Scheschukova-Poretzkaja & Glezer (1964: 87).

Holotype: **BM** 78195.

Type locality: Ukraine: Dnjepropetrovs: left bank of river Dnieper. Upper Eocene-lower Oligocene.

Replaced designation: “*Corona retinervis* Scheschukova-Poretzkaja & Glezer”, *Novosti sistematiki nizshikh rastenii. Moscow, Leningrad. 1964: 87; pl. 4, figs 1, 2, 1964, nom. inval.*,
 “*Craspedoporus retinervis* Hendey & Sims”, *Diatom Research 2: 34. 1987, nom. inval.*

***Phycorona temperei*, sp. nov.**

Description: Ross & Sims (2000: 33).

Holotype: **BM** coll. Adams H 126.

Type locality: Barbados. Middle Eocene-Oligocene.

Replaced designation: “*Corona temperei* Ross & Sims”, *Diatom Research 15: 338; figs 117-120, 2000, nom. inval.*

***Phycorona tetragona*, sp. nov.**

Description: Ross & Sims (2000: 340).

Holotype: **ANSP** gen. coll. no. 92134.

Type locality: Bermuda Rise, North Atlantic Ocean (30° 53.39' N, 67° 38.86' W), sediment at 5125 m depth; Middle Eocene.

Replaced designation: “*Corona tetragona* Ross & Sims”, *Diatom Research 15: 340, figs 121-130, 2000, nom. inval.*

I am grateful to the reviewers and to Professor M.D. Guiry for their helpful suggestions.

Blanco, S. & Wetzel, C.E. 2016. Replacement names for botanical taxa involving algal genera. *Phytotaxa* 266: 195–205.

Brun, J. 1896. Diatomées Miocènes, description des espèces. *Le Diatomiste* 2: 229–247.

Caballero, M., Khursevich, G. & Velasco de León, P. 2009. *Tertiarius hidalgensis* sp. nov., a new diatom species from Neogene deposits in central México. *Diatom Research* 24: 23–33.

Castracane, F. 1873. Le diatomée del litorale dell'Istria e della Dalmazia: Memoria. Tipografia delle scienze matematiche e fisiche.

Desvaux, A.-N. 1818. Observations sur les plantes des environs d'Angers, pour servir de supplément à la "Flore de Maine-et-Loire", et de suite à l'"Histoire naturelle et critique des plantes de France". Fourier-Mame.

Fenner, J. 1994. Diatoms of the Fur Formation, their taxonomy and biostratigraphic interpretation—results from the Harre borehole, Denmark. *Aarhus Geoscience* 1: e131.

Graham, R. 1836. Description of several new or rare plants which have lately flowered in the Neighbourhood of Edinburgh, chiefly in the Royal Botanic Garden. *Edinburgh New Philosophical Journal* 21: 154–158.

Hajós, M. 1976. Upper Eocene and Lower Oligocene Diatomaceae, Archaeomonadaceae, and Silicoflagellatae in southwestern Pacific sediments, Deep Sea Drilling Project, Leg 29. *Initial Reports of the Deep Sea Drilling Project* 35: 817–883.

Håkansson, H. & Khursevich, G. 1997. *Tertiarius* gen. nov., a new genus in the Bacillariophyceae, the transfer of some cyclotelloid species and a comparison to closely related genera. *Diatom Research* 12: 19–33.

Hasle, G.R., Syvertsen, E.E. & von Quillfeldt, C.H. 1996. *Fossula arctica* gen. nov., spec. nov., a marine Arctic araphid diatom. *Diatom Research* 11: 261–272.

Hendey, N.I. & Sims, P.A. 1987. Examination of some fossil Eupodiscoid diatoms with descriptions of two new species of *Craspedoporus* Greville. *Diatom Research* 2: 23–34.

Hill, J. 1756. The British Herbal: an history of plants and trees, natives of Britain, cultivated for use, or raised for beauty. T. Osborne & J. Shipton.

Houk, V., Klee, R. & Tanaka, H. 2010. Atlas of freshwater centric diatoms with a brief key and descriptions Part III: Stephanodiscaceae A, *Cyclotella*, *Tertiarius*, *Discostella*. *Fottea* 10: 1–498.

- Hustedt, F. 1952. Neue und wenig bekannte Diatomeen IV. *Botaniska Notiser* 4: 366–410.
- Khursevich, G., Fedenya, S., Kuzmin, M., Karabanov, E., Williams, D. & Prokopenko, A. 2003. Morphology of new taxa of the class Centrophyceae (Bacillariophyta) from the Pliocene and Pleistocene deposits of Lake Baikal, Siberia. *Algologia* 13(3): 305–321.
- Khursevich, G. & Kociolek, J. 2002. New *Tertiarius* (Bacillariophyta: Stephanodiscaceae) species from western North America. *Proceedings of the Fifteenth International Diatom Symposium*. Koeltz, Koenigstein, 331–349.
- Khursevich, G. & Kociolek, J.P. 2012. A preliminary, worldwide inventory of the extinct, freshwater fossil diatoms from the orders Thalassiosirales, Stephanodiscales, Paraliales, Aulacoseirales, Melosirales, Coscinodiscals, and Biddulphiales. *Nova Hedwigia, Beiheft*. 141: 315–364.
- Khursevich, G.K., Karabanov, E.B., Prokopenko, A.A., Williams, D.F., Kuzmin, M.I. & Fedenya, S.A. 2001. Biostratigraphic significance of new fossil species of the diatom genera *Stephanodiscus* and *Cyclotella* from Upper Cenozoic deposits of Lake Baikal, Siberia. *Micropaleontology* 47(1): 47–71.
- Lanjouw, J. 1956. International Code of Botanical Nomenclature adopted by the eighth international botanical congress, Paris, July 1954. *Regnum Vegetabile* 8: 1–338.
- Lefébure, P. & Chenevière, E. 1938. Description et Iconographie de Diatomées rares ou nouvelles. *Bulletin de la Société Française de Microscopie* 7: 8–12.
- Lloyd, G.N. 1826. Botanical Terminology: Or Dictionary Explaining the Terms Most Generally Employed in Systematic Botany. Longman Rees Orme Brown and Green.
- Nakov, T., Guillory, W., Julius, M., Theriot, E. & Alverson, A. 2015. Towards a phylogenetic classification of species belonging to the diatom genus *Cyclotella* (Bacillariophyceae): Transfer of species formerly placed in *Puncticulata*, *Handmannia*, *Pliocaenicus* and *Cyclotella* to the genus *Lindavia*. *Phytotaxa* 217(3): 249–264.
- Ognjanova-Rumenova, N., Jovanovska, E., Cvetkoska, A., Levkov, Z. & others. 2015. Two new *Tertiarius* (Bacillariophyta, Coscinodiscophyceae) species from Mariovo Neogene Basin, Macedonia. *Fottea* 15(1): 51–62.
- Olshtynskaya, A.P. 1978. New diatoms (Bacillariophyta) from the late Eocene of the Ukraine. *Paleontologicheskii Sbornik* 15:75–79.
- Paddock, T.B. 1988. *Plagiotropis* Pfitzer and *Tropidoneis* Cleve, a summary account. *Bibliotheca Diatomologica* 16: 1–152.
- Pantocsek, J. 1892. Beiträge zur Kenntnis der fossilen Bacillarien Ungarns. Teil III. Süßwasser Bacillarien. Anhanganalysen 15 neuer Depôts von Bulgarien, Japan, Mähren, Russland und Ungarn. Buchdruckerei von Julius Platzko Nagy-Tapolcsány.
- Ross, R. & Sims, P. 2000. A revision of *Actinodiscus* Greville, *Craspedoporus* Greville and related genera (Eupodiscaceae). *Diatom Research* 15: 285–347.
- Schmidt, A. 1902. Atlas der Diatomaceen-Kunde: Ser. V.
- Scheschukova-Poretzkaja, V.S. & Glezer, S.I. 1964. Novie vidy morskikh paleogenovikh diatomovikh vodoroslei U.S.S.R. *Novosti Sistematiki Nizschikh Rastenii* 1964: 78–92.
- Schrader, H.-J. & Fenner, J. (1976). Norwegian Sea Cenozoic diatom biostratigraphy and taxonomy. *Initial Reports of the Deep Sea Drilling Project* 38: 921–1099.
- Simonsen, R. 1974. The diatom plankton of the Indian Ocean Expedition of R/V Meteor 1964-5. *“Meteor” Forschungsergebnisse. Reihe D: Biologie* 19: 1–107.
- Stearn, W.T. (1973). Botanical Latin. History, grammar, syntax, terminology and vocabulary ed. 2. pp. i-xiv, [1]-566, 41 figs. Newton Abbott: David & Charles.
- Stidolph, S.R. 1990. *Cavernosa kapitiana*, a new diatom genus and species from Kapiti Island, New Zealand. *Nova Hedwigia*: 97–110.
- Stidolph, S.R. 1994. Deposition of diatom holotypes. *Diatom Research* 9: 479.

- Tanaka, H. 2014. Atlas of Freshwater Fossil Diatoms in Japan: Including Related Recent Taxa. Uchida Rokakuho Publishing Company.
- Tanaka, H. & Nagumo, T. 2019. *Tertiarius kabutoiwaensis* sp. nov. and *T. minimus* sp. nov. from a Pliocene deposit of the Kabutoiwa Formation, central Japan. *Diatom* 35: 48–55
- Turland, N. J., Wiersema, J. H., Barrie, F. R., Greuter, W., Hawksworth, D. L., Herendeen, P. S., Knapp, S., Kusber, W.-H., Li, D.-Z., Marhold, K., May, T. W., McNeill, J., Monro, A. M., Prado, J., Price, M. J. & Smith, G. F. (eds.) 2018: International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017. Regnum Vegetabile 159. Glashütten: Koeltz Botanical Books
- Van Heurck, H.F. 1884. Synopsis des diatomées de Belgique: Atlas. Édité par l'auteur.