

Cryptogamic nomenclatural notes. 2

I. V. Sokolova (ed.), R. M. Gogorev

Komarov Botanical Institute, St. Petersburg, Russia

Corresponding author: R. M. Gogorev, RGogorev@binran.ru

Abstract. New combinations for *Actinocyclus maccollumii*, *Synedra camtschatica* var. *finnmarchica* and *Synedra salina* are proposed. Replacement names for the later homonyms of *Amphiprora hyalina*, *Navicula constricta* and *N. grunovii* are published.

Keywords: diatoms, *Bacillariophyta*, *Actinocyclus*, *Amphiprora*, *Catacombas*, *Entomoneis*, *Fragilaria*, *Synedra*, *Ulnaria*, *Actinocyclus maccollumii*, *Amphiprora hyalina*, *Amphiprora pantocsekii*, *Catacombas camtschatica* var. *finnmarchica*, *Navicula constricta*, *Navicula grunovii*, *Navicula omearae*, *Navicula peroi*, *Stellarima maccollumii*, *Synedra camtschatica* var. *finnmarchica*, *Synedra salina*, *Ulnaria salina*, new combination, nomen novum.

Номенклатурные заметки по водорослям, грибам, лишайникам и мохообразным. 2

И. В. Соколова (ред.), Р. М. Гогорев

Ботанический институт им. В. Л. Комарова РАН, Санкт-Петербург, Россия

Автор для переписки: Р. М. Гогорев, RGogorev@binran.ru

Резюме. Предложены новые комбинации для *Actinocyclus maccollumii*, *Synedra camtschatica* var. *finnmarchica* и *Synedra salina*. Для поздних омонимов *Amphiprora hyalina*, *Navicula constricta* и *N. grunovii* предложены замещающие названия.

Ключевые слова: диатомовые, *Bacillariophyta*, *Actinocyclus*, *Amphiprora*, *Catacombas*, *Entomoneis*, *Fragilaria*, *Synedra*, *Ulnaria*, *Actinocyclus maccollumii*, *Amphiprora hyalina*, *Amphiprora pantocsekii*, *Catacombas camtschatica* var. *finnmarchica*, *Navicula constricta*, *Navicula grunovii*, *Navicula omearae*, *Navicula peroi*, *Stellarima maccollumii*, *Synedra camtschatica* var. *finnmarchica*, *Synedra salina*, *Ulnaria salina*, новая комбинация, замещающее название.

ALGAE — ВОДОРОСЛИ

New combinations for *Actinocyclus maccollumii* and two *Synedra* taxa (*Bacillariophyta*). R. M. Gogorev. — Новые комбинации для *Actinocyclus maccollumii* и двух таксонов из рода *Synedra* (*Bacillariophyta*). Р. М. Гогорев.

Actinocyclus maccollumii was described from the Middle Pliocene deposits of the Kerguelen Plateau in the Southern Ocean (Harwood, Maruyama, 1992). The authors noted the presence of a distinct pseudonodulus at the valve margin, and thus placed the species in *Actinocyclus* Ehrenb. The species was not studied in scanning electron microscope (SEM), so data on the structure of pseudonodulus in SEM are missing. On the other hand, another

important morphological character of the species is the presence of multiple subcentral rimoportulae, that is a unique feature of the genus *Stellarima* Hasle et P. A. Sims, and unknown in *Actinocyclus*. Therefore, I publish a new combination here.

Stellarima maccollumii (Harwood et T. Maruyama) Gogorev, comb. nov.

Basionym: *Actinocyclus maccollumii* Harwood et T. Maruyama, 1992, Proc. ODP, Sci. Results, 120: 700, pl. 17, fig. 29.

Williams and Round (1986) transferred *Synedra camtschatica* Grunow to the genus *Catacombas* D. M. Williams et Round, but left without change its variety *S. camtschatica* var. *finnmarchica* Cleve et Grunow. Later, Poulin *et al.* (1984) moved the both *Synedra* taxa to the genus *Fragilaria* Lyngbye and published appropriate combinations.

According to a modern classification system (Cox, 2015; Guiry, Guiry, 2017) the genus *Catacombas* includes only marine taxa and belongs to the family *Ulnariaceae*, whereas the genus *Fragilaria* contains freshwater and brackish-water species of the *Fragilaria-ceae*. *Synedra camtschatica* var. *finnmarchica* was described from the marine coast of North Norway (Finnmark) and has to be a member of the genus *Catacombas*. Based on this presumption I publish a new combination.

Catacombas camtschatica (Grunow) D. M. Williams et Round var. ***finnmarchica*** (Cleve et Grunow) Gogorev, comb. nov.

Basionym: *Synedra camtschatica* var. *finnmarchica* Cleve et Grunow in Grunow, 1880, Bih. Kongl. Svenska Vetensk.-Akad. Handl., ser. 4, 17(2): 106, pl. VI, fig. 113.

≡ *Fragilaria camtschatica* var. *finnmarchica* (Cleve et Grunow) M. Poulin, L. Bérard-Therriault et A. Cardinal, 1984, Naturaliste Canad., 111(4): 351.

The name *Synedra salina* W. Sm. was hardly accepted in publications after its description (Smith, 1853). Later, the species was considered an intraspecific taxon of *S. ulna* (Nitzsch) Ehrenb. because of their great morphological similarity. The protologues of *S. salina* and *S. ulna* f. *marina* (Rabenhorst, 1864) inform that these taxa differ from *S. ulna* s. str. by denser striae on the valve and, possibly, by somewhat longer valve. *S. salina* was described from the marine habitat and is characteristic of saline and brackish waters, in contrast to the typically freshwater *S. ulna*. Since *S. ulna* (≡ *Ulnaria ulna* (Nitzsch) Compère) is the type species of the genus *Ulnaria* (Kütz.) Compère, and *S. salina* undoubtedly belongs to the same genus, I publish a new combination.

Ulnaria salina (W. Sm.) Gogorev, comb. nov.

Basionym: *Synedra salina* W. Sm., 1853, Syn. Brit. Diat., 1: 71, pl. XI, fig. 88.

≡ *Synedra ulna* var. *salina* (W. Sm.) Schaarschm., 1880, Magyar Növényt. Lapok, 5: 162. ≡ *Synedra ulna* f. *salina* (W. Sm.) West et G. S. West, 1901, Bot. Trans. Yorkshire Naturalists Union, 5: 197.

= *Synedra ulna* f. *marina* (Nitzsch) Rabenh., 1864, Fl. Eur. Alg., 1: 134.

Replacement names for *Amphiprora hyalina* and two *Navicula* species (*Bacillariophyta*). R. M. Gogorev. — Замещающие названия для *Amphiprora hyalina* и двух видов рода *Navicula* (*Bacillariophyta*). Р. М. Гогорев.

Amphiprora hyalina Grev. was described from Honkong Harbour (Greville, 1865). Two later homonyms were published subsequently by Van Heurck (1881) and Pantocsek (1902). *A. hyalina* Eulens. ex Grunow, nom. illeg. (Van Heurck, 1881) was validated by transferring to *Amphiprora paludosa* var. *hyalina* Cleve (1894) (McNeill *et al.*, 2012: Art. 58.1). Below I propose a replacement name for the second homonym.

Amphiprora pantocsekii Gogorev, nom. nov.

Replaced synonym: *Amphiprora hyalina* Pant., 1902, Zap. Imp. S.-Peterburgsk. Mineral. Obsch., ser. 2, 39(2): 638, pl. 13, fig. 58, nom. illeg., non Grev., 1865, nec Grunow in Van Heurck, 1881.

After *Navicula constricta* Ehrenb. was described from outskirts of Berlin (Ehrenberg, 1838), three later homonyms were published subsequently by Grunow (1860), Pero (1894) and Schütt (1896). *N. constricta* Grunow, nom. illeg. was validated by transfer in another genus as *Diploneis constricta* Cleve (1894) (McNeill *et al.*, 2012: Art. 58.1). Another illegitimate name *Navicula constricta* (Ehrenb.) Schütt was combined on basionym *Stauroneis constricta* Ehrenb. (1843), the last name is valid and currently accepted taxonomically. Below I propose a replacement name for the third homonym.

Navicula peroi Gogorev, nom. nov.

Replaced synonym: *Navicula constricta* Pero, 1894, Nuova Notarisia, 5: 417, nom. illeg., non Ehrenb., 1838, nec Grunow, 1860.

Navicula grunovii O'Meara (1875) is a later homonym of *N. grunovii* Rabenhorst (1864). Below I propose replacement name for it.

Navicula omearae Gogorev, nom. nov.

Replaced synonym: *Navicula grunovii* O'Meara, 1875, Proc. Roy. Irish Acad., ser. 2, Science, 2: 362, pl. 31, fig. 17, nom. illeg., non *Navicula grunovii* Rabenh., 1864.

References

- Cleve P. T. 1894. Synopsis of the naviculoid diatoms. Part I. *Bih. Kongl. Svenska Vetensk.-Akad. Handl.* 26(2): 1–194.
- Cox E. J. 2015. Coscinodiscophyceae, Mediophyceae, Fragilariophyceae, Bacillariophyceae (Diatoms). *Syllabus of Plant Families. Adolf Engler's Syllabus der Pflanzenfamilien. Part 2/1. Photoautotrophic eukaryotic Algae: Glaucocystophyta, Cryptophyta, Dinophyta/Dinzoa, Haptophyta, Heterokontophyta/Ochrophyta, Chlorarachniophyta/Cercozoa, Euglenophyta/Euglenozoa, Chlorophyta, Streptophyta p. p.* Berlin: 64–103.
- Ehrenberg C. G. 1838. *Die Infusionsthierchen als vollkommene Organismen: Ein Blick in das tiefere organische Leben der Natur.* Leipzig: i–xviii, 1–547.

- Ehrenberg C. G. 1843. Verbreitung und Einfluss des mikroskopischen Lebens in Süd-und Nord-Amerika. *Abh. Königl. Akad. Wiss. Berlin.* 1841: 291–466.
- Greville R. K. 1865. Descriptions of new genera and species of diatoms from Hongkong. *Ann. Mag. Nat. Hist., ser. 3* 16(91): 1–7.
- Grunow A. 1860. Über neue oder ungenügend gekannte Algen. Erste Folge, Diatomeen, Familie Naviculaceen. *Verh. K. K. Zool.-Bot. Ges. Wien* 10: 503–582.
- Guiry M. D., Guiry G. M. 2017. *AlgaeBase*. World-wide electronic publication, National University of Ireland, Galway. <http://www.algaebase.org>
- Harwood D. M., Maruyama T. 1992. Middle Eocene to Pleistocene diatom biostratigraphy of Southern Ocean sediments from the Kerguelen Plateau, Leg 120. *Proceedings ODP, Scientific Results* 120: 683–733.
- McNeill J., Barrie F. R., Buck W. R., Demoulin V., Greuter W., Hawkworth D. L., Herendeen P. S., Knapp S., Marhold K., Prado J., Prud'homme van Reine W. F., Smith G. F., Wiersema J. H., Turland N. J. 2012. International Code of Nomenclature for algae, fungi and plants (Melbourne Code) adopted by the Eighteenth International Botanical Congress Melbourne, Australia, July 2011. *Regnum Vegetabile* 154. Koenigstein: 232 p.
- O'Meara E. 1875. Report on the Irish Diatomaceae. *Proc. Roy. Irish Acad., ser. 2, Science* 2: 235–425.
- Pantocsek J. 1902. Die Bacillarien des Klebschiefers von Kertsch. *Zap. Imp. S.-Peterburgsk. Mineral. Obshch. ser. 2* [Verhandlungen der Kaiserlichen Gesellschaft für die Gesamte Mineralogie zu St. Petersburg] 39(2): 627–655.
- Pero P. 1894. I laghi alpini valtellinesi (continuazione) [Ricerche e studi sui Laghi Valtellinesi]. *Nuova Notarisia* 5: 413–489, 531–607, 669–704.
- Poulin M., Bérard-Therriault L., Cardinal A. 1984. Les diatomées benthiques de substrats durs des eaux marines et saumâtres du Québec. 3. Fragilarioideae (Fragilariales, Fragilariaceae). *Naturaliste Canad.* 111(4): 349–367.
- Rabenhorst L. 1864. *Flora europaea algarum aquae dulcis et submarinae. Sect. I: Algas diatomaceas complectens, cum figuris generum omnium xylographice impressis.* Lipsiae: 359 p.
- Schütt F. 1896. Peridinales (Peridineae, Dinoflagellata, Cilioflagellata, arthrodele Flagellaten). Bacillariales (Diatomeae). *Die natürlichen Pflanzenfamilien. I. Teil. Abt. 1b.* Leipzig: 1–153.
- Smith W. 1853. *A synopsis of the British Diatomaceae; with remarks on their structure, function and distribution; and instructions for collecting and preserving specimens. Vol. 1.* London: [i]–xxxiii + 1–89.
- Van Heurck H. 1881. *Synopsis des Diatomées de Belgique. Atlas. Fasc. 2.* Anvers: pls 11–30.
- Williams D. M., Round F. E. 1986. Revision of the genus *Synedra* Ehrenb. *Diatom Res.* 1(2): 313–339.