

Diatoms of North America: Nomenclatural transfers within the Bacillariophyceae 1.

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The online diatom identification and ecological assessment guide, *Diatoms of North America* (<https://diatoms.org>), provides taxonomic, nomenclatural, and ecological information on over 1000 diatom species to date (Spaulding & al. 2021). In creating and maintaining species pages for the website and in supporting efforts to achieve taxonomic certification by the *Society for Freshwater Science* (<https://freshwater-science.org/about/taxonomic-certification>), issues have arisen regarding the identification, nomenclature, and systematic position (e.g. genus) of taxa. Here we propose several nomenclatural transfers necessitated by recent changes in the classification and phylogeny of diatoms (Ruck & al. 2016, Jahn & al. 2019, Wynne 2019).

Surirella internationalis (Bahls) Spaulding, *comb. nov.*

Basionym: *Cymatopleura internationalis* Bahls, *Phytotaxa*, 82(1): 25, fig. 104. 2013 ('internationale').

PhycoBank Registration: <http://phycobank.org/104259>

Notes: Recent revisions based on molecular phylogenies of the keeled and canal raphe-bearing diatom genera *Surirella*, *Cymatopleura*, *Rhopalodia*, and *Iconella*, revealed monophyly of the genus *Surirella*. This necessitated nomenclatural transfers of many nested taxa within *Surirella* (Ruck & al. 2016), including the freshwater forms of *Cymatopleura*. However, *Cymatopleura internationalis* from Glacier National Park, Montana, USA, described by Bahls (2013), was not included in the transfers to *Surirella* proposed by Ruck & al. (2016) and Jahn & al. (2017).

Gomphonella fogedii Edlund, *stat. et nom. nov.*

Replaced synonym: *Gomphonema olivaceoides* var. *densistriatum* Foged, *Natura Jutlandica* 10: 40, pl. VI [6]: fig. 5, 1963 ('densestriata').

PhycoBank Registration: <http://phycobank.org/104260>

Notes: Recent revisions based on molecular and morphological phylogenies of *Gomphonema* and its allies (Jahn & al. 2019) resulted in the recognition of a monophyletic grouping around *Gomphonema olivaceum* (Hornemann) Ehrenberg and allies. *Gomphonema olivaceum* was originally described as *Ulva olivacea* Hornemann (1810: fasc. 24; pl. MCCCCXXIX [1429]), which was transferred as *Gomphonella olivacea* (Hornemann) Rabenhorst (1853: 61, pl. IX [9]), the generitype of *Gomphonella* Rabenhorst, 1853. As a result, Jahn & al. (2019) resurrected the genus *Gomphonella* to define this monophyletic grouping. One taxon that was not transferred on the basis of this resurrected name was Foged's *Gomphonema olivaceoides* var. *densistriatum*, which has all the characters (Foged 1963, Bishop 2017) of the resurrected genus *Gomphonella*,

necessitating this transfer and a new name at the species level as *Gomphonella densistriata* (Levkov) R.Jahn & N.Abarca is already occupied.

Delicatophycus tundraphilus (Bahls) Edlund, *comb. nov.*

Basionym: *Cymbopleura tundraphila* Bahls, *Diatoms from western North America 1. Some new and notable biraphid species*. p. 16, fig. 70, 2017.

PhycoBank Registration: <http://phycobank.org/104261>

Notes: Recent recognition that several generic diatom names were based on descriptive or adjectival terms led to new validated names, including *Decussatophycus* (Guiry & Gandhi. 2019), *Delicatophycus* (Wynne 2019), *Pulchellophycus* (Edlund & Wynne 2019), and others (e.g. Blanco & Wetzel 2016, Turland & al. 2018). However, *Cymbopleura tundraphila*, described by Bahls (2017) from Nunavut, Canada (Coppermine River, September Mountains Lake), shares diagnostic features (Bahls 2018) with the recently validated genus *Delicatophycus*, justifying this transfer, as suggested by Bahls (2019: 22).

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