

Taxonomic transfers within the *Surirellaceae* (*Bacillariophyceae*) from *Stenopterobia* to *Iconella*

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Recent taxonomic changes within the *Surirellaceae* have resulted in the transfer of species formerly placed in *Stenopterobia* Brébisson ex Van Heurck to the recently reinstated genus *Iconella* Jurilj (Ruck & al. 2016a, 2016b, Jahn & al. 2017, Sala & al. 2021). Ruck & al. (2016a, b) developed a phylogeny for the *Surirellales* resulting in a monophyletic clade, now known as *Iconella*, which included *Stenopterobia*. The morphological circumscription of *Iconella* was modified to include valves having keeled or raised raphe canals, fenestral bars and openings, and internally rimmed or ringed areolae (Ruck & al. 2016a, Jahn & al. 2017). However, it should be noted that internal areolae ornamentation, rimmed or not rimmed, appears to be a variable trait for the genus *Stenopterobia sensu lato* and variability is seen even within a species, as is the case for *Iconella delicatissima* (F.W.Lewis) Ruck & Nakov (Siver & Camfield 2007). More work is needed to assess the polymorphic nature of internal areolae ornamentation within *Iconella*.

Using authors' descriptions and scanning electron micrographs from published literature we diagnose and transfer several species of *Stenopterobia* based on morphology to the genus *Iconella*. Metzeltin & Lange-Bertalot (1998, pl. 210: fig. 4) showed that *S. planctonica* Metzeltin & Lange-Bertalot has a raised raphe and fenestral openings. Siver & Hamilton (2005, figs 52–60) showed that *S. pseudodelicatissima* Siver & P.B.Hamilton has a raised raphe canal, fenestral openings, fenestral bars, and simple internal areolae openings, lacking ornamentation. Siver & Camfield (2007, figs 59–64), showed that *S. gracilis* Siver & L.Camfield has a raised raphe canal, fenestral openings, fenestral bars, and areolae are internally occluded, although open-ended internal areolae ornamented with a ring were observed. Siver & Camfield (2007, figs 111–122), showed that *S. baileyi* (F.W.Lewis) Brébisson ex Van Heurck has a raised raphe canal, fenestral openings, fenestral bars, and internal areolae openings ornamented by rings. Siver & Camfield (2007, figs 111–122), showed that *S. anceps* (F.W.Lewis) Brébisson ex Van Heurck having a raised raphe canal, fenestral openings, fenestral bars, and internal areolae openings ornamented with rings. Siver & Camfield (2007, figs 71–79 and 86–91) also showed that *S. fusiformis* Siver & L.Camfield has a raised raphe canal, fenestral openings, and fenestral bars. Interestingly, they showed that the external areolae openings are ornamented with rings and note the internal openings are not ornamented.

Iconella anceps (F.W.Lewis) Rytlewski & D.R.L.Burge, *comb. nov.*

Basionym: *Surirella anceps* F.W.Lewis *Proceedings of the Academy of Natural Sciences of Philadelphia* 15: 342, figs. 3a, b., 1863.

Homotypic synonym: *Stenopterobia anceps* (F.W.Lewis) Brébisson ex Van Heurck, 1896: 374

Registration: <http://phycobank.org/105595>

Iconella baileyi (F.W.Lewis) Rytlewski & D.R.L.Burge, *comb. nov.*

Basionym: *Surirella baileyi* F.W.Lewis *Proceedings of the Academy of Natural Sciences of Philadelphia* 15: 338, figs. 1a, b., 1863.

Registration: <http://phycobank.org/105597>

Iconella fusiformis (Siver & L.Camfield) Rytlewski & D.R.L.Burge, *comb. nov.*

Basionym: *Stenopterobia fusiformis* Siver & L. Camfield. *Canadian Journal of Botany*. 85: 844, figs. 9, 71–79, 86–91, 2007.

Registration: <http://phycobank.org/105599>

Iconella gracilis (Siver & L.Camfield) Rytlewski & D.R.L.Burge, *comb. nov.*

Basionym: *Stenopterobia gracilis* Siver & L.Camfield *Canadian Journal of Botany*. 85: 840, figs 52–66, 2007.

Registration: <http://phycobank.org/105596>

Iconella planctonica (Metzeltin & Lange-Bertalot) Rytlewski & D.R.L.Burge, *comb. nov.*

Basionym: *Stenopterobia planctonica* Metzeltin & Lange-Bertalot in *Iconographia Diatomologica* 5: 221, pl. 219: fig. 3; pl. 210: fig. 4, 1998.

Registration: <http://phycobank.org/105594>

Iconella pseudodelicatissima (Siver & P.B.Hamilton) Rytlewski & D.R.L.Burge, *comb. nov.*

Basionym: *Stenopterobia pseudodelicatissima* Siver & P.B.Hamilton, *Canadian Journal of Botany* 83: 369, figs 40–45, 52–60, 2005.

Registration: <http://phycobank.org/105598>

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