

## Transfer of two soft-water *Surirella* species to *Iconella* (*Surirellaceae*, *Bacillariophyceae*)

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Based on morphological and molecular grounds, Ruck & al. (2016a) reinstated *Iconella* Jurilj to accommodate taxa within the *Surirellales* with a canal-raphe that is not positioned on the mantle but on an elevated marginal keel and occluded fenestrae. It includes taxa formerly attributed to *Campylodiscus* Ehrenberg, *Stenopterobia* Brébisson and the *Robustae* group of *Surirella* Turpin, necessitating several nomenclatural changes (Ruck & al. 2016b; Jahn & al. 2017; Cocquyt & Van De Vijver 2018; Kapustin & Kulikovskiy 2018). Referring to their structural details in common with *Iconella*, as illustrated by light and scanning electron microscopy by Leclercq (1983), Denys (1987) and Werum & Lange-Bertalot (2004), new combinations are proposed for two smaller *Surirella* species occurring in European low-alkalinity habitats.

### *Iconella bohemica* (G.W.Maly) Denys, comb. nov.

Basionym: *Suriraya bohemica* G.W.Maly, *Verhandlungen der kaiserlich-königlichen zoologisch-botanischen Gesellschaft in Wien Jahrgang 1895 XLV* [45]: 282, pl. VI [6], figs 13, 14, 1896.

Synonyms:

*Surirella bohemica* (G.W.Maly) Schönfeldt, *Bacillariales (Diatomeae)*. In: A. Pascher (ed.), *Die Süßwasser Flora Deutschlands, Österreichs und der Schweiz*. Heft 10: 171, 1913.

*Surirella clavatiformis* Denys, *Bulletin du Jardin botanique National de Belgique / Bulletin van de Nationale Plantentuin van België* 57: 267, figs 1–8, 1987.

Registration: <http://phycobank.org/104562>

Notes: Maly (1896: 280) lists this species under “*Suriraya* Turp., 1828 (*Surinella* Turp., 1927)”, with “*Surinella*” as an obvious typographical error for *Surirella*. Even though Maly followed Pfitzer’s (1871: 107) interpretation of *Suriraya* Turpin as an orthographic correction of *Surirella* Turpin 1828 (Fourtanier & Kociolek 1999), formal transfer to the latter remained necessary (Kusber & al. 2020). *Index Nominum Algarum* (2024) cites *Surirella bohemica* (Maly) Maly ex Schönfeld 1913 as the correct name in *Surirella* but the valid publication of *Suriraya bohemica* does not warrant the prescript ‘ex’ according to ICN Art. 46 (Shenzhen Code, Turland & al. 2018). Although Maly (1896) did not publish a combination within *Surirella*, Mayer (1915: 67) refers to *Surirella bohemica* Maly 1895, wrongly citing the year of publication as well as page number for the protologue. This was nevertheless followed by Cleve-Euler (1952: 105), Krammer & Lange-Bertalot (1988: 204) and Kociolek & al. (2024).

### *Iconella roba* (Leclercq) Denys, comb. nov.

Basionym: *Surirella roba* Leclercq, *Bulletin du Jardin botanique National de Belgique / Bulletin van de Nationale Plantentuin van België* 53: 493, fig. 1: 2–6, fig 2: 2–8, fig. 3: 1–5. 1987.

Registration: <http://phycobank.org/104563>

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Cleve-Euler, A. (1952). Die Diatomeen von Schweden und Finnland. Teil V [5]. *Kungliga Svenska Vetenskapsakademiens Handlingar* 3: 1–153, 46 Tafeln.

- Cocquyt, C. & Van De Vijver, B. (2018). The transfer of *Surirella kerguelensis* to *Iconella* (Bacillariophyceae). *Notulae algarum* 57: 1–2.
- Denys, L. (1987). *Surirella clavatiformis* sp. nov. a new diatom from northern Campine (Belgium). *Bulletin du Jardin botanique National de Belgique / Bulletin van de Nationale Plantentuin van België* 57: 267–270.
- Fourtanier, E. & Kociolek, J.P. (1999). Catalogue of the diatom genera. *Diatom Research* 14: 1–190.
- Jahn, R., Kusber, W.-H. & Cocquyt, C. (2017). Differentiating *Iconella* from *Surirella* (Bacillariophyceae): typifying four Ehrenberg names and a preliminary checklist of the African taxa. *PhytoKeys* 82: 73–112.
- Index Nominum Algarum*, University Herbarium, University of California, Berkeley. Compiled by Paul Silva. <http://ucjeps.berkeley.edu/CPD/>; searched on 23 April 2024
- Kapustin, D. & Kulikovskiy, M. (2018). Transfer of *Stenopterobia* and *Surirella* taxa (Bacillariophyceae) described from the insular Southeast Asia to the genus *Iconella*. *Nova Hedwigia, Beihefte* 147: 237–245.
- Kociolek, J.P., Blanco, S., Coste, M., Ector, L., Liu, Y., Karthick, B., Kulikovskiy, M., Lundholm, N., Ludwig, T., Potapova, M., Rimet, F., Sabbe, K., Sala, S., Sar, E., Taylor, J., Van De Vijver, B., Wetzel, C.E., Williams, D.M., Witkowski, A. & Witkowski, J. (2024). DiatomBase. *Surirella bohemica* Maly, 1895. <https://diatombase.org/aphia.php?p=taxdetails&id=610772>; searched on 24 April 2024
- Krammer, K. & Lange-Bertalot, H. (1988). *Bacillariophyceae 2. Teil: Bacillariaceae, Epithemiaceae, Surirellaceae*. In: Etl, H., Gerloff, J. & Heynig, H. (eds), *Süßwasserflora von Mitteleuropa 2*. pp. 1–437. Stuttgart – New York: Gustav Fischer Verlag.
- Kusber, W.-H., Cocquyt, C. & Jahn, R. (2020). Assessment of names in the genera *Iconella*, *Surirella* and *Suriraya* (Bacillariophyceae). *Notulae Algarum* 156: 1–4.
- Leclercq, L. (1983). Description et écologie de nouveaux taxons de diatomées des genres *Surirella* et *Achnanthes*. *Bulletin du Jardin botanique National de Belgique / Bulletin van de Nationale Plantentuin van België* 53: 491–505.
- Maly, G.W. (1896). Beiträge zur Diatomeenkunde Böhmens. I. Böhmerwald. *Verhandlungen der kaiserlich-königlichen zoologisch-botanischen Gesellschaft in Wien* XLV [45]: 271–283 (printed separately as *Arbeiten des botanischen Institutes der kaiserlich königlichen deutschen Universität in Prag* XIV [14]: 1–13, Tafel VI [6], 1896).
- Mayer, A. (1917). Beiträge zur Diatomeenflora Bayerns. *Denkschriften der Königlich Baierischen Botanischen Gesellschaft in Regensburg* 13: 1–151.
- Pfitzer, E. (1871). *Untersuchungen über Bau und Entwicklung der Bacillariaceen (Diatomaceen)*. In: Hanstein, J. (ed.), *Botanische Abhandlungen aus dem Gebiet der Morphologie und Physiologie* Bd 2. pp. [i]–vi, [1]–189, 6 Tafeln. Bonn: bei Adolph Marcus.
- Ruck, E.C., Nakov, T., Alverson, A.J. & Theriot, E.C. (2016a). Phylogeny, ecology, morphological evolution, and reclassification of the diatom orders Surirellales and Rhopalodiales. *Molecular Phylogenetics and Evolution* 103: 155–171.
- Ruck, E.C., Nakov, T., Alverson, A.J. & Theriot, E.C. (2016b). Nomenclatural transfers associated with the phylogenetic reclassification of the Surirellales and Rhopalodiales. *Notulae Algarum* 10: 1–4.
- Schönfeldt, H. von (1913). *Bacillariales (Diatomeae)*. In: Pascher, A. (ed.), *Die Süßwasser Flora Deutschlands, Österreichs und der Schweiz*. Heft 10, pp. 1–187. Jena: G. Fischer.
- 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. pp. [i]–xxxviii, 1–253. Glashütten: Koeltz Botanical Books.

Werum, M. & Lange-Bertalot, H. (2004). Diatomeen in Quellen unter hydrogeologischen und anthropogenen Einflüssen in Mitteleuropa und anderen Regionen. *Iconographia Diatomologica* 13: 3–417.