

**Note on the type of *Sabbea* Van de Vijver, J.Bishop & Kopalová (*Naviculaceae*, *Bacillariophyceae*)**

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Van de Vijver & Kusber (2018) proposed to validate *Navicula adminii* D.Roberts & McMinn (Roberts & McMinn 1999), which they considered a nomenclaturally invalid name. Their interpretation of its validity was questioned by Nicholas Turland (pers. comm.). Richard Moe (in *Index Nominum Algarum* 2020) also considered the original name to be valid.

The main issue of the Roberts & McMinn (1999) paper is that two different gatherings had been cited explicitly as “holotype” and “isotypes”, respectively, but this does not prevent the name being validly published, because the holotype specified belonged to a single gathering (ICN Art. 40.2; Turland & al. 2018). Because the so-called isotypes belonged to a different gathering, they are not in fact isotypes, which must be duplicates of the holotype (ICN Art. 9.5). This use of the term isotype is to be treated as a correctable error (ICN Art. 9.10) for a paratype (ICN Art. 9.7). Thus, Roberts & McMinn’s name was not invalid and a validation was unnecessary. Van de Vijver & Kusber (2018) also recognised that the epithet *adminii* was formed in an unusual way and not in the manner recommended by Rec. 60D of the *Code*, which would give, amongst others, *adminensis* or *adminica*. The epithet was taken from “Lake Admin”. A correction of an epithet derived from a geographical name is permitted only in the case of orthographical or typographical errors (ICN Art. 60.1); corrections of the endings, as required for epithets derived from personal names (ICN Art. 60.8), are not required for epithets derived from geographical names. Recommendation 60E of the *Code* is restricted to names of new taxa or replacement names only. For the intended validation, Van de Vijver & Kusber (2018) formed the epithet *adminensis* following Rec. 60D and 60E. Because *Navicula adminii* D.Roberts & McMinn was already validly published, the use of a different epithet created a superfluous and hence illegitimate name (ICN Art. 52.1).

When Bishop & al. (2019) published *Sabbea* Van de Vijver, J.Bishop & Kopalová as the name of a new, monotypic genus, they indicated the type as “*Sabbea adminensis*”, an intended new combination by the same authors, who cited the intended basionym as “*Navicula adminensis* Roberts & McMinn 1999 *Bibliotheca Diatomologica* 44, p. 27, plate 4, figs 2–4”, which is the place of valid publication of *Navicula adminii*.

In conclusion, Bishop & al. (2019) validly published a generic name, *Sabbea*, based on a validly published species name, *Navicula adminii*, but they failed to legitimately publish a new combination in *Sabbea* based on *N. adminii*.



Here the treatment for *Sabbea* including the provision of a legitimate species name in that genus for the name of the type of the generic name is given:

Sabbea Van de Vijver, J.Bishop & Kopalová in *Phytotaxa* 418(1): 52, 2019.

Type: *Sabbea adminii* (D.Roberts & McMinn) Van de Vijver, J.Bishop & Kopalová, *comb. nov.* (\equiv *Navicula adminii* D.Roberts & McMinn).

Sabbea adminii (D.Roberts & McMinn) Van de Vijver, J.Bishop & Kopalová, *comb. nov.*

Basionym: *Navicula adminii* D.Roberts & McMinn in *Bibliotheca Diatomologica* 44: 27, pl. 4: figs 2-4, 1999 \equiv *Navicula adminensis* D.Roberts & McMinn ex Van de Vijver & Kusber in *Notulae Algarum* 65: 1, 2018, *nom. illeg.* (ICN Art. 52.1).

Registration: <http://phycobank.org/102360>

Because the holotype of *Navicula adminii* was lost, an unpublished slide from the original material was selected as the lectotype in Bishop & al. (2019: 46): **BR-4555** (Meise Botanic Garden, Belgium: slide AD-3, Admin Lake, Vestfold Hills, Antarctic Continent). Additionally, an epitype was designated in Bishop & al. (2019: 46): **BR-4556** (Meise Botanic Garden, Belgium: sample accession 2488, Blue Lake, McMurdo Sound, Antarctic Continent). The lectotype is represented by LM figs 1-20, the epitype is represented by SEM figs 21-29 in Bishop & al. (2019).

The entries of *Navicula adminensis* and *Sabbea adminensis* have been annotated in PhycoBank (2020).

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Bishop, J., Kopalová, K., Darling, J.P., Schulte, N.O., Kohler, T.J., McMinn A., Spaulding, S.A., McKnight, D.M. & Van de Vijver, B. (2019). *Sabbea* gen. nov., a new diatom genus (Bacillariophyta) from continental Antarctica. *Phytotaxa* 418(1): 42–56.

Index Nominum Algarum, University Herbarium, University of California, Berkeley. Compiled by Paul Silva. Available online at <http://ucjeps.berkeley.edu/CPD/>; searched on 03 August 2020.

PhycoBank (2020). Registration of Nomenclatural Acts of Algae. Available from <https://phycobank.org>, searched on 03 August 2020.

Roberts, D. & McMinn, A. (1999). Diatoms of the saline lakes of the Vestfold Hills, Antarctica. *Bibliotheca Diatomologica* 44: 1–83.

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., editors (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*, Vol. 159. pp. [i]-xxxviii, 1–253. Glashütten: Koeltz Botanical Books.

Van de Vijver, B. & Kusber, W.-H. (2018). Validation of *Navicula adminensis* D.Roberts & McMinn (“*Navicula adminii*” D.Roberts & McMinn) (*Naviculaceae*, Bacillariophyceae). *Notulae Algarum* 65: 1.