The valid transfer of *Cyclotella bodanica* var. *intermedia* to *Lindavia* (Bacillariophyceae)

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The genus *Lindavia* (Schütt) De Toni & Forti (De Toni & Forti 1900: 553) was resurrected by Nakov *et al*. (2015) to accommodate a number of taxa previously placed in the genus *Cyclotella* (Kützing) Brébisson, *nom. et typ. cons.* (Brébisson 1838: 19) and the related genera *Pliocaenicus* Round & Håkansson (Round & Håkansson 1992: 116), *Handmannia* M. Peragallo *in* Handmann (Handmann 1913: 14), and *Puncticulata* Håkansson (Håkansson 2002: 21, 112). Support for recognizing the monophyletic genus *Lindavia* was based on valve characters associated with position of the rimoportulae (Nakov *et al*. 2015) and published molecular and morphological phylogenetic trees (Alverson *et al*. 2007). *Lindavia* specimens possess at least one rimoportula, and both internal and external openings of the rimoportulae are located on the valve face rather on than the valve face margin or mantle, a feature that is unique to the genus (Nakov *et al*. 2015).

Species of *Lindavia* frequently have a convoluted taxonomic history. An example that has recently come to our attention is *Lindavia intermedia* (Manguin) Nakov *et al*. nom. inval. (Nakov *et al*. 2015: 256). The earlier name upon which this taxon was based, *Cyclotella bodanica* var. *intermedia* Manguin (1961: 268), was invalidly introduced as a Latin description was not provided and a type was not designated. Kociolek and Reviers (1996) provided a Latin description and designated a type to validate the taxon as *Cyclotella bodanica* var. *intermedia* Manguin *ex* Kociolek & Reviers (1996: 176). However, two subsequent attempts to elevate this taxon to species rank – *Cyclotella intermedia* (Manguin) Houk *nom. inval. in* Houk *et al*. (2010: 34), and *Lindavia intermedia* (Manguin) Nakov *et al*. *nom. inval.* (Nakov *et al*. 2015: 256) – failed, because they did not provide a full and direct citation of the basionym by Kociolek & Reviers (1996) that validated the name (see ICN Art. 6.10, Art. 41.5). The recommended indication of the taxon's new rank was also missing (Art. 32, *Rec. 32.A.1*) in the transfer proposed by Nakov *et al*. (2015). As such, a valid transfer to the genus *Lindavia* is necessary and is provided here in accordance with the ICN (McNeill *et al*. 2012; Art. 6.10, Art. 41.5, Art. 32, *Rec. 32.A.1*):

***Lindavia intermedia* (Manguin *ex* Kociolek & Reviers) T.Nakov, W.X.Guillory, M.L.Julius, E.C.Theriot & A.J.Alverson *ex* W.C.Daniels, Novis & Edlund comb. et stat. nov.**
Basionym: *Cyclotella bodanica* var. *intermedia* Manguin *ex* Kociolek & Reviers *Cryptogamie, Algologie* 17(3): 176, 1996.

The genus *Lindavia* has generally gained acceptance within the phycological community (e.g., Mohan *et al.* 2016). Other researchers have offered alternative hypotheses limiting membership within the genus (Acs *et al.* 2016); however, the inclusion of *Lindavia intermedia* has not been questioned. Earlier works synonymized *Lindavia intermedia* with *Lindavia lemanensis* (Chodat) Nakov *et al*. (within the genus *Cyclotella*; Krammer and Lange-Bertalot 1991) or with *Lindavia bodanica* Eulenstein *ex* Grunow *in* Schneider (within the genus *Cyclotella;* Genkal *et al*. 2013). Other work recognises *Lindavia intermedia* as a separate species (Houk *et al*. 2010, Daniels 2012). *Lindavia intermedia* has received renewed attention in ecological studies, appearing relevant in paleolimnologic records from lakes in Montana (Spanbauer *et al*. 2016) and Alaska (Daniels

unpublished), and having been identified as a potential nuisance-diatom in New Zealand water bodies (Saulnier-Talbot *et al*. 2016).

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