

Validation of *Lacuneolimna* (Sellaphoraceae, Bacillariophyceae)

Loïc Tudesque¹, Horst Lange-Bertalot² & Wolf-Henning Kusber³

¹ Centre de Recherche sur la Biodiversité et l'Environnement (CRBE), Université de Toulouse, CNRS, IRD, Toulouse INP, Université Toulouse 3 – Paul Sabatier (UT3), Toulouse, France

² Goethe-Universität, Botanisches Institut, Frankfurt am Main, Germany

³ Botanischer Garten Berlin, Freie Universität Berlin, Königin-Luise-Str. 6–8, D-14195 Berlin, Germany (correspondence: w.h.kusber@bo.berlin)

When Tudesque & al. (2015) intended to name a genus with two species originally described in “*Eolimna*” (Schiller & Lange-Bertalot 1997), they were not aware that the intended type “*Eolimna zalokariae*” was invalidly published, because the genus name was not valid in accordance with the International Code of Nomenclature (Turland & al. 2018, ICN: Art. 35.1). For the place of valid publication of *Eolimna* Lange-Bertalot & W. Schiller see Lange-Bertalot & al. (2024). The aim of this note is to provide a validated treatment for the designation “*Lacuneolimna*”.

Lacuneolimna Tudesque, Le Cohu & Lange-Bertalot, *gen. nov.*

Replaced designation: “*Lacuneolimna*” Tudesque, Le Cohu & Lange-Bertalot, *nom. inval.*, ICN Art. 10.1.

Description (English): Tudesque & al. (2015: 21).

Type: *Lacuneolimna zalokariae* Tudesque & Lange-Bertalot, *sp. nov.*

Registration: <http://phycobank.org/104382>.

Lacuneolimna zalokariae Tudesque, Le Cohu & Lange-Bertalot, *sp. nov.*

Replaced designation: “*Lacuneolimna zalokariae*” Tudesque, Le Cohu & Lange-Bertalot, *Phytotaxa* 231(1): 24, 2015, *nom. inval.*, ICN Art. 35.1.

Replaced designation: “*Eolimna zalokariae*” Metzeltin & Lange-Bertalot, *Iconographia Diatomologica* 5: 39, pl. 167: figs 1–2, 1998, *nom. inval.*

Description (Latin): Metzeltin & Lange-Bertalot (1998: 39, 40) for “*Eolimna zalokariae*”

Holotype: **FR** AmS-664 (Senckenberg Gesellschaft für Naturforschung: Senckenberg Forschungsinstitut und Naturmuseum, Frankfurt/Main, Germany).

Type locality: Rio Tapajós, Brazil (leg. H. Lange-Bertalot, August 1985).

Etymology: The taxon is dedicated to the phycologist Yolanda Zalokar de Dimitrovic, Corrientes, Argentina.

Representative illustrations: pl. 167: figs 1, 2 in Metzeltin & Lange-Bertalot (1998).

Registration: <http://phycobank.org/104383>.

Further observations: French Guiana, different localities with a range of chemico-physical data (see map on fig. 1 and table 1 in Tudesque & al. 2015); Nouvelle France River, illustrated as figs 2–34 in Tudesque & al. (2015).

Lacuneolimna novagallia Tudesque & Le Cohu, *sp. nov.*

Replaced designation: “*Lacuneolimna novagallia*” Tudesque & Le Cohu, *Phytotaxa*: 24, figs 43–71. 2015, *nom. inval.*, ICN, Art. 35.1.

Description (English): Tudesque & Le Cohu in Tudesque & al. (2015: 24).

Holotype: **PC** 0534080 (Muséum National d'Histoire Naturelle de Paris, France); isotype: **ANSP** GC 26822 (Academy of Natural Sciences, Philadelphia, U.S.A.).

Registration: <http://phycobank.org/104384>.



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- Metzeltin, D. & Lange-Bertalot, H. (1998). Tropical diatoms of South America I: About 700 predominantly rarely known or new taxa representative of the neotropical flora. *Iconographia Diatomologica* 5: 3–695, 220 pls.
- Schiller, W. & Lange-Bertalot, H. (1997). *Eolimna martinii* n. gen., n. sp. (Bacillariophyceae) aus dem Unter-Oligozän von Sieblos/Rhön im Vergleich mit ähnlichen rezenten Taxa. *Paläontologische Zeitschrift* 71(3/4): 163–172.
- Tudesque, L., Le Cohu, R., Coste, M. & Lange-Bertalot, H. (2015). *Lacuneolimna* gen. nov., *Lacuneolimna zalokariae* comb. nov. and *Lacuneolimna novagallia* spec. nov. (Bacillariophyceae) from the French Guiana diatom freshwater flora. *Phytotaxa* 231(1): 19–30, 71 fig., 2 tables.
- 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.