
Typification of *Lepocinclus ovum* (Ehrenberg) Lemmermann (*Euglenophyta*), a widespread freshwater species

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Lepocinclus ovum is a cosmopolitan and common freshwater species of euglenoid flagellates. It was first described by Ehrenberg (1840) under the name *Euglena ovum*, and later referred to the genus *Lepocinclus* by Lemmermann (1901). The validity of this generic placement was confirmed by contemporary phylogenetic analyses (Marin *et al.* 2003, Łukomska-Kowalczyk *et al.* 2019). Simultaneously, due to the morphological similarity of *L. ovum* to other species and difficulties with its correct identification, Marin *et al.* (2003) lectotypified *L. ovum* with an unpublished drawing by Ehrenberg (#551) and designated a preserved sample of strain AICB 278 (= CCAC 0099) as the epitype of *L. ovum*. Meanwhile, in light of the research presented by Łukomska-Kowalczyk *et al.* (2019), reasonable doubts arose regarding the correctness and validity of the *L. ovum* epitype designation. The first was of a substantive character: it was shown, that the “lectotype” and the “epitype” of *L. ovum* (both designated by Marin *et al.* 2003) differ taxonomically – the strain AICB 278 represents *L. cylindrica*, not *L. ovum*. The other doubt concerned the formal aspect - the typification statement published in Marin *et al.* (2003: 103) does not include the phrase “designated here” (or an equivalent) for either the lectotype or the epitype, and thus neither nomenclatural act has been effected in accordance with ICN Art. 7.11 (Turland *et al.* 2018).

As far as we can establish, lectotypification and the epitypification of *Lepocinclus ovum* has yet to be effected in accordance with ICN Art. 7. Therefore, we provide the following typification:

Lepocinclus ovum (Ehrenberg) Lemmermann 1901, *Berichte der deutsche botanischen Gesellschaft* 19: 88

Basionym: *Euglena ovum* Ehrenberg 1840, *Bericht über die zur Bekanntmachung geeigneten Verhandlungen der Königlich-Preussischen Akademie der Wissenschaften zu Berlin* 1840: 200

Lectotype (designated here): Ehrenberg’s unpublished drawing no. 551, dated April 1840, in the Ehrenberg Collection (Institut für Paläontologie, Museum für Naturkunde, Humboldt Universität zu Berlin, Invalidenstr. 43, D-10115 Berlin, Germany; [available here](#)).

Epitype (designated here): Figure 3a in Łukomska-Kowalczyk *et al.* (2019)

Representative DNA sequence: GenBank AF110419.

Representative strain: SAG 1244-8.

Type locality: Germany: Bremen.

Epitype locality: Freshwater, cattle pond near Tały Lake, Mazurian Lake District, Poland

(53°48'52.2" N, 21°34'23.0"E) (see Łukomska-Kowalczyk *et al.* 2019).

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Marin, B., Palm, A., Klingberg, M. & Melkonian, M. (2003). Phylogeny and taxonomic revision of plastid-containing euglenophytes based on SSU rDNA sequence comparisons and synapomorphic signatures in the SSU rRNA secondary structure. *Protist* 154: 99-145.

Lemmermann, E. (1901). Beiträge zur Kenntniss der Planktonalgen. XII. Notizen über einige Schwebealgen. XIII. Das Phytoplankton des Ryck und des Greifswalder Boddens. *Berichte der deutsche botanischen Gesellschaft* 19: 85-95.

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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.