

Carolibrandtia antarctica (Fritsch) H.Chae, H.-G.Choi & Ji Hee Kim, comb. nov. (Chlorellaceae, Trebouxiophyceae)

Ji Hee Kim, Hyunsik Chae & Han-Gu Choi

Division of Life Sciences, Korea Polar Research Institute, Incheon 21990, Korea (correspondence: jhalgae@kopri.re.kr)

Fritsch (1912a: 302, 324) described *Chlorosphaera antarctica* as a new species based on the examination of three collections "Samples 1-3 (yellow snow)" collected during the Scottish National Antarctic Expedition, 1902-04. However, a type was not specified in the protologue. As the original materials have been lost (Jo Wilbraham, Natural History Museum, London, pers. comm.), the selection of a lectotype from the illustrations cited in the protologue in Fritsch (1912) is necessary (ICN Art. 9.12; Turland & al. 2018). Despite Fritsch providing five illustrations based on these three collections, figure 2 in his plate 10 is that most frequently referenced in descriptions of the species. Therefore, we propose designating this figure as the lectotype for *Chlorosphaera antarctica* Fritsch, in accordance with ICN Recommendation 9A, and we designate an epitype to support this lectotype (Art. 9.9).

Additionally, in Chae & al. (2023: 248) we referred to Fritsch (1912b), which was not the correct place of publication of the basionym, rendering the proposed combination invalid as there was not a full and direct reference to the place of publication of the basionym (ICN Art. 41.5).

We here rectify both issues.

Carolibrandtia antarctica (Fritsch) H.Chae, H.-G.Choi & Ji Hee Kim, comb. nov.

- Basionym: *Chlorosphaera antarctica* Fritsch, *Journal of the Linnean Society of London, Botany* 40: 302 (English), 324 (Latin), pl. 10: figs 2-6; pl. 11, photos. 1, 3, 5, 6, C, 1912.
- Lectotype for *Chlorosphaera antarctica* Fritsch (here designated): [!icon] *Journal of the Linnean Society of London Botany* 40: pl. 10: fig. 2, 1912.
- **Epitype** for above lectotype (here designated): cryopreserved, metabolically inactive material from culture CCAP 211/45 lodged at CCAP (Culture Collection of Algae and Protozoa, SAMS, Ltd, Oban, Scotland).
- Registrations: <u>http://phycobank.org/104341</u> (name), <u>http://phycobank.org/104339</u> (lectotype), <u>http://phycobank.org/104340</u> (epitype).
- Representative strain: CCAP 211/45, as *Chlorella antarctica* (Fritsch) Wille, collected from an unknown site in Antarctica by Sutton in 1970.
- Note: *Chlorosphaera antatctica* Fritsch was recently transferred to the genus *Carolibrandtia* R.Hoshina & Nakada, 2018, *as Carolibrandtia antarctica* (Fritsch) H.Chae, H.-G.Choi & Ji Hee Kim in Algae 38(4): 248. 2023, nom. inval. (ICN, Art. 41.5), utilizing the same strain as the above-designated epitype. This reclassification is based on phylogenetic analysis and the secondary structure of the small subunit ribosomal RNA gene, as detailed in Chae & al. (2023). However, there was an error in the new combination; figs 2-6 from Fritsch (1912) were mistakenly cited as the holotype, accompanied by some inaccuracies in the literature citations.

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unavailability. This work was supported by KOPRI (Korea Polar Research Institute) grant funded by the Ministry of Oceans and Fisheries, Project no. PE24130.

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