

The disappearance of *Theriotia* Kociolek, Q.M.You, J.Stepanek, R.L. Lowe & Q.X.Wang after 24 days: a nomenclatural evaluation and advice for authors and editors

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Theriotia Kociolek, Q.M.You, J.Stepanek, R.L.Lowe & Q.X.Wang (authors of scientific names and designations are standardised according to IPNI, <https://ipni.org/>) was published in Kociolek & al. (2016a) electronically as a PDF by the journal *Phycological Research* under the digital object identifier <https://doi.org/10.1111/pre.12145>. After publication it became apparent that this generic name was a later homonym of *Theriotia* Cardot (*Diphysciaceae*, *Bryophyta* Cardot 1904). To provide a legitimate name for *Theriotia* Kociolek, Q.M.You, J.Stepanek, R.L.Lowe & Q.X.Wang, the diatom genus, a replacement name for (Kociolek & al. 2016a) was necessary. In this particular case, it was decided to correct the published PDF (Kociolek & al. 2016b), thus the corrected publication appeared under the same doi. The correction has been noted on the first page of the PDF as “[Correction added on 5 October 2016, after first online publication: The genus name ‘*Theriotia*’ has been corrected to ‘*Edtheriotia*’ in the title and throughout the article.]” The original publication disappeared after 24 days, and Kociolek & al. (2016b) was later printed as Kociolek & al. (2016c) under the same doi with a volume number and final pagination.

However, a key nomenclatural issue is that the publisher and authors provided corrections in the same paper with the same doi. This is not in accordance with the provisions of the Code of Nomenclature for algae, fungi, and plants. The text of ICN Art. 30.4 (Turland & al. 2018, Shenzhen Code) had been introduced already in the Melbourne Code as Art. 30.3 (McNeill & al. 2012) and reads “The content of a particular electronic publication may not be altered after it is effectively published. Any such alterations are not themselves effectively published and have no effect on the original publication. Corrections or revisions must be issued separately to be effectively published.” In the Madrid Code (Turland & al. 2025) the following sentence was added to Art. 30.4: “Electronic material that has been effectively published remains effectively published even if retracted.”

The intended correction of the illegitimate *Theriotia* to *Edtheriotia* in Kociolek & al. (2016b, c) seemed to solve the nomenclatural issue (Figure 1), but this procedure resulted in several unexpected nomenclatural issues, of which the authors and the communicating editor of Kociolek & al. (2016b, c) were not aware. Here, we evaluate each nomenclatural act in Kociolek & al. (2016a) and each correction in Kociolek & al. (2016b, c), we also try to figure out the intentions of Kociolek & al. (2016a–c) and to find nomenclatural solutions.

Theriotia Cardot in *Beihefte zum Botanischen Centralblatt* 17: 8. 1904.

Comment: This bryophyte moss genus, overlooked by Kociolek & al. (2016a), was published validly alongside its type, *Theriotia lorifolia* Cardot, and is named for Irénée Thériot (1859–1947) who studied Bryophytes and Spermatophytes.

Theriotia Kociolek, Q.M.You, J.Stepanek, R.L.Lowe & Q.X.Wang [12 Sept] 2016 in *Phycological Research*, initially not assigned to a volume, on page 2 of 7.

Comment: This diatom genus was named for Dr Edward C. Thériot (1953–), University of Texas at Austin, USA.

Although validly published it was illegitimate being a later homonym of *Theriotia* Cardot according to ICN Art. 53.1 (Madrid Code, Turland & al. 2025) and is to be cited as *Theriotia* Kociolek, Q.M.You, J.Stepanek, R.L.Lowe & Q.X.Wang [12 Sept] 2016 in *Phycological Research* without volume, page 2 of 7, *nom. illeg.*, not *Theriotia* Cardot, 1904.

Theriotia guizhoiana Kociolek, Q.M.You, J.Stepanek, R.L.Lowe & Q.X.Wang [12 Sept] 2016 in *Phycological Research* initially without volume, page 3 of 7 pages, figs 1-26. Holotype **COLO** 10 443.

Comment: *Theriotia guizhoiana* was validly published and formally linked to *Theriotia* that has priority: *Theriotia* Cardot. Because of this the intended typification of *Theriotia* Kociolek, Q.M.You, J.Stepanek, R.L.Lowe & Q.X.Wang with *Theriotia guizhoiana* was illegitimate.

Theriotia shanxiensis (S.Q.Xie & Y.Z.Qi) Kociolek, Q.M.You, J.Stepanek, R.L.Lowe & Q.X.Wang [12 Sept] 2016 in *Phycological Research* initially without volume, page 3 of 7 pages.

Comment: This combination was validly published with a full and direct reference to the basionym.

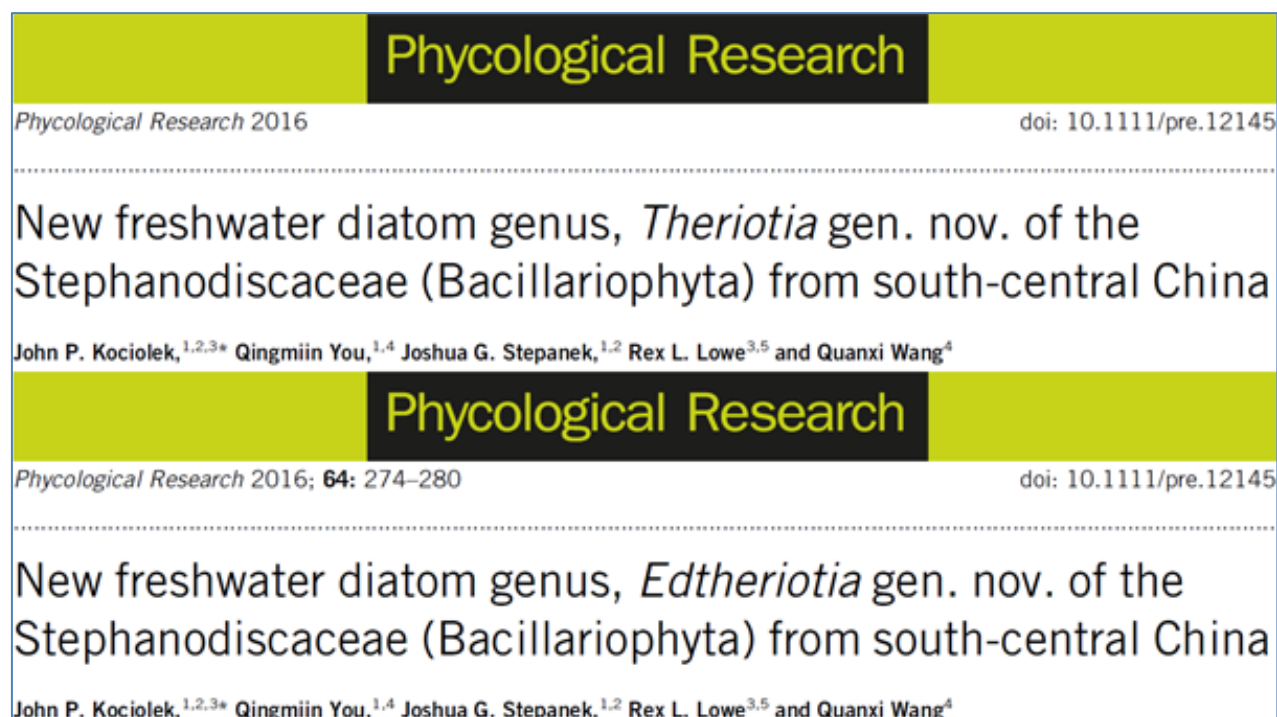


Figure 1. Above: screengrab of version of record of Kociolek & al. (2016a). Below: screengrab of corrected version as published with final pagination and volume under the same doi (Kociolek & al. 2016c).

“*Edtheriotia*” Kociolek, Q.M.You, J.Stepanek, R.L.Lowe & Q.X.Wang [05 Oct] 2016 in *Phycological Research* initially without volume, page 2 of 7. This designation was published in Kociolek (2016b) and later in print as Kociolek & al. (2016c: 275).

Comment: The authors intended “*Edtheriotia*” to be the effectively published, valid, legitimate, and the correct name for the illegitimate *Theriotia* in Kociolek (2016a); see above. Because “*Edtheriotia*” was not published in a subsequent publication, but as an alteration in the same publication, this intended nomenclatural act was not effectively published, neither in the corrected electronic version, nor in the printed volume (ICN Art. 30.4, Turland & al. 2025).

“*Edtheriotia guizhoiana*” Kociolek, Q.M.You, J.Stepanek, R.L.Lowe & Q.X.Wang [12 Sept] 2016 in *Phycological Research* initially without volume, page 3 of 7 pages, figs 1-26.

Comment: Because of ICN Art. 30.4 (Turland & al. 2025), the intended species name and type of “*Edtheriotia*” were not effectively published.

“*Edtheriotia shanxiensis*” Kociolek, Q.M.You, J.Stepanek, R.L.Lowe & Q.X.Wang [05 Oct] 2016 in *Phycological Research* without volume, page 3 of 7 pages.

Comment: Because of ICN Art. 30.4 (Turland & al. 2025), the intended combination was not effectively published.

We conclude that Kociolek & al. (2016b, c) intended to provide a replacement name for *Theriotia* Kociolek, Q.M.You, J.Stepanek, R.L.Lowe et Q.X.Wang, nom. illeg., not Cardot 1904 with inclusion for a newly described species as its type and adding a recombined species. Thus, the final treatment of the genus requires an effective publication of the respective nomenclatural acts that will be published in a subsequent paper by Kociolek & al.

Conclusion for publishers: It is strongly recommended that nomenclatural novelties and nomenclatural acts published in error be corrected in a subsequent publication, either as a PDF or as a printed note. Further, publishers should archive the version of record, as well as the publications with the incorrect information.

Conclusion for nomenclatural authors: The requirements for new combinations and replacement names for the full and direct reference to a basionym or replaced synonym is challenging in case the first effective electronical publication of an PDF, known as the ‘version of record’ is not now available. Missing page numbers or pagination differing from the final and/or printed paper as well as missing volume number in the version of record are issues that can be tackled citing the full and direct reference supplemented by “published in print as [followed by the full and direct reference to the printed issue]”.

Conclusion for data management: Registration of novelties and nomenclatural acts are a place to keep the data of the version of record. Phycobank (<http://phycobank.org>) aims to keep track of these nomenclatural details important for nomenclature by annotating these as a service to nomenclature and thereby to taxonomy.

Cardot, J. (1904). Première contribution à la flore bryologique de la Corée. *Beihefte zum Botanischen Centralblatt* 17: 1–44.

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