

## Typification of *Sporidesmium coronatum* revisited

Gregorio DELGADO, Ondřej KOUKOL & Uwe BRAUN

**Abstract:** Delgado, G., Koukol, O. & Braun, U. 2024: Typification of *Sporidesmium coronatum* revisited. *Schlechtendalia* **41**: 83–84.

The typification of the name *Sporidesmium coronatum*, type of the genus *Ellisembia*, is critically discussed and corrected. It is argued that this name needs to be lectotypified based on syntype materials preserved in numerous herbaria. Therefore, a lectotype is designated. Based on the unequivocally identified lectotype, epitypification of the name *Sp. coronatum* is not necessary. The specimen that has previously been cited as ‘epitype’ (registration not effected according to Art. F.5.4) is proposed to serve as a reference specimen with reference sequences for phylogenetic-taxonomic purposes.

**Zusammenfassung:** Delgado, G., Koukol, O. & Braun, U. 2024: Typisierung von *Sporidesmium coronatum* neu aufgegriffen. *Schlechtendalia* **41**: 83–84.

Die Typisierung des Namens *Sporidesmium coronatum*, Typusart der Gattung *Ellisembia*, wird kritisch diskutiert und korrigiert. Es wird argumentiert, dass dieser Name auf Grundlage von Syntypen, die in zahlreichen Herbarien erhalten sind, lectotypisiert werden muss. Deshalb wird ein Lectotypus designiert. Aufgrund der zweifelsfreien Identifizierung des Lectotypus ist keine Epitypisierung des Namens *Sp. coronatum* erforderlich. Die früher als ‚Epitypus‘ zitierte Kollektion (Epitypisierung nicht wirksam nach Art. F.5.4) wird vorgeschlagen, als Referenzkollektion mit Referenzsequenzen für phylogenetisch-taxonomische Zwecke zu dienen.

**Key words:** *Ellisembia*, lectotypification, epitype.

Published online 20 June 2024

Delgado et al. (2024) recently published a phylogenetic-taxonomic revision of *Ellisembia* Subram. (s. str.) including *E. coronata* (Fuckel) Subram., the type of the genus. *Sporidesmium coronatum* Fuckel (Fuckel 1874) is its basionym, and therefore the phylogenetic relationships of this species as well as the typification of the name are of special significance. Unfortunately, the original illustration published in Fuckel (1874) was erroneously cited by Delgado et al. (2024) as ‘holotype’, and wrongly interpreted from the “Typification details” listed in Index Fungorum. Furthermore, the proposed epitypification was not achieved due to the lack of an identifier (Art. F.5.4). Both circumstances led us to clarify the typification of *Sp. coronatum* in line with the current Code of nomenclature (Turland et al. 2018).

Fuckel (1874) introduced the name *Sp. coronatum*. In the protologue, he cited his own illustration (Fig. 26) and “An noch stehenden, dürren Aestchen von *Philadelphus coronarius*, selten, im Herbst. Bei N. Walluf.” [At still attached, barren branches of *Philadelphus coronarius*, rare, in autumn. Near N. Walluf.]. The cited collection data is a clear reference to a genuine collection (original material, Art. 9.12) that Fuckel (1874) used in his description, and which is preserved. As most authors of the 19<sup>th</sup> century, Fuckel (1874) did not designate a type/holotype. In such cases, a specimen or illustration can only be accepted as the holotype when an author demonstrably based the description of the new taxon only on a single specimen or a single illustration (Art. 9.1, Note 1). This, however, does not apply to the name *Sp. coronatum*, for which several duplicate specimens exist, and therefore Fuckel’s original illustration cannot be the holotype of *Sp. coronatum*. Due to the existence of more than one element within the original material, the nomenclatural type of this name (Art. 7.2) must be established by lectotypification. There are numerous duplicates of the original collection made near ‘N. Walluf’ [Niederwalluf, OT (Ortsteil) of Walluf, Rheingau-Taunus-Kreis, Hessen, Germany]. Fuckel (1874) published the name *Sp. coronatum* and distributed original material in the same year as part of Fuckel, *Fungi Rhen. Exs., Suppl., Fasc. 12, no. 2693*. Notably, Fuckel’s original collection must have been very rich. Several duplicates of the original material from Fuckel’s estate were maintained in the herbarium of the Swiss botanist W. Barbey (later Barbey-Boissier) in Geneva. R. H. Chodat, also a Swiss botanist in Geneva, distributed a series of fungi from the Herbarium Barbey-Boissier (no. 1–2685), which contained abundant material from Fuckel (Stafleu & Cowan 1976). They included no. 2568 (Herbarium Fuckel 1894), which was renumbered original material of *Sp. coronatum*. The year on the specimen ‘1894’ refers to the distribution of the series of exsiccata and has nothing to do with the year in which the material had been collected as Fuckel passed away in 1876. Since Fuckel’s herbarium is preserved in the herbarium at Geneva (G), it does make sense to designate the duplicate

(syntype) of *Sp. coronatum* maintained at G as lectotype. On the other hand, the citation of ‘type’ in connection with *Sp. coronatum* by Ellis (1958: 23) could be considered at first glance as lectotypification of this name based on Art. 7.11. Ellis, Deighton, and other mycologists working at IMI used to prepare slides of types they had examined from other herbaria, including K (Kew), and preserved them at IMI. In the case of *Sp. coronatum*, Ellis examined the duplicate of ‘Fuckel, Fungi Rhen. Exs., Suppl., no. 2693’ deposited at K and maintained the prepared slides at IMI. However, in his publication, he cited the examined duplicate as well as the slides deposited at IMI. Hence, his treatment does not constitute a lectotypification according to Art. 9.3 requiring the citation of one specimen, and since two specimens from two different herbaria had been cited. The unequivocal identification of the lectotype of *Sp. coronatum* renders an epitype unnecessary. Therefore, we propose to use the specimen collected at the type locality (‘topotype’), which has been cited as ‘epitype’ by Delgado et al. (2024), as reference material with reference sequences for phylogenetic-taxonomic purposes.

*Sporidesmium coronatum* Fuckel, Jahrb. Nassau. Ver. Naturk. **27–28**: 77, [1873–74] 1874.

≡ *Clasterosporium coronatum* (Fuckel) Sacc., Syll. fung. (Abellini) **4**: 385, 1886.

≡ *Ellisembia coronata* (Fuckel) Subram., Proc. Indian Natn Sci. Acad., Part B., Biol. Sci. **58**(4): 183, 1992.

**Lectotype** (designated here, MycoBank, MBT10020914): Germany, Hessen, Niederwalluf, on dried twigs of *Philadelphus coronarius*, s.d., K. W. G. L. Fuckel (G00266276). Isolectotypes: ex Herbarium Barbey-Boissier, no. 2568 [“Rameaux secs de *Philadelphus coronarius*, rare. Neu-Walluf près Oestrich (Nassau), legit Fuckel.” Herbarium Fuckel 1894] (BPI 427837–427839, CUP, DAOM 02-01000757512, FH, MICH-F-329236, MU 10542, S-F46416, WSP 22755), and Fuckel, Fungi Rhen. Exs., Suppl., no. 2693 (“Ad *Philadelphus coronarius* ramos aridos, raro. Autumno. Ca. N. Walluf.”) [e.g., FH, G, HAL, IMI 11864 (slides)].

**Reference material:** Germany, Hessen, Niederwalluf, by the northwest side of Sankt Johannes der Tauber Catholic church, 50° 02' 03.7" N, 8° 09' 38.4" E, 86 m a.s.l., on a dead twig of *Philadelphus coronarius*, 28 Sep. 2022, G. Delgado & M. Piepenbring (PRC 9257). Ex-reference strain: CCF 6699.

## Literature

Delgado, G., Koukol, O. Maciá-Vicente, J. G., Colbert, W & Piepenbring, M. 2024: Redefining *Ellisembia* sensu stricto with a reassessment of related taxa in Sordariomycetes. *Mycological Progress* **23**: 32.

Ellis, M. B. 1958: *Clasterosporium* and allied Dematiaceae-Phragmosporae. I. *Mycological Papers* **70**: 1–89.

Fuckel, K. W. G. L. 1874 [“1873–1874”]: *Symbolae mycologicae*. Zweiter Nachtrag. *Jahrbücher des Nassauischen Vereins für Naturkunde* **27–28**: 1–99.

Stafleu, F. A. & Cowan, R. S. 1976: *Taxonomic literature*. Volume I: A-G. Utrecht.

Turland, N. J., Wiersma, 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. (eds.) 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* **159**. Glashütten: Koeltz Botanical Books.

## Addresses of the authors

Gregorio Delgado, Eurofins Built Environment, 6110 W. 34th St., Houston, TX 77092, USA.

(E-mail: gregorio.delgado@et.eurofinsus.com)

Ondřej Koukol, Department of Botany, Faculty of Science, Charles University, Benatska 2, CZ–128 01 Prague 2, Prague, Czech Republic.

(E-mail: ondrej.koukol@natur.cuni.cz)

Uwe Braun, Martin-Luther-Universität, Institut für Biologie, Bereich Geobotanik und Botanischer Garten, Herbarium, Kirchtor 3, 06099 Halle (Saale), Germany.

(E-mail: uwe.braun@botanik.uni-halle.de)