©Institut für Biologie, Institutsbereich Geobotanik und Botanischer Garten der Martin-Luther-Universität Halle-Wittenberg

Reassessment of the nomenclature of some ascomycete names

Uwe BRAUN & Paul KIRK

Abstract: Braun, U. & Kirk, P. 2019: Reassessment of the nomenclature of some ascomycete names. Schlechtendalia **36**: 87–89.

The nomenclature of several ascomycete names is critically discussed. *Torula tritici* Corda, 1837, is a valid name introduced for a dematiaceous hyphomycete and probably a heterotypic synonym of *Rutola graminis.* Since type material is not preserved, Corda's original illustration is designated as lectotype. In 1842, Corda published the combination *Torula tritici* (Lib.) Corda (nom. illegit.), based on the valid basionym *Oidium tritici*, which is a heterotypic, anamorph-typified synonym of *Blumeria graminis*. Furthermore, the nomenclature of *Stenella cassiae* Abbasi & D.N. Shukla and *St. cassiae-fistulae*, two homotypic species, is analysed and corrected. *Stenella cassiae* Kamal, R.P. Singh & P. Kumar is an illegitimate name (Art. 53.1).

Zusammenfassung: Braun, U. & Kirk, P. 2019: Neubewertung der Nomenklatur einiger Askomyzetennamen. Schlechtendalia **36**: 87–89.

Die Nomenklatur mehrerer Askomyzetennamen wird kritisch diskutiert. *Torula tritici* Corda, 1837, ist eine gültiger Name, eingeführt für einen Hyphomyzeten mit pigmentierten Strukturen, der wahrscheinlich ein heterotypisches Synonym von *Rutola graminis* darstellt. Da kein Typusmaterial erhalten ist, wird Cordas Originalabbildung als Lectotypus bestimmt. Im Jahr 1842 veröffentlichte Corda die neue Kombination *Torula tritici* (Lib.) Corda (nom. illegit.), basierend auf dem gültigen Basionym *Oidium tritici*, welches ein heterotypisches, auf die Anamorphe begründetes Synonym von *Blumeria graminis* ist. Darüber hinaus wird die Nomenklatur zweier homotypischer Arten, *Stenella cassiae* Abbasi & D.N. Shukla and *St. cassiae-fistulae*, analysiert und korrigiert. *Stenella cassiae* Kamal, R.P. Singh & P. Kumar ist ein illegitimer Name (Art. 53.1).

Key words: *Oidium tritici*, *Torula tritici*, *Stenella cassiae*, *Zasmidium cassiae* comb. nov., lectotypification.

Published online 30 Jul. 2019

In the course of an analysis of the nomenclature of names cited as synonyms of the economically important powdery mildew species *Blumeria graminis* (Braun & Cook 2012), a nomenclatural problem around *Oidium tritici* became evident, above all in terms of a confusion with *Torula tritici*, which needs to be critically discussed and clarified. Another nomenclatural problem concerns the names *Stenella cassiae* Abbasi & D.N. Shukla, *S. cassiae* Kamal, R.P. Singh & P. Kumar, and *S. cassiae-fistulae* U. Braun & Kamal.

(1) The nomenclature of *Torula tritici* and *Oidium tritici*

Corda (1837) described and illustrated *Torula tritici*. This valid name was introduced for a dematiaceous hyphomycete on *Elymus repens* (≡ *Triticum repens*). Corda's (l.c.) original drawing is the only original material available for lectotypification (Art. 9.4). Type material is not preserved in Corda's herbarium at PRM (M. Šandová, pers. comm.) as already emphasized by Pilát (1938), and a search in PRC failed as well (O. Koukol, pers. comm.). A critical analysis of Corda's original illustration suggests a probable identity of *T. tritici* with *Rutola graminis* (Crane & Schoknecht 1978). However, the final determination of this name and the assumed synonymy with *R. graminis* need, of course, confirmation and establishment by epitypification with ex-epitype sequence data.

In 1842, Corda introduced the combination *Torula tritici* (Lib.) Corda, with *Oidium tritici* Lib. as basionym. This name is illegitimate (homonym). Corda's (1842) description and illustration refer to the asexual morph of *Blumeria graminis* on *Elymus repens*. Corda (l.c.) undoubtedly became aware of *Oidium tritici* published by Libert in 1837 and was probably able to examine type material of the latter species, which is preserved in PRM together with Corda's herbarium (see fig. 1). His combination was probably motivated by the assumption that Libert's *O. tritici* has priority over his own *Torula tritici* from 1937, and he was probably not aware of the blocking of the epithet "*tritici*" in *Torula* by his own species name. The two names *T. tritici* published in 1837 and 1842 caused a long-lasting confusion, in addition exacerbated by the wrong classification of *Oidium tritici* Lib. as invalid name, although the later name was validly published by Libert in "Plantae cryptogamicae, quas in Arduenna collegit, fasc. 4, no. 385" with a brief description (see fig. 1). "*Oidium tritici* (Corda) Sacc. & Voglino, in Saccardo, Syll. fung.

©Institut für Biologie, Institutsbereich Geobotanik und Botanischer Garten der Martin-Luther-Universität Halle-Wittenberg

(Abellini) **4**: 46, 1886" was meant to be based on "*Torula tritici* Corda, 1842" but is just one of the incorrect interpretations of the names involved. The nomenclature and current taxonomic status of the names involved can be summarised as follows:

Rutola graminis (Desm. ex Fr.) J.L. Crane & Schokn., Canad. J. Bot. **55**(24): 3015, [1977] 1978.
≡ *Torula graminis* Desm. ex Fr., Syst. mycol. (Lundae) **3**(2): 502, 1832.
= *Torula tritici* Corda, Icon. fung. (Prague) **1**: 8, 1837 (syn. nov.). Lectotype (designated here, MycoBank, MBT388243): Corda, Icon. fung. (Prague) **1**: tab. 2, fig. 128, 1837.

Blumeria graminis (DC.) Speer, Sydowia **27**(1-6): 2 1975.
≡ *Erysiphe graminis* DC., Flore française **6**: 106, 1815.
= *Oidium tritici* Lib., Pl. Crypt. Arduenna, Fasc. 4, no. 385, 1837. Lectotype (designated here, MycoBank, MBT388244): on leaves of *Triticum repens* (≡ *Elymus repens*), sine loco et anno, Lib., Pl. Crypt. Arduenna 385 (PRM 685898). Isolectotypes: Lib., Pl. Crypt. Arduenna 385 (e.g., BR, FH, G, ILLS 529, K, S-F49308).
≡ *Torula tritici* (Lib.) Corda, Icon. fung. (Prague) **5**: 51, 1842, nom. illeg. (Art. 53.1).

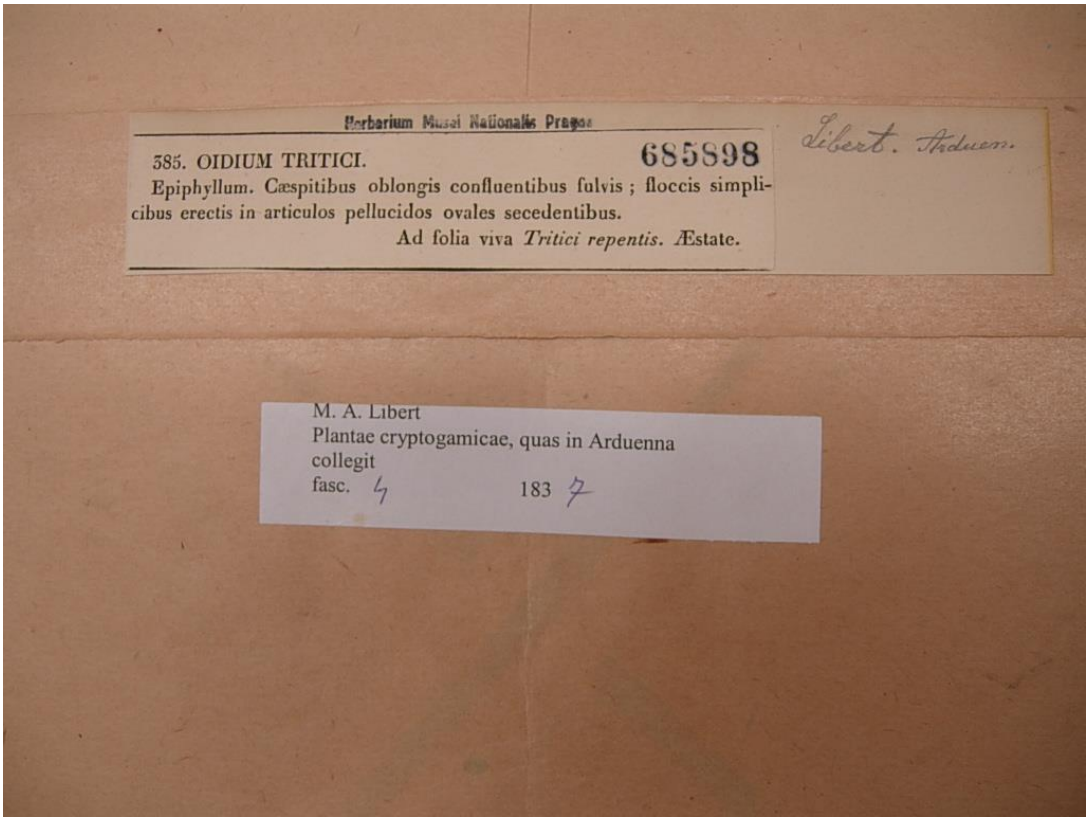


Fig. 1: *Oidium tritici* Lib., Plantae cryptogamicae, quas in Arduenna collegit, fasc. 4, no. 385 (PRM).

(2) The nomenclature of *Stenella cassiae* and *Stenella cassia-fistulae*

Braun (in Braun et al. 2003) re-examined numerous Indian *Stenella* collections on *Cassia fistula*, including a sample collected by P. Abbasi (Uttar Pradesh, Gorakhpur, St. Andrew College, 4 Feb. 1979, IMI 235458), and described together with Kamal a new species, *Stenella cassia-fistulae*, based on the latter specimen as holotype. *Stenella cassiae* Abbasi & D.N. Shukla (Abbasi & Shukla 1980) was cited as synonym, but regarded as invalid since the authors failed to indicate a type. This assumption was, however, incorrect because the latter name was published in 1980. Abbasi & Shukla (1980) cited a single specimen ["on living leaves of *Cassia fistula* Linn., Madhaulia Range, North Gorakhpur Forest Division" (without collector name and undated)], which fulfilled Art. 40.1 of the Code, requiring the indication of a type, which must be accepted as the holotype (according to Art. 9.1, Note 1). Art. 40.6 (requiring to use the word

©Institut für Biologie, Institutsbereich Geobotanik und Botanischer Garten der Martin-Luther-Universität Halle-Wittenberg

"holotype" or "type" in Latin or any other language) and 40.7 (necessitating the indication of the single herbarium, collection or institution in which the type has been deposited) are not applicable in the case of *Stenella cassiae* as this article only came into effect in 1990. IMI 235458, the only specimen deposited at IMI collected by Abbasi in 1979 and connected with the name *St. cassiae*, can undoubtedly be considered the holotype of this species. However, the reassessed nomenclature of *St. cassiae* Abbasi & D.N. Shukla has consequences for *St. cassiae* Kamal et al. (1980) and *St. cassiae-fistulae* resulting in the illegitimacy of the latter two names, the former (published in December 1980) as a homonym (Art. 53.1) and the latter as a superfluous name (Art. 52.1). Furthermore, Braun and Kamal (in Kamal 2010) placed *St. cassiae-fistulae* in *Zasmidium* as the currently accepted genus for this species, but the reassessed nomenclature of *St. cassiae* requires its reallocation to the latter genus:

Zasmidium cassiae (Abbasi & D.N. Shukla) U. Braun & P.M. Kirk, **comb. nov.**

MycoBank, MB832105.

Basionym: *Stenella cassiae* Abbasi & D.N. Shukla, Curr. Sci. **49**(2): 71, 1980.

≡ *Stenella cassiae-fistulae* U. Braun & Kamal, Mycol. Progr. **2**(3): 206, 2003, nom. illegit. (Art. 52.1).

≡ *Zasmidium cassiae-fistulae* (U. Braun & Kamal) Kamal & U. Braun, in Kamal, Cercosporoid Fungi of India (Dehra Dun): 239, 2010, nom. inval. (Art. 41.1).

Acknowledgments

We are grateful to O. Koukol (PRC) and M. Šandová (PRM) for valuable information on the type collections of species described by A. C. J. Corda.

Literature

Abbasi, P. & Shukla, D. N. 1980: A new species of *Stenella* from India. Current Science **49**(2): 71–72.

Braun, U. & Cook, R. T. A. 2012: Taxonomic Manual of the Erysiphales (Powdery Mildews). CBS Biodiversity Series No. **11**: 1–707.

Braun, U., Crous P. W. & Kamal 2003: New species of *Pseudocercospora***,** *Pseudocercosporella*, *Ramularia* and *Stenella* (cercosporoid hyphomycetes). Mycological Progress **2**(3): 197–208.

Corda, A. C. J. 1837: Icones fungorum hucusque cognitorum. Tomus 1. J. G. Calve, Prag.

Corda, A. C. J. 1842: Icones fungorum hucusque cognitorum. Tomus 5. J. G. Calve, Prag.

Crane, J. L. & Schoknecht, J. D. 1977: Revision of *Torula* species. *Rutola*, a new genus for *Torula graminis*. Canadian Journal of Botany **55**(24): 3013–3019.

Kamal 2010: Cercosporoid Fungi of India. Dehra Dun.

Kamal, Singh, R. P. & Kumar, P. 1980: Fungi of Gorakhpur. XVIII. *Stenella*. Sydowia **33**: 162–166.

Pilát, A. 1938: Seznam druhů hub, popaných A. C. J. Cordou s udánim originálních exemplářů, které jsou uloženy v herbáři Národního Musea v Prace. Liste der von A. C. J. Corda beschriebenen Pilzarten, mit Angabe der Originalexemplate, die im Herbarium des Nationalmuseums in Prag aufbewahrt werden. Sborník Národního Musea v Prace [Acta Musei Nationalis Pragae] **1**B(10), Botanica 3: 139–170.

Addresses of the authors

Uwe Braun, Martin-Luther-Universität, Institut für Biologie, Bereich Geobotanik und Botanischer Garten, Neuwerk 21, 06099 Halle (Saale), Germany.
(E-Mail: uwe.braun@botanik.uni-halle.de)

Paul Kirk, Royal Botanic Gardens Kew, Jodrell Laboratory, Kew, Richmond TW9 3DS, UK.
(E-Mail: p.kirk@kew.org)

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Schlechtendalia

Jahr/Year: 2019

Band/Volume: 36

Autor(en)/Author(s): Braun Uwe, Kirk Paul M.

Artikel/Article: Reassessment of the nomenclature of some ascomycete names 87-89