

Proposals from the Floor to be considered by the Fungal Nomenclature Session of the 12th International Mycological Congress

The following proposals to amend *Chapter F* of the *International Code for Nomenclature of algae, fungi and plants* were received too late for inclusion in the published set of proposals. They are provided here in advance of the IMC12 Fungal Nomenclature Session. Proposals from the floor will be dealt with in the Fungal Nomenclature Session after consideration of the formally published proposals. Therefore, proposals from the floor have been scheduled for discussion in Symposium 48 (NOMENCLATURE B: 14:30-16:30) on Thursday, August 15, 2024.

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Secretary & Deputy Secretary, Fungal Nomenclature Bureau IMC12

6 August 2024

Prop. F-008 (floor)

Add a note to clarify that an earlier homonym of a sanctioned name remains unavailable if the sanctioned name is explicitly rejected

Submitted by Andrew M. Minnis & Tom W. May

Background

Art. F.3.8 states that “Conservation (Art. 14), protection (Art. F.2), and explicit rejection (Art. 56 and F.7) override sanctioning”. In considering the recent proposal to reject the sanctioned name, *Tuber albidum* Fr. (Prop. 2870, Pacioni & al. in *Taxon* 71: 463–465. 2022), a question about the availability of a homonymous name of this sanctioned name arose, should the proposal be accepted.

Tuber albidum Picco 1788 is an earlier homonym of the sanctioned name, *T. albidum* Fr. 1823. The former name is unavailable for use under Art. F.3.4. If *T. albidum* Fr. is explicitly rejected (Art. 56 and F.7), two interpretations are possible. One is that the earlier homonym, *T. albidum* Picco, remains unavailable under Art. F.3.4 (i.e. the effect of sanctioning on the name *T. albidum* Fr. remains, even when the name is rejected). The other is that *T. albidum* Picco would become available as a result of the rejection of *T. albidum* Fr. (i.e. the original sanctioning would cease to have effect). In the latter case, nomenclatural stability may be impacted as some authors have treated *T. albidum* Picco as a synonym of *T. borchii* Vittad., the subsequently published name of an economically important truffle, although there is uncertainty about the identity of *T. albidum* Picco (Leonardi & al. in *Crypt. Mycol.* 42: 149-170. 2021).

Note 2 under Art. 53.1 states in part that an earlier homonym rejected under Art. 56 or F.7 causes rejection of any later homonym that is not conserved, protected, or sanctioned. In the situation referred to in Note 2, the ongoing effect of an earlier homonym remains (in terms of a later homonym) even when the earlier homonym is rejected. However, in the case under discussion, it is the later homonym that we are concerned about.

The *Code* does not appear to offer any explicit guidance on how to deal with the situation. We consider that retaining the effect of sanctioning is less destabilizing than removing the effect of

sanctioning (on rejection of a sanctioned name). Indeed, it could be argued that once a name is sanctioned, this status is not removed by any nomenclatural act, even if some of these acts (such as rejection) “override” sanctioning. In other words, while explicit rejection “overrides” sanctioning, this is in respect of the name being sanctioned, and not in respect of the sanctioned status of the sanctioned name.

No previous examples of this situation were found in a review of previously rejected names as listed in Appendix V, and it is expected that such cases will be quite rare. Nevertheless, given this *Tuber* example and the potential that more sanctioned names may be explicitly rejected in the future, there is value in clarifying that the effect of sanctioning is not removed by rejection of a name that is sanctioned. Consequently, an earlier homonym of a sanctioned name remains unavailable even when the sanctioned name is rejected. The addition of a note would be appropriate, and the following modification to Chapter F is proposed:

Proposal

In Article F.3 below Art F.3.8, insert new text:

Note 2. An earlier homonym of a sanctioned name remains unavailable under Art. F.3.4 if the sanctioned name is explicitly rejected (Art. 56 and F.7).

If approved, the Editorial Committee and/or the appropriate group responsible for Chapter F should renumber Note 2 and Note 3 under Art. F.3 to Note 3 and Note 4, respectively, as well as elsewhere if appropriate.

If approved, it is further noted that conservation and protection would be available if the use of an earlier homonym of an explicitly rejected sanctioned name is necessary or desirable. See Art. F.3.4 Ex. 5 as well as Art. F.2.1.

If approved, this note will also imply that the sanctioned status of a name is not impacted under Art. F.3.8 in cases where conservation or protection (rather than explicit rejection) are applied to a sanctioned name. This retention of sanctioned status has consequences in relation to typification as the type of a sanctioned name “may be selected from among the elements associated with the name in the protologue and/or the sanctioning treatment” (Art. F.3.9). However, when a name is conserved with a conserved type, this would override a typification based on Art 3.9.

Props F-009 to F-015 (floor)

Proposals concerning cultures as types

Submitted by Yurkov, A. et al.

Background

Background for this proposal has been provided in the following publication.

Yurkov, A., Visagie, C.M., Crous, P.W. et al. Cultures as types and the utility of viable specimens for fungal nomenclature. *IMA Fungus* 15, 20 (2024).

<https://imafungus.biomedcentral.com/articles/10.1186/s43008-024-00155-8>

Please note that the proposals were submitted as a batch. The numbering of proposals below has been added by the Secretaries in order to facilitate voting on individual articles or sets of articles that are closely aligned – and to keep different concepts separate for purposes of voting.

Existing text of *Code* and *Chapter F* (for reference)

[Note by Secretaries: the Fungal Nomenclature Session can only amend Chapter F of the *Code*].

***Code*. Recommendation 8B**

8B.1. Whenever practicable a living culture should be prepared from the holotype material of the name of a newly described taxon of algae or fungi and deposited in at least two institutional culture or genetic resource collections. (Such action does not obviate the requirement for a holotype specimen under [Art. 8.4](#).)

8B.2. In cases where the type of a name is a culture permanently preserved in a metabolically inactive state (see [Art. 8.4](#)), any living isolates obtained from it should be referred to as “ex-type” (ex typo), “ex-holotype” (ex holotypo), “ex-isotype” (ex isotypo), etc., in order to make it clear they are derived from the type but are not themselves the nomenclatural type.

Chapter F. Article 5

F.5.4. For purposes of priority (Art. 9.19, 9.20, and 10.5), designation of a type, on or after 1 January 2019, of the name of an organism treated as a fungus under this Code (Pre. 8), is achieved only if an identifier issued for the type designation by a recognized repository (Art. F.5.3) is cited.

F.5.5. For an identifier to be issued by a recognized repository as required by Art. F5.4, the minimum elements of information that must be accessioned by author(s) of type designations are the name being typified, the author designating the type, and those elements required by Art. 9.21, 9.22, and 9.23.

PROPOSALS

Prop F-009

Add a new article to Chapter F, under a new section: **CULTURES AS TYPES: Article F.X.**

Art. F.X.1.

“From 1 January 2025, for a fungus based on a living culture, the holotype strain and any isotype strains must be registered according to Art. F5.4, F5.5 to be acceptable as a nomenclatural type.”

Insert a new article in Art. F.5

Art. 5.X. The registration of a name for which the type is a viable metabolically inactive culture must include the kind of material (viable specimen), holotype and isotype designations (culture collection numbers) and the type of preservation (metabolically inactive state).

Prop F-010

Add new recommendation

Recommendation F.X.1

“From 1 January 2025, for a fungus based on a living culture, its viable progenies shall be preserved metabolically inactive in at least two different publicly accessible culture collections (Rec. 8B.1eS).”

Prop F-011

Art. F.X.2

“In case the holotype and isotype material are not available anymore, the oldest authenticated, culture of an ex-type progeny preserved in a metabolically inactive state attains the status of a neotype.”

Prop F-012

Art. F.X.3

“For names of fungi based on cultures that are preserved in a metabolically inactive state, any type of writing that explicitly indicates in a non-contradicting way that a single culture is the holotype is to be considered a valid typification (see Ex. X.1).”

Example F.X.1

“In the description of *Metschnikowia hawaiiensis* Lachance, Starmer and Phaff (Int. J. Syst. Bacteriol. 40: 416. 1990), the type of the name has been designated as the type strain UWO(PS) 87–2167.2 (= ATCC 76059 = CBS 7432). The type of *Metschnikowia hawaiiensis* UWO(PS) 87–2167.2 (original culture) has been permanently preserved in a metabolically inactive state in the American Type Culture Collection (ATCC 76059 is the holotype) and the collection of the Yeast Division of the Centraalbureau voor Schimmelcultures (CBS 7432 is the isotype).”

Example F.X.2

In the description of *Cryptococcus vishniacii* Vishniac & Hempfling (Int. J. Syst. Bacteriol. 29: 155. 1979), the type of the name has been designated as the type strain MTSW 304Y268 (= ATCC 36649). The type of *Cryptococcus vishniacii* MTSW 304Y268 (original culture) has been permanently preserved in a metabolically inactive state in the American Type Culture Collection (ATCC 36649 is the holotype).

Example F.X.3

“In the description of *Cryptococcus bacillisporus* Kwon-Chung & J.E. Benn. (Int. J. Syst. Bacteriol. 28: 618. 1978), the type of the name has been designated as the type strain ATCC 32608 (= CBS 6955). The type of *Cryptococcus bacillisporus* has been permanently preserved in a metabolically inactive state in the American Type Culture Collection (ATCC 32608 is the holotype). Its metabolically inactive duplicate has been permanently preserved in a metabolically inactive state in the collection of the Yeast Division of the Centraalbureau voor Schimmelcultures (CBS 6955 is the isotype).”

Note F.X.1

“Descriptions that used the writing format “strain designation A” [=original culture] (= “culture-collection B” [=holotype] = “culture-collection C” [=isotype]) are considered valid typifications, even where the kind of type is not specified in the original publication, provided that the preserved cultures are in a metabolically inactive state. Unless otherwise indicated, the first-mentioned metabolic inactive strain deposited in a public culture collection is recognized as the holotype.”

Note F.X.2

“Superscript T (T) used to indicate the nomenclatural type and its progenies in descriptions has no meaning in the Code. It does not substitute an indication of a nomenclatural type.”

Prop F-013

Note F.X.3

“Specification of abbreviated forms the herbarium, collection, or institution can be given in an abbreviated form (Art. 40.7 Note 4). When not explicitly stated in the description, acronyms of culture collections can be determined according to data sources managed by the WFCC-MIRCEN World Data Center for Microorganisms. Any other culture identifiers are to be interpreted as strain designations.”

Prop F-014

Recommendation F.X.2

“The recommended format for typification of names of fungi based on viable cultures is: Holotype CULTURE_COLLECTION XXXX, stored in a metabolically inactive state; isotype CULTURE_COLLECTION XXXX, stored in a metabolically inactive state; ex holotype culture CULTURE_COLLECTION XXXX, CULTURE_COLLECTION XXXX.”

Prop F-015

Art F.X.4

“Before 1 January 2019, when the preservation of a type of a fungus in a metabolically inactive state is not clearly stated in the original publication (Art. 40.8), this is treated as a correctable error not preventing valid publication of the name, provided there is evidence that a type was preserved in a metabolically inactive state by the specified culture collection prior to the publication of the protologue.”

Cross references in the body of the Code

[Note by Secretaries: edits to the cross references are editorial, and not voted on by the Fungal Nomenclature Session]

Appropriate cross references to the new material in *Chapter F* (should it be accepted) will need to be added to the body of the *Code*, specifically in Art. 8.4, which can be done editorially, and will not require any formal action.

Type specimens of names of taxa must be preserved permanently and may not be living organisms or cultures. Nevertheless, cultures of algae and fungi, if preserved in a metabolically inactive state (e.g., by lyophilization or deep-freezing to remain alive in that inactive state), are acceptable as types (see also Art. 40.8). **For further provisions relating to type specimens of fungi that are viable cultures preserved in a metabolically inactive state, see Art. X, Chapter F.**

Add the following text in bold to the Glossary

[Note by Secretaries: edits to the *Glossary* are editorial, and not voted on by the Fungal Nomenclature Session]

Glossary: ex-type (ex typo), ex-holotype (ex holotipo), ex-isotype (ex isotipo), etc. A living isolate obtained from the type of a name when this is a culture permanently preserved in a metabolically inactive state (Rec. 8B.2). **Living cultures of organisms treated as fungi derived from the revitalisation of holotype or isotype metabolically inactive cultures are termed ex-type cultures.**