Proposals to amend the Code

(116) Delete Recommendation 36A.1.

If accepted, these proposals would have no effect on the language requirements the Code places on diagnoses for non-fossil algae (Latin on or after 1 January 1958 – Art. 36.2) and fossil taxa (English or Latin on or after 1 January 1996 – Art. 36.3). However, if there is consensus among the users of names of algae and/or fossils, similar proposals could be made to Arts. 36.2 and 36.3 that would allow the newly adopted Code to be completely free of any language requirement for diagnoses for newly described taxa. The primary objective of the authors is to eliminate the Latin requirement at Art. 36.1, and we feel that the best way to effect this change is to not require any specific language.

(117–119) Proposals to make the pre-publication deposit of key nomenclatural information in a recognized repository a requirement for valid publication of organisms treated as fungi under the Code

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Mycologists first proposed the introduction of some form of a mandatory indexing system for newly proposed fungal names in the 1950s (Ainsworth & Ciferri in Taxon 4: 3–6. 1955). Following informal discussions amongst mycologists – particularly during the 7th International Mycological Congress in 2002 – the CBS-Fungal Diversity Centre in Utrecht initiated MycoBank in 2004 (Crous & al. in Mycol. Res. 108: 1236–1238. 2004; Crous & al. in Stud. Mycol. 50: 19–20. 2004). This step was taken in order to test the willingness of mycologists to use a depository system where they could place information on new scientific names they were proposing. MycoBank is a fully online system whereby the proposers of new scientific names of organisms treated as fungi under the Code (i.e., including chytrids, oomycetes, and slime moulds; Pre. 7 of the ICBN; McNeill & al. in Regnum Veg. 146. 2006) can deposit key information that becomes public and freely available on the worldwide web only after effective publication of the work including those names. Each name is assigned a unique number from a range made available by Index Fungorum to MycoBank. (Index Fungorum is a partnership of CAB International, CBS-KNAW Fungal Diversity Centre, and Landcare Research, that offers a freely available nomenclator of fungal names in all ranks online to the public.) As of January 2010, the Index Fungorum database held information on 450,280 names; see http://www.indexfungorum.org/.

MycoBank operates similarly to GenBank, which provides unique identifiers for molecular sequence data. MycoBank does not require any hard-copy material to be lodged at CBS or elsewhere, but serves to disseminate information on newly proposed taxa widely and rapidly at no cost to all users, whether they are depositors or interrogators. Since 2007, MycoBank has operated under the auspices of the International Mycological Association (IMA), which has assumed long-term responsibility for its operation. Like IAPT, IMA is a Scientific Member of the International Union of Biological Sciences (IUBS).

Scientific names in all ranks are covered in the existing MycoBank system. The basic information required for deposition of a newly described taxon is the name itself, the validating Latin (or for fossil fungi, English) description or diagnosis, details of the nomenclatural type, and (for species and infraspecific taxa) where the type is permanently preserved. New combinations and replacement names require only the full bibliographic reference to the basionym or replaced name, as already specified by Art. 33.4. MycoBank personnel check the uniqueness of the name, alert the depositor to any earlier homonym, and draw attention to orthographic errors (such as incorrect Latin terminations), but do not express any taxonomic opinions; i.e., there is no censorship. Index Fungorum, as the body issuing unique numbers for fungal names, automatically receives a copy of all nomenclatural information deposited in MycoBank.
Depositors are additionally encouraged – but not required – to provide available information (e.g., GenBank accession identifiers, where living cultures are deposited, detailed descriptions, illustrations, other comments, or a copy of in-press publications). After publication, the actual volume and page references can be inserted in the MycoBank database, and some publishers (e.g., Elsevier, Mycotaxon) have indicated that they have no objection to the full text of published articles being attached, for example as Portable Document Format files (PDFs).

MycoBank and Index Fungorum are now favourably and almost universally accepted by the mycological community (Stalpers & al. in Bull. Zool. Nomencl. 66: 14–17. 2009). The proportion of newly proposed names deposited in MycoBank is increasing: in 2005, 353 of 1893 new fungal names introduced that year were deposited (i.e., 19%); in 2006, 857 of 2339 (37%); in 2007, 1392 of 2436 (57%); in 2008, 1292 of 2342 (55%); and in 2009, 1666 (the total for the year is not yet available from the Index of Fungi). Further, Taxon and the leading mycological journals that regularly publish new scientific names of fungi now require authors to deposit information in MycoBank and cite the MycoBank reference numbers as a condition of publication. These journals include: The Bryologist, Czech Mycology, Fungal Biology (formerly Mycological Research), Fungal Diversity, Graphis Scripta, The Lichenologist, Mycologia, Mycologica Balcanica, Mycology, Mycoscience, Mycosphere, Mycotaxon, Nova Hedwigia (lichen papers), Opuscula Philolichenum, Persoonia, Studies in Mycology, and Sydowia.

The attitudes of individual mycologists to the existing MycoBank system and other nomenclatural issues were explored by questionnaire distributed at three major mycological meetings in August–September 2007: nomenclatural sessions or symposia at the Mycological Society of America annual meeting (Baton Rouge, Louisiana), the XV Congress of European Mycologists (St Petersburg, Russia), and the XVI Simposio Botánica Criptogámica de España (Léon, Spain). A total of 95 ballots was completed from this geographically dispersed spectrum of mycologists. All did not vote on all issues, but of those voting, 85% (73) were in favour of making deposit in MycoBank mandatory for the valid publication of new fungal taxa (Hawksworth in Mycol. Res. 111: 1363–1364. 2007). Further, in July 2008 the International Association for Lichenology (IAL), meeting in Asilomar, California, passed a resolution endorsing the establishment of MycoBank under the auspices of the IMA, encouraging lichenologists to deposit information on newly recognized taxa in it, and urging editors who had not yet done so to make such deposits a condition of publication.

The proposals below aim to incorporate into the Code what has become the regular practice of most mycologists and of key mycological journals. If accepted, the proposals made here will benefit the entire mycological community, which then will be assured of immediate and complete access to the key nomenclatural information on new fungal names proposed after 1 January 2013.

This will be of enormous and immediate benefit to the discipline, because mycology now has an almost complete catalogue of fungal names in Index Fungorum (www.indexfungorum.org), and this new proposal will mean mycologists have access to a free, ongoing, and continuously updated repository for new fungal names. There is already a major lag in the time between publication of a name and appearance in the printed yearly Index of Fungi; the latest issue (July 2009) comprises only names published in 2008 and before. As mycology no longer has any institution with the resources to search out all names from the literature, do-it-yourself repositories provide a relatively easy and effective mechanism to establish and maintain an accurate and up-to-date list of fungal names.

We wish to draw attention to two differences between the proposals made here and previous proposals on the “registration” of botanical names: (1) there is no requirement to submit printed matter (including protologues) to a registering office designated by the International Association for Plant Taxonomy (IAPT) as prescribed in the text incorporated into the Toyo Code (Art. 32.2); and (2) the deposit of names is restricted to their author(s) and deposition by third parties of newly proposed names is not allowed after the requirement becomes mandatory, contrary to the proposals of Borgen & al. (in Taxon 47: 899–904. 1998). Technological advances since 1996 have rendered the first requirement superfluous, and author-restricted deposition and activation clarifies author intent. However, the proposals do not preclude others depositing information on names proposed prior to 1 January 2013 after that date. The deposit of nomenclatural information in a recognized repository, as proposed below, does not obviate the need for author(s) to fulfill the current requirements of the Code in relation to effective publication (Art. 29.1), nor does it affect the date of effective publication (Art. 31.1).

We forward these proposals at this time so that they will be available for debate at the Nomenclature Session to be convened during the IX International Mycological Congress in Edinburgh in August 2010. We shall transmit the outcomes of that debate to the Nomenclature Section meetings at the International Botanical Congress in Melbourne July 2011 for final decision.

We wish to emphasize that, while most of us making these proposals have, or have recently held, positions in international mycological organizations or committees, we make them here in our personal capacities in anticipation of their consideration by mycologists as a whole at the forthcoming IXth International Mycological Congress.

(117) Add a new Article 37bis:

"37bis.1. For organisms treated as fungi under this Code (Pre.7), from 1 January 2013 the citation of an identifier issued by a recognized repository (Art. 37bis.3) in the protologue is an additional requirement for valid publication.

37bis.2. For an identifier to be issued by a recognized repository as required by Art. 37bis.1, the minimum elements of information that must be accessioned by author(s) of scientific names are those required for valid publication under Art. 32.1 (b–e).

Note 1. Issuance of an identifier by a recognized repository based upon the presumed future fulfilment of requirements under Art. 32.1 (b–e) does not in itself constitute or guarantee a valid publication of a proposed name; that can occur only on effective publication (Art. 29) if the requirements of Art. 32.1 (b–e) are simultaneously fulfilled in that publication.

37bis.3. The Committee for Fungi (Div. III.2.4) has the power to: (1) appoint one or more localized or decentralized open and accessible electronic repositories to perform this function; (2) remove such repositories at its discretion; and (3) set aside the requirement to deposit information on newly proposed scientific names for organisms treated as fungi under the Code in a recognized repository, should the repository mechanism, or essential parts thereof, cease to function. Decisions made by the Committee under these powers are subject to ratification at the subsequent International Mycological Congress.

* The only current operational repository appointed is MycoBank (www.mycobank.org).*

The Editorial Committee may wish to consider combining the existing Arts 38 and 39, both of which deal with illustrations, to avoid changing the numbering of subsequent articles in the Code. In addition, the Committee is also requested to: (1) change “International
Mycological Congress” to “International Botanical Congress” in the proposed Art. 37bis.3 should Props 016–020 (Hawksworth & al. in Taxon 58: 658–659. 2009; Hawksworth & al. in Mycotaxon 108: 1–4. 2009) not be accepted by the Nomenclature Section; and (2) revise the wording of the proposed footnote as necessary to take account of any decisions on repositories made by the Committee for Fungi prior to the publication of the Melbourne Code.

(118) Insert a new Recommendation 37bisA.1:
“37bisA.1. Authors of names of organisms treated as fungi under this Code are encouraged to: (a) deposit minimal elements of information in relation to the names in a recognized repository, and obtain accession identifiers, as soon as possible after their papers are accepted for publication; and (b) after the effective publication of the name, inform the recognized repository of the complete bibliographical details, including for example, the volume, part number, page number, date of publication, and (for books) the publisher and place of publication.”

Acknowledgement
We are indebted to John McNeill (Edinburgh) for particularly constructive comments made during the preparation of this set of proposals.

(120) Proposal to replace Article 46 Example 10 with a more appropriate example

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Article 46 Example 10, following Art. 46.2 in the Vienna Code (McNeill & al. in Regnum Veg. 146. 2006), is intended to illustrate the principle that when, in a publication by some author A, both the name of a new taxon and the description of that taxon are ascribed to some other person B, the correct author citation for the taxon is “B”, not “B ex A”. It uses the example of Verrucaria aethiobola, and concludes that “The name is therefore appropriately cited as V. aethiobola Wahlenb. … and certainly not as V. aethiobola Wahlenb. ex Ach.”. Unfortunately, the protologue for Verrucaria aethiobola has a complication that makes it a poor choice for such an Example. In fact, as shown below, a logical application of the Rules to this unusual case leads to the conclusion that the correct author citation is Wahlenb. ex Ach.

The name Verrucaria aethiobola was published in Acharius, Methodus, Supplementum: 17–18 (1803). In this Supplementum, Acharius presented results from the travels of his pupil Wahlenberg; these results had become available to him too late to be included in the main body of Methodus. The full protologue for Verrucaria aethiobola reads as follows:

VERRUCARIA aethiobola: crusta tenui subeffusa subcontigua tenuissime elevato-punctata umbrina; tuberculis hemisphaerico-subglobosis turgidis umbilicatis atris nitidis.

Verrucaria (ACH.) aethiobola: crustacea subtenuis elevato-punctulata umbrina solida, thalamis elevatis superne subglobosis turgidis umbilicatis nigerimis nitidis. WAHLENB. Msc.

Habitat Finmarkiae Norvegicae in lateribus rupium aqua nivali saepè madefactis sparsim. Wahlenberg.


Crusta tenui solida subcontigua tenuissime rimosa opaca, et perfecta saccissime punctis elevatis minutissimis subrugosa, passim etiam cinerascens, laeviuscula, punctis elevatis vix discernendis. Tubercul sparsa turgida nitida subcornica vel etiam hemisphaerico-subglobosa supra umbilicata et impressa. A.

Paragraph 1 of the protologue is not explicitly ascribed to anyone, so must be assumed to have been written by Acharius. Paragraph 2 is stated to be from Wahlenberg’s manuscript. In accordance with Acharius’s normal practice, the ascription to “WAHLENB. Msc.” at the end of paragraph 2 covers only that paragraph. Its scope does not include paragraph 1. (If its scope did include paragraph 1, that would imply that Wahlenberg had written two entirely separate descriptions in his manuscript and that Acharius had seen fit to print both of them—a most implausible situation.) Paragraph 3 deals only with habitat and locality, and is not relevant here. Paragraph 4 was written by Wahlenberg, as indicated by the letter “W.” at the end, and paragraph 5 was written by Acharius, as indicated by the letter “A.” at the end.

Paragraph 2 makes it clear that the name Verrucaria aethiobola came from Wahlenberg’s manuscript. This is confirmed on p. 392 of the Index in the main part of Methodus, where the name is cited as Verrucaria aethiobola Wahlenb. In other words, Acharius does ascribe the name to Wahlenberg. Descriptive information, however, is contained in paragraphs 1 and 2 (which have different authors), with further descriptive remarks in paragraphs 4 and 5 (which also have different authors). The question that arises is the following. When a protologue contains separate descriptions written by separate authors, what is “the validating description” for the purposes of Art. 46.2?

The most natural answer to this question is that the validating description consists of all the descriptive information in the protologue. This is consistent with the usage of the word “description” suggested in the Glossary: a description is “a written statement of a feature or features of a taxon required for valid publication of its name”. Any other answer would not be consistent with this usage. Suppose, for example, that the validating description was presumed to be only those descriptive parts of the protologue ascribed to Wahlenberg. It is not the case that those parts are “required for valid publication of the name”, because if they were deleted from the protologue the name would still be validly published because of the descriptive information supplied by Acharius.