# PROPOSALS TO AMEND THE CODE

Edited by John McNeill & Nicholas J. Turland

# Synopsis of Proposals on Botanical Nomenclature – Melbourne 2011: A review of the proposals concerning the *International Code of Botanical Nomenclature* submitted to the XVIII International Botanical Congress

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### ■ NOTICE

Each personal member of the International Association for Plant Taxonomy is entitled to participate in the Preliminary Mail Vote on nomenclature proposals submitted to the XVIII International Botanical Congress, as stated in Division III of the *International Code of Botanical Nomenclature* (McNeill & al. in Regnum Veg. 146. 2006). Authors of proposals to amend the *Code* and members of the Permanent Nomenclature Committees (described in Div. III.2) are also entitled to participate, but no institutional votes are allowed. A voting form is inserted in this issue of *Taxon* and, if lost, available from www.iapt-taxon.org (sub Nomenclature).

The voting forms (ballots) should be returned to the IAPT Office, Institute of Botany, University of Vienna, Rennweg 14, A-1030, Vienna, Austria, by 31 May 2011, so that they may be included in the tabulation to be made available to members of the Nomenclature Section of the Congress.

The sessions of the Nomenclature Section, which will take definitive action on proposals, will be held in the Copland Theatre, Economics and Commerce Building 148, University of Melbourne (Parkville campus), Melbourne, Australia, from Monday, 18 July 2011 (09:00 hours) to Friday, 22 July 2011 (see http://www.ibc2011.com/NomenclatureSection.htm).

Each person registered for at least one full day of the Congress is entitled to enrol as a member of the Nomenclature Section. Registration for the Congress should be done in advance (see http://www.ibc2011.com/Registration.htm); the confirmation received will be the evidence of eligibility for registration for the Nomenclature Section, which will start during a welcoming reception on Sunday, 17 July, at 16:00 hours at The School of Botany Building 122 on the Parkville campus; Nomenclature Section registration will continue on Monday, 18 July at 08:00 hours at the Copland Theatre.

Each member of the Nomenclature Section is entitled to one personal vote in the sessions. Personal votes can neither be transferred nor accumulated; one person never receives more than one personal vote. A member of the Nomenclature Section may be the official delegate of one or more institutions, thereby carrying their votes, but no one person is allowed more than 15 votes (including his or her personal vote). Official delegates are required to submit their credentials and to collect their voting cards when registering for the Nomenclature Section. Institutions are being advised of their allocation of votes in March 2011, in accordance with Division III of the *Code*.

### **■** INTRODUCTION

This Synopsis repeats the exact wording of the proposals, along with reference to the published justification. The numbered sequence of proposals extends to 338. The comments by the Rapporteurs were drafted during a working meeting in and near Edinburgh, in unusually snow-bound conditions, at the end of November and beginning of December 2010. The Rapporteurs have endeavoured to outline the foreseeable consequences of each of the proposals, irrespective of their personal opinions on desirability. The comments are the result of a consensus between the Rapporteur and the Vice-rapporteur, and both have equal responsibility for them.

As noted on the ballot, there are four voting options: "yes", "no", "ed.c.", and "sp.c."; all proposals accepted by the Congress will be reviewed by the Editorial Committee prior to the production of the next edition of the Code, and any necessary editorial changes will be made; consequently, a "yes" vote only implies approval in principle of the proposal, not necessarily of its exact wording. Unless otherwise noted, an "ed.c." vote instructs the Editorial Committee to consider inclusion in the Code of material in the proposal but does not necessarily require it to do so. A "sp.c." vote refers the proposal to a Special Committee to review the matter, either during the Nomenclature Section meetings or, more likely, prior to the next Congress; it implies the desire to establish such a Committee. In order to make the result of the ballot as meaningful as possible, instructions have been added in several cases as to how special expressions of opinion, such as certain "ed.c." votes, will be interpreted.

All proposals that relate to particular groups have been referred to the Permanent Nomenclatural Committees for those groups (*Code*, Div. III.2) in order that the Committees may give their opinions prior to the meetings of the Nomenclature Section.

Two Special Committees established at the Vienna Congress have submitted reports: the Special Committee on Electronic Publication included proposals favoured by at least 60% of the voting Committee members, while the Special Committee on the Nomenclature of Fungi with a Pleomorphic Life Cycle, lacking that support, was accompanied by a set of proposals in the name of the Secretary of the Committee and a separate set from one member of the Committee. The entire membership of the Committee has since voted on these proposals and in many cases reached definite conclusions (Redhead, in prep.). These votes are recorded under the proposals involved and tabulated as follows: the first digit stands for the "yes" votes, the second for the "no" votes, and the third for abstentions.

The proposals are arranged in the sequence of the provisions of the *Code* that they affect, general proposals being listed first. Within each of the provisions, the proposals have been lettered sequentially in the order in which the Rapporteurs believe they might usefully be discussed by the Section. Needless to say, the Section, or its President, is completely free to adopt another sequence for its deliberations.

The numbering of Examples, Notes, and paragraphs of Articles or Recommendations proposed as new follow the numbering given in the published proposals in *Taxon* in which items that would precede the present first item were given the number 0, those placed at the end received a running-on number, and those to be intercalated received *bis* or *ter* numbers. In the proposals to the Melbourne Congress this has provided a unique numbering system. This system is not of course intended to bind the future Editorial Committee in any way.

# ■ ACKNOWLEDGEMENTS

The preparation of the Synopsis of Proposals with the Rapporteurs' Comments was made possible by the support of IAPT and the facilities provided by the Royal Botanic Garden Edinburgh and by members of its staff.

# ■ PROPOSALS TO AMEND THE CODE

# **General Proposals**

*Prop. A (016 – Hawksworth & al. in Taxon 58: 659)* Establish more clearly that the *Code* covers mycology, the study of fungi, as well as botany, commonly defined as "the study of plants" by:

- (i) inserting "and Mycological" after "Botanical" in the title of the Code.
- (ii) replacing "requires" by "and mycology require" at the start of *Pre. 1*.
- (iii) replacing the "word 'plant'" by the "words "'plant' and 'fungus'", and inserting "and mycologists respectively" after "botanists" in the footnote to *Pre. 1*.
- (iv) inserting in *Div.III.1* footnote 1, "and mycological" after "botanical".

*Prop. B (017 – Hawksworth & al. in Taxon 58: 659)* Instruct the Editorial Committee to replace "plant(s)" by "plant(s) or fungus/fungi)" throughout the *Code* where this is intended to include all organisms covered by the *Code*.

*Prop. C (101 – Cleal & Thomas in Taxon 59: 312)* Change the words "fossil plant" to "plant fossil" in Rec. 8A.3 and in the Index; and change the words "fossil plants" to "plant fossils" in Arts. 8.5, 9.13 13.1, 36.3, 38.1 and 38.2. in Div. III.2(6), and in the headings of Apps. IIA F, III F, and IV F.

Rapporteurs' comments – Prop. A and B are part of a series of proposals designed to "enable the international mycological community to assume full responsibility for nomenclature of fungi". These are to be seen in the context of mycologists nowadays normally attending International Mycological Congresses in preference to International Botanical Congresses and of consequent pressure from some mycologists to establish a separate Code for fungi. The mechanisms proposed will be considered under Div. III Prop. A–C. The current proposals address the perceived need to make clearer that the ICBN governs the nomenclature of fungi, and they could be accepted regardless of the outcome of the other proposals. Those of us who trained in botany departments in which the study of fungi was a major component may

feel these suggested changes unnecessarily cosmetic. The recognition, however, that fungi are evolutionarily far removed from the main plant lineages leads many to consider the proposed changes essential for clarity. Most importantly, the majority of mycologists apparently believe these changes are essential (e.g. of those submitting ballots at the 9th IMC in August 2010, 71% preferred fungi to be covered under the *ICBN* **provided** it is renamed the "Botanical and Mycological Code" – Norvell & al. in Taxon 59: 1867–1868. 2010a & in Mycotaxon 113: 503–511. 2010b). The Rapporteurs' only concern would be whether phylogenetic insights on, for example, groups of "algae" will prompt proposals for an even more detailed title and in-text terminology. The Nomenclature Committee for Fungi will give its recommendation on these proposals in the April issue of *Taxon*.

*Prop. C* is part of a series of proposals designed to clarify that it is *plant fossils* that should be named under the *ICBN* rather than the (often hypothetical) reconstructions of *fossil plants*. The specific proposals to implement this will be considered under Art. 1 Prop. A and B, but the present proposal would seem to be a clarification of terminology within the *Code* regardless of the acceptance or otherwise of these further proposals. The Nomenclature Committee for Fossil Plants has been asked to give its recommendation on this proposal.

### **Preamble**

*Prop. A (048 – Redhead & al. in Taxon 58: 669)* Add to Preamble paragraph 7 after "slime moulds" the following phrase:

", but excluding the phylum Microsporidia;"

Prop. B (314 – Gandhi & Reveal in Taxon 59: 1930) Add an item to Preamble:

"7bis. Names that have been conserved or rejected, oppressed publications, and a glossary of terms used and defined in the *Code* are given in Appendices I-VII."

Rapporteurs' comments – Prop. A is designed to establish unambiguously that the nomenclature of the members of the phylum Microsporidia, now generally accepted as related to the fungi, should continue to be governed by the International Code of Zoological Nomenclature (ICZN) and not the ICBN. Workers on Microsporidia would apparently prefer this option and it is in accord with the current wording of both the ICZN (1.1.1. For the purposes of this Code the term "animals" refers to the Metazoa and also to protistan taxa when workers treat them as animals for the purposes of nomenclature) and the ICBN (Pre. 7: the Code applying "to all organisms traditionally treated as plants"). The present proposal, along with Art. 13 Prop. A, Art. 45 Prop. A, and Art. 54 Prop. A, makes this assignment explicit. The Nomenclature Committee for Fungi will give its recommendation on this proposal in the April issue of Taxon.

*Prop. B* seems appropriate (with the "I–VII" corrected to "II–VII") as the Preamble specifies to some degree the structure of the *Code*. Should Art. 14 Prop. G and H be accepted, the wording of Prop. B could be editorially modified.

# Article 1

*Prop. A (102 – Cleal & Thomas in Taxon 59: 312)* Remove mention of the concept of "morphotaxa" from the *Code*. This requires the following inter-related changes.

- (i) Amend Art. 1.2 to read:
- "A taxon based on a fossil type is a fossil-taxon. A fossil-taxon comprises the remains of one or more parts of the parent plants, or one or more of their life history stages, preserved in one or more preservational states, as indicated by the description or diagnosis of the taxon.
  - (ii) Amend Art. 1 Ex. 1 and Ex. 2 to read:

"Ex. 1. Alcicornopteris hallei J. Walton (in Ann. Bot. (Oxford), n.s., 13: 450. 1949) is a fossil-species for which the original description included rachides, sporangia, and spores of a pteridosperm, preserved in part as compressions and in part as petrifactions."

"Ex. 2. Protofagacea allonensis Herend. & al. (in Int. J. Pl. Sci. 56: 94. 1995) is a fossil-species for which the original description included dichasia of staminate flowers, with anthers containing pollen grains, fruits, and cupules, and thus comprises more than one part and more than one life-history stage."

(iii) Delete the footnote to "fossil and non-fossil" in Preamble 7 which becomes redundant, as the application of the word "fossil" to taxa is dealt with in the revised Art. 1.2.

(iv) Delete Art. 1.3.

(v) Amend Art. 7.9 so that it begins: "The typification of names of fossil-taxa (Art. 1.2), of fungal ..."

(vi) Amend the last sentence of Art. 11.1 to read:

"However, the use of separate names for the form-taxa of fungi is allowed (Arts. 59.4 and 59.5) and also for fossil-taxa that represent different parts, life-history stages or preservation states of what may have been a single biological entity or even a single organism (Art. 1.2)."

(vii) Amend Art. 11.7 to read:

"For purposes of priority, names of fossil-taxa (diatoms excepted) compete only with names based on a fossil type."

(viii) Delete Art. 11 Ex. 28 (in order to include an emended version following Art. 1.2, see Prop. 103).

(ix) Amend Art. 11 Ex. 29 and Ex. 30 as follows:

In Ex. 29 replace "morphogeneric" by "fossil-generic" in the first line.

In Ex. 30 replace "morphospecies" by "fossil-species" in the fourth line, and "morphogenus" by "fossil-genus" in the fifth line.

*Prop. B (103 – Cleal & Thomas in Taxon 59: 313)* Insert in Art. 1 the following additional examples of the use of the term fossil-taxa:

"Ex. 3. Stamnostoma A. Long (in Trans. Roy. Soc. Edinburgh 64: 212. 1960) is a fossil-genus that was originally described with a single species, S. huttonense, comprising anatomically-preserved ovules with completely fused integuments forming an open collar around the lagensostome. Rothwell & Scott (in Rev. Palaeobot. Palynol. 72: 281. 1992) have subsequently enlarged the circumscription of the genus to include also the cupules in which the ovules were borne. The name Stamnostoma can be applied to either circumscription or to any other that may involve other parts, life-history stages or preservation states, so long as it includes S. huttonense, but not the type of any earlier generic name."

"Ex. 4. The generic name Sigillaria Brongn. (in Mém. Mus. Hist. Nat. 8: 222. 1822) was established for fossils of "bark" fragments, but Brongniart (in Arch. Mus. Hist. Nat. 1: 405. 1839) subsequently included anatomically-preserved stems within his concept of Sigillaria. Anatomically-preserved cones that may in part represent the same biological taxon are referred to as Mazocarpon M. J. Benson (in Ann. Bot. (London), ser. 2, 32: 569. 1918), whereas such cones preserved as adpressions are known as Sigillariostrobus Schimp. (Traité Paléont. Vég. 2: 105. 1870). All these generic names can be used concurrently in spite of the fact that they may, at least in part, apply to the same organism."

*Prop. C (175 – Bateman & Hilton in Taxon 59: 1608)* Insert a new Art. 1.3 and associated Note to read:

"1.3. As in the case of form-taxa for asexual forms (anamorphs) of certain pleomorphic fungi (Art. 59), the provisions of this *Code* authorise the publication and simultaneous use of names for fossil-taxa, irrespective of the extent of disarticulation into component organs, and hence of whether the fossil-taxa are perceived as 'organ-taxa', 'form-taxa', 'autapo-taxa', or conceptual whole-plant taxa.<sup>1</sup>

"1 Because most fossil plants have been disarticulated into their component organs, the basic unit of palaeobotanical taxonomy is of necessity a single morphologically circumscribed organ, termed an 'organ-species'. Where two or more partially or completely reconstructed conceptual whole-plant species based on fossil evidence are shown to contain indistinguishable copies of the same category of organ, that shared organ can be described as a 'form-species'. Where an organ-species exhibits at least one character-state that also appears to be diagnostic of a partially or completely reconstructed conceptual whole-plant species, this organ-species can be described as an 'autapo-species'. These three prefixes (organ-, form-, autapo-) can also be employed at any higher taxonomic rank."

*Prop. D (176 – Bateman & Hilton in Taxon 59: 1608)* Insert immediately after the new Art. 1.3 the following Example:

"Ex. 5. Conceptual reconstructions have been achieved for at least 13 whole-plant species of Pennsylvanian tree-lycopsids assignable to seven whole-plant genera, based largely on anatomically preserved plant fossils (Bateman & al. in Ann. Missouri Bot. Gard. 79: 506–507. 1992). All three whole-plant species assigned to the wholeplant genus Lepidophloios include the root+rootlet organ-species Stigmaria ficoides (Sternb.) Brongn., which also occurs throughout the remaining six genera. The microsporangiate cone Lepidostrobus oldhamianus Williamson occurs in all Lepidophloios species plus one additional whole-plant genus, whereas the megasporangiate cone Lepidocarpon lomaxi Scott is confined to the whole-plant genus Lepidophloios. The megaspore Cystosporites giganteus (Zerndt) Schopf is found throughout *Lepidophloios* and two other whole-plant genera. Although contrasting organ-species of both Lycospora Schopf, Wilson & Bentall microspores and Lepidophloios Sternb. stems+branches are unique to each of the three whole-plant species recognised within the whole-plant genus Lepidophloios, the stems reliably provide more diagnostic characters than the microspores. Thus, the organ-species of root+rootlet, microsporangiate cone, megasporangiate cone and megaspores are perceived as form-species of varying degrees of taxonomic generality, whereas the organ-species representing stem+branch and microspores are perceived as autapo-species that are genuinely diagnostic of the source fossil plant."

Rapporteurs' comments - Prop. A represents the result of a detailed review and argument in favour of abolishing the concept of morphotaxa in plant fossil nomenclature (Cleal & Thomas in Taxon 59: 261–268. 2010) and Prop. B provides two examples to illustrate the effect of the proposal. The generally fragmentary nature of plant fossils and the different types of information provided by different modes of preservation have led historically to the development of concepts such as "organ genera" and "form genera" in plant fossil nomenclature. The concept of morphotaxon, introduced in the Saint Louis Code (2000) is the latest in this succession and one that has certainly proven both ambiguous and controversial. Whereas the proposal will undoubtedly simplify the nomenclature of plant fossils, whether it will satisfy the communication requirements of palaeobotanists is for that community to assess. Conservation of names may be adequate to overcome what some may see as an undesirable consequence of applying the principle of priority without restriction in that a name applied to, say, a pollen grain might also have to be applied to the flower, and perhaps even to the stem, that bear it. The Nomenclature Committee for Fossil Plants has been asked to give its recommendation on these proposals.

*Prop C*, and the associated Example in *Prop. D*, are presented as an elaboration of Prop. A and B to establish that the simultaneous use of names for different organs of what are considered to be a single fossil-taxon is permitted, Some may question the introduction into

the *Code* of the conceptual terminology incorporated in the proposals. The Nomenclature Committee for Fossil Plants has been asked to give its recommendation on these proposals also.

### Article 6

*Prop. A (262 – Turland in Taxon 59: 1919)* Add three new Articles to Art. 6, and adjust the Glossary as appropriate:

"6.9. The name of a new taxon is a name validly published in its own right, i.e. one not based on a previously validly published name; it is not a new combination, a status novus, or a nomen novum."

"6.10. A nomen novum (nom. nov., avowed substitute, replacement name) is a new name based on but not formed from a previously published legitimate or illegitimate name, which is its replaced synonym. The replaced synonym does not provide the final epithet, name, or stem of the nomen novum (but see Art. 58.1)."

"6.11. A new combination (combinatio nova, comb. nov.) or a status novus (stat. nov., new status, i.e. new rank) is a new name based on and formed from a previously published legitimate name, which is its basionym. The basionym provides the final epithet, name, or stem of the new combination or status novus."

*Prop. B (242 – Turland in Taxon 59: 1915)* Insert "perhaps" before "by different authors" in Art. 6 Note 2 and in the entry for "isonym" in the Glossary.

Rapporteurs' comments – Prop. A seeks to address a deficiency that was highlighted by the preparation of a Glossary as a new feature of the Vienna Code, i.e., that many very important and very familiar terms such as "nom. nov." were explained only obliquely in the articles of the Code and not really defined. Defining status novus in this way means that it includes what the Vienna Code termed a "new generic name with a basionym" and thus permits the replacement, where it occurs in the Code, of that cumbersome phrase. Some may question the slight inconsistency of permitting "new combination" as the preferred term for "combination nova, comb. nov.", while retaining the Latin "nomen novum" for "nom. nov., avowed substitute, replacement name" and "status novus" for "stat. nov., new status". The use of "nomen novum" may (or may not) help to emphasize its quite different meaning from "new name" (any name validly published for the first time).

*Prop. B* is a clarification of a discrepancy in the current wording between Art. 6 Note 2 and Art. 14 Note 1.

# Article 7

*Prop. A (263 – Turland in Taxon 59: 1919)* Reword Art. 7.3 and 7.4 as follows:

"7.3. A nomen novum (Art. 6.10) is typified by the type of its replaced synonym, even though it may have been applied erroneously to a taxon now considered not to include that type (but see Art. 33 Note 2 and 48.1)."

"7.4. A new combination or status novus (Art. 6.11) is typified by the type of its basionym, even though it may have been applied erroneously to a taxon now considered not to include that type (but see Art. 48.1 and 59.6)."

Prop. B (315 – Gandhi & Reveal in Taxon 59: 1930) Add a new Example following Art. 7.4:

"Ex. 3bis. Coulter (Dec 1892) published Sullivantia hapemanii, noting that he was correcting the generic assignment of Heuchera hapemanii J. M. Coult. & Fisher (Nov 1892). As S. hapemanii was formed by using the epithet of H. hapemanii and as Coulter did not exclude its type (Art. 48.1), and indeed designated the same type, S. hapemanii (J. M. Coult. & Fisher) J. M. Coult. is a new combination based on Heuchera hapemanii J. M. Coult. & Fisher."

*Prop. C (276 – Perry in Taxon 59: 1922)* In Art. 7.7 insert "solely" after "published", so that the first sentence reads:

"7.7. A name validly published solely by reference to a previously and effectively published description or diagnosis (Art. 32.1(d)) is to be typified by an element selected from the context of the validating description or diagnosis, unless the validating author has definitely designated a different type (but see Art. 10.2)."

Prop. D (155 – Sennikov in Taxon 59: 1291) Amend Art. 7.7 as follows:

Replace "context of" by "material associated with".

*Prop. E (156 – Sennikov in Taxon 59: 1291)* Expand Art. 7.7 as follows (new text in bold):

"7.7. A name validly published by reference to a previously and effectively published description or diagnosis (Art. 32.1(d)) is to be typified by an element selected from the **entire** context of the validating description or diagnosis, unless the validating author has definitely designated a different type **or explicitly excluded part of the material associated with the validating description or diagnosis** (but see Art. 10.2). However, the type of a name of a taxon assigned to a group with a nomenclatural starting-point later than 1 May 1753 (see Art. 13.1) is to be determined in accordance with the indication or descriptive and other matter accompanying its valid publication (see Art. 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45)."

If Prop. 155 is accepted, "entire context of" would be replaced by "material associated with".

Prop. F (157 – Sennikov in Taxon 59: 1291) Add a new Example to Art. 7 after Ex. 8:

"Ex. 8 bis. Brenner (in Meddel. Soc. Fauna Fl. Fenn. 30: 142. 1904) validly published *Hieracium oribates* Brenner without accompanying descriptive matter but with reference to the validating description of *Hieracium saxifragum* subsp. *oreinum* Dahlst. ex Brenner (in Meddel. Soc. Fauna Fl. Fenn. 18: 89. 1892), another validly published name. In 1904 Brenner definitely excluded the earlier name itself and part of its original material, making the two names different in circumscription. As provided in Art. 7.7, both names are to be typified from the material associated with the same description, except for the part excluded from the circumscription of the later name."

*Prop. G (214 – Perry in Taxon 59: 1908)* Amend Art. 7 Ex. 7 as follows (new text in bold):

"Ex. 7. Since the name Adenanthera bicolor Moon (1824) is validated solely by reference to Rumphius (Herb. Amboin. 3: t. 112. 1743) the description associated with the illustration, "Rumph. amb. 3: t. 112", cited by Moon, the type lectotype of the name, in the absence of the specimen(s) from which it was figured on which the validating description was based, is the illustration referred to associated with that description i.e. "Clypeariae rubrae" Rumphius, Herbarium Amboinense 3: 177, t. 112 (1743). It is not the specimen, at Kew, collected by Moon and labelled "Adenanthera bicolor", since Moon did not definitely designate the latter as the type."

Prop. H (223 – Redhead & al. in Taxon 59: 1911) Delete Art. 7.8. Prop. I (224 – Redhead & al. in Taxon 59: 1911) Amend Art. 7.8 to read as follows (new text in bold):

7.8. Typification, **termed sanctiotypification**, of names **lacking a holotype** adopted in one of the works specified in Art. 13.1(d), and thereby sanctioned (Art. 15), may be effected in the light of anything **based on any element** associated with the name in that work.

*Prop. J (221 – Perry in Taxon 59: 1910)* Add a new Note after Art. 7.8 to read as follows:

"Note 1. For sanctioned names all references to 'protologue' (cf. Art. 9.4, 9.5, 9.17, 10.2, 10.5, 10.4, 59.2, 59.3 & 59.7 and Rec. 9A.2,

9A.3, 9A.4, 9B.1) are taken as referring to everything associated with the name in the sanctioning work."

Prop. K (087 – Rabeler & Gandhi in Taxon 59: 305) Amend Art. 7.11 as follows:

Replace the final clause starting "and, on or after 1 January 2001," by: "and if the requirements of Arts. 9.20 and 9.21 are met."

*Prop. L (183 – Gams in Taxon 59: 1611)* Add at the end of Art. 7.10 the phrase:

"and, on or after 1 January 2013 for organisms treated as fungi under this *Code*, only if information on such type designation is entered in the record of the name in a recognized repository (Art. *37bis.3*) and its record number cited in the place of publication."

Prop. M (266 – Turland in Taxon 59: 1920) Editorially change "replacement name" to "nomen novum" in Art. 7 Ex. 3 and 4, Art. 20 Ex. 5, Art. 33 Ex. 10, and Art. 52 Ex. 9 and 10.

Rapporteurs' comments – Prop. A is a desirable simplification of Art. 7.3 and 7.4 that would be possible if Art. 6 Prop. A is accepted.

*Prop. B* may be referred to the Editorial Committee, although the Example is not particularly relevant to Art. 7.4 as there is no suggestion of erroneous application.

*Prop. C*, although part of a set of proposals seeking to clarify the nomenclatural status of names for which there is more than one potential descriptive statement, simply makes clear what most would assume to be the case, namely that only if there is no descriptive statement in the protologue, may a previously published one be the basis for typification. It could be accepted independently of the other proposals.

Prop. D claims to be make more explicit the material from which the type of a name validated by reference to a previously published description or diagnosis may be selected, but, in fact, determination of the "material associated with" that description might be quite speculative, whereas "an element selected from the context of" that description would seem to imply an element that was indicated directly or indirectly in the publication. The proposed change may perhaps be beneficial in allowing a wider choice but it does not appear to be more explicit.

*Prop. E*, although proposed on the basis of a somewhat bizarre validation of a species name, nevertheless seems a reasonable additional restriction.

*Prop. F* aims to exemplify the addition to Art. 7.7, proposed in Prop. E, but it is to be hoped that a more normal Example might be found.

 $Prop.\ G$  is a useful clarification and correction of a long-standing Example in the Code.

*Prop. H* is a simple, some might say simplistic, alternative to the series of proposals on the typification of sanctioned names that comprise Art. 7 Prop. I, Art. 9 Prop. J-M, Rec. 9C Prop. A, Art. 10 Prop. C, and Art. 15 Prop. B and C (see Art. 9 Prop. J). A rather different and also relatively simple alternative is presented in Art. 7 Prop, J and Art. 9 Prop. F and I (see Art. 9 Prop. I). The acceptance of Prop. H would mean that sanctioned names would be typified in exactly the same way as any other name. Given the long period during which the present sanctioning works were starting-point works, and the consequent attempt in the wording of what is now Art. 7.8 to ensure that the application of a name that was correct before the change in starting point would not change as a result, it would seem that such a drastic solution might be nomenclaturally disruptive, but it is the users of these names who are best equipped to determine this. The Nomenclature Committee for Fungi will give its recommendation on this proposal in the April issue of *Taxon*.

*Prop. I*, as indicated, is a part of a series of proposals designed to provide a less extreme approach to the typification of sanctioned

names than Prop. H. Comments on this approach are provided under Art. 9 Prop. J.

*Prop. J*, as indicated, is also part of a series of proposals designed to clarify the typification of sanctioned names. Comments on this approach are provided under Art. 9 Prop I.

*Prop. K* is one of two proposals (the other is Art. 9 Prop. II) together designed to remove what is perceived as a minor inconsistency in the wording of Art. 7.11 and 9.21 on the requirements for lectotypification on or after 1 January 2001. However, the proposal stems from a slight misconception that was unfortunately reinforced in the editorial process. Article 9 (along with Art. 8) deals only with typification of names of species and infraspecific taxa, whereas Art. 7 deals with typification in general and so Art. 7.11 applies also to all typification including that of names of genera and subdivisions of genera. The doubt that the proposers perceived as to the requirements for typification on or after 1 January 2001 could be resolved by the addition of a parenthetical "(see also Art. 7.11)" at the end of Art. 9.21. An "ed.c." vote will be so interpreted.

*Prop. L* is an additional proposal, stimulated by Art. 37bis Prop. A and associated proposals and by discussions at the 9th International Mycological Congress in August 2010, requiring the publication of fungal nomenclatural acts, as well as the publication of new fungal names, to be recorded in a recognized repository. As this information can apparently be incorporated in existing repositories, the proposal appears reasonable, The Nomenclature Committee for Fungi will give its recommendation on this proposal in the April issue of *Taxon*.

*Prop. M* is editorial depending on the outcome of Art. 6 Prop. A.

# **Article 8**

*Prop. A (216 – Perry in Taxon 59: 1909)* Add a footnote to Art. 8.1 to read as follows:

"Here and elsewhere in the *Code* an illustration is a work of art or a photograph depicting a feature or features of the new taxon described, e.g. that of a herbarium specimen or a scanning electron micrograph."

*Prop. B (135 – Traverse in Taxon 59: 666)* Amend Art. 8.5 by adding the following text and footnote:

"However, for names of plant microfossils<sup>1</sup>, the validating illustration of the type (Art. 38.1) may serve as surrogate for it. The type remains the specimen itself, but the illustration can serve the nomenclatural functions of the type, including its clarification by epitype illustrations. If the type specimen is lost, disintegrated, or cannot be found in the type preparation, the illustration becomes its surrogate for all nomenclatural purposes." Add the following footnote to the words "plant microfossils" in the above amendment to 8.5:

"1"Plant microfossils" here refers to fossil microscopic plants or microscopic plant parts, found dispersed in sedimentary rocks. Such microscopic fossils, for investigation, are located on microscope slides in various mounting media, or on SEM stubs, or are parts of other sorts of preparations that must be studied by light, electronic, or other kinds of microscopy at a magnification of at least 100×."

Prop. C (158 – Bandyopadhyay & Pathak in Taxon 59: 1292) Insert a new Art. 8.6:

"On or after 1 January 2013, designation of a lectotype, neotype or epitype is not effective unless there is a statement that the specimen has been actually annotated as being the selected lectotype, neotype or epitype, or the unique accession number or bar code identification number of the specimen is cited, or a photograph of the specimen published, or some other means of unambiguous identification provided."

Rapporteurs' comments – Although proposed in association with Art. 9 Prop. E to clarify that an illustration included in the protologue

be part of the original material, *Prop. A* is an acceptable clarification of the meaning of illustration as generally used in the *Code*, ruling out habitat photographs and the like, and it could be accepted independently of the outcome of the other proposal.

*Prop. B* reflects the practical difficulty of utilizing types to fix the names of plant microfossils due to degradation and the problems of relocation of the type on a slide. In response to a proposal to the previous Congress to permit the illustration itself to be the type, it was suggested that the illustration could be designated as an epitype. This would not in fact be practical because an epitype interprets "only the type to which it is linked by the typifying author" (Art. 9 Note 5). As the supported type has generally been lost or destroyed, it cannot be so linked and indeed may be superseded, in which case "the epitype has no standing with respect to the replacement type" and, in any case, presumably that type would again soon be lost! The present proposal suggests that even if "the type specimen is lost, disintegrated, or cannot be found in the type preparation" the illustration would remain its surrogate for all nomenclatural purposes. This does, however, appear to be in conflict with Art. 9.2 and 9.6, which provide for the selection of a lectotype or a neotype when a holotype or all original material is lost. It might be much simpler and more satisfactory just to permit the illustration itself to be the type (or the lectotype) in such situations. This is permitted for "microscopic algae or microfungi (fossils excepted ...) ... if there are technical difficulties of preservation or if it is impossible to preserve a specimen" (Art. 37.5). Deletion of the "fossils excepted" clause in that Article and the provision of wording that covered all plant microfossils might be a simpler alternative. The Nomenclature Committee for Fossil Plants has been asked to give its recommendation on this proposal and the possible alternative.

*Prop. C* reflects the frustration that the proposers and perhaps others have felt at not being able to locate a selected type specimen. Requiring the suggested statement or the more precise information on the selected type might also make it more likely that the typifier had actually seen the specimen, but some may feel that the *Code* should not demand as a requirement of effective typification such detailed conformity to good practice.

# **Recommendation 8A**

*Prop. A (078 – Rijckevorsel in Taxon 59: 303)* In the footnote defining protologue (see Rec. 8A.4) include "(as far as effectively published)" after "everything", so that it reads:

"Protologue (from Greek πρώτος, protos, first; λόγος, logos, discourse): everything (as far as effectively published) associated with a name at its valid publication, i.e., description or diagnosis, illustrations, references, synonymy, geographical data, citation of specimens, discussion, and comments."

Also, adjust the Glossary accordingly.

*Prop. B* (009 – Niederle in Taxon 57: 317) Append the following to the footnote to Rec. 8A.4 on p. 13 of the Vienna Code defining protologue:

"This includes the description, etc., of any subdivision of a genus or infraspecific taxon accompanying the description of a genus or species respectively."

*Prop. C (284 – Perry in Taxon 59: 1923)* If Proposal 283 is accepted, replace "description or diagnosis" with "descriptive matter" in the footnote to Rec. 8A.4 defining protologue.

Prop. D (014 – Bandyopadhyay & Pathak in Taxon 57: 318) Insert a new Rec. 8A.5:

"8A.5. When the type of a name is a specimen, it is strongly recommended that the designated specimen be precisely indicated by

annotating it (or, when the type has been designated by examining its image or photograph, by requesting the curator of the collection involved to do so), by mentioning the accession number or bar code identification number of the sheet, and, if possible, by publishing a photograph of the specimen, or by any other means suitable to the author(s)."

Rapporteurs' comments – Prop. A seeks to refine the definition of "protologue" so as to make it explicit that material which is not effectively published is excluded, e.g. electronic supplements to hard-copy papers. If effective electronic publication is permitted by the Melbourne Congress, then the only electronic material that could be part of a protologue would be that which satisfied the requirements for effective publication (see Art. 29 Prop. A and B).

*Prop. B* suggests an addition that is strictly correct, but it and, more particularly, the wording of the associated Note and Examples may be more confusing than helpful. See Comments on Art. 9 Prop. R and S.

*Prop. C* would be essentially editorial, consequent on the acceptance of Art. 32 Prop I.

*Prop. D* recommends greater precision in the designation of a type, which may be thought applicable primarily to lectotypification and neotypification and hence to overlap with Rec. 9A Prop. B and C.

### **Recommendation 8B**

*Prop. A (138 – Nakada in Taxon 59: 983)* Add a new Recommendation 8B.3 to read:

"8B.3. When a culture is designated as a type, the status of the culture should be indicated, including the phrase 'permanently preserved in a metabolically inactive state' or an equivalent."

Rapporteurs' comments – Prop. A seems to be a useful addition to Rec. 8B. The Nomenclature Committees for Algae and for Fungi have been asked to give their recommendations on this proposal proposal; those of the latter will be published in the April issue of *Taxon*.

# Article 9

Prop. A (159 – Moran & al. in Taxon 59: 1292) Amend Art. 9.1 to read (changes appear in bold):

"9.1. A holotype of a name of a species or infraspecific taxon is the one specimen (see Art. 8.2 and 8.3) or illustration (but see Art. 37.4) used by the author, or designated by the author as the nomenclatural type. As long as a holotype is extant, it fixes the application of the name concerned (but see Art. 9.13; see also Art. 10).

"Note 1. Any designation made by the original author, if definitely expressed at the time of the original publication of the name of the taxon, is final (but see Art. 9.9 and 9.13). If the author used only one element, that one must be accepted as the holotype, and its duplicates (if any) accepted as isotypes. If a new name is based on a previously published description or diagnosis of the taxon, the same considerations apply to material included by the earlier author (see Art. 7.7 and 7.8)."

*Prop. B (160 – Moran & al. in Taxon 59: 1292)* Add the following examples following Art. 9.1:

"Ex. 1. When E. Tuckerman established *Opegrapha oulocheila* (Lich. Calif. Ore. & Rocky Mts.: 31. 1866) he stated that he had before him a "specimen, Schweinitz's herbarium (Herb. Acad. Sci. Philad.)." Even though the term "type" or its equivalent was not used in the protologue, that specimen (PH) is the holotype.

"Ex. 2. When E.L. Greene proposed *Persicaria grandifolia* (in Leafl. Bot. Observ. Crit. 1: 37. 1904) he stated that his type consisted of several sheets of a single individual. Nonetheless, none of the three mounted sheets (NDG sheet nos. 14949, 14950, 25187) is labelled to denote that collectively they constitute the holotype as required by

Art. 8.3; therefore, a lectotype was later designated (NDG, sheet no. 14950; fide Reveal & Atha in Brittonia, in press)."

Prop. C (161 – Moran & al. in Taxon 59: 1293) Amend Art. 9.2 to read (changes appear in bold):

"9.2. A lectotype is a specimen or illustration designated from the original material as the nomenclatural type, in conformity with Art. 9.9 and 9.10, if no holotype was **used or** indicated at the time of publication, or if it is missing, or if it is found to belong to more than one taxon (see also Art. 9.12)."

*Prop. D (162 – Moran & al. in Taxon 59: 1293)* Add the following examples following Art. 9.2:

"Ex. 3. When E.L. Greene proposed *Polygonum parryi* (in Bull. Torrey Bot. Club 8: 99. 1881) he cited a C.C. Parry collection he had seen prior to its distribution. The distributed sheets bear a printed label with the expression "*Polygonum parryi*, Greene n. sp." but sheets at both CAS and NDG have hand-written labels in Greene's hand with basically the same information although the printed labels lack the location, "Yosemite Valley." Because Greene clearly saw the unmounted material before its distribution, all of the individual sheets of this single gathering that were subsequently distributed are syntypes for which a lectotype (NDG, sheet no. 14532) was designated by Reveal & Atha (in Brittonia, in press).

"Ex. 4. When E.L. Greene proposed *Persicaria oregana* (in Leafl. Bot. Observ. Crit. 1: 31. 1904) he stated that he was aware of two specimens, one in his own herbarium (NDG) and a second at the Smithsonian Institution (US). The sheet in his own herbarium was annotated "Type" whereas the US sheet was not annotated by Greene. Even though there is no direct evidence that Greene used the US sheet to established *P. oregana*, the fact that he mentioned it in the prologue is sufficient to require lectotypification.

"Ex. 5. When E. Tuckerman (in W. Darlington, Fl. Cestrica, ed. 3: 451. 1853) validated *Endocarpon arboreum*, citing a manuscript name of L.D. von Schweinitz, he stated "Hab. on trunks, &c." Though the editor, E. Michener, stated that it was "only once found" this statement is not germane because he did not describe the name. There was no indication a single element was used, and therefore a lectotype was selected from the Schweinitz herbarium (PH; see Lendemer in Mycotaxon 90: 320. 2004). Although there is no direct evidence that Tuckerman used the Schweinitz material, there is evidence he had access to it from publications (Amer. J. Sci. Arts. 75: 427. 1858) and annotations on other Schweinitz specimens."

*Prop. E (215 – Perry in Taxon 59: 1909)* Amend Art. 9 Note 2 as follows:

In clause (a), replace "(both unpublished and published either prior to or together with the protologue)" with "(both unpublished and published prior to publication of the protologue)". After clause (a), insert a new clause to read: "(a bis) those illustrations published as part of the protologue even if not used by the author of the validating description or diagnosis;".

Prop. F (217 – Perry in Taxon 59: 1909) Amend Art. 9 Note 2 as follows:

In the first line, after "For the purposes of this *Code*," add "except for the situations covered by Art. 7.7 & 7.8," and in the last line delete "(but see also Art. 7.7, second sentence, and 7.8)".

*Prop. G (218 – Perry in Taxon 59: 1909)* Add a new Note after Note 2 to read as follows:

"Note 2bis. For names falling under Art. 7.7 first sentence, the original material comprises (a) those specimens and illustrations (both published and unpublished) upon which it can be shown that the description or diagnosis validating the name was based; (b) those

illustrations published with the validating description or diagnosis even if not used by the author of the validating description or diagnosis; (c) those specimens which even if not seen by the author of the description or diagnosis were cited with the validating description or diagnosis; (d) the holotype and the duplicates of the holotype (isotypes)."

*Prop. H (219 – Perry in Taxon 59: 1909)* Add a further new Note after Note 2*bis* to read as follows:

"Note 2ter. For names falling under Art. 7.7 second sentence, the original material comprises only those specimens and illustrations available to or indicated by the validating author."

*Prop. I (220 – Perry in Taxon 59: 1909)* Add a further new Note after Note 2*ter* to read as follows:

"Note 2 quarter. For names falling under Art. 7.8, the original material comprises only those specimens and illustrations associated with the name in the sanctioning work and can be an element not associated with the protologue."

*Prop. J (225 – Redhead & al. in Taxon 59: 1911)* Add a new Art 9.6bis and two examples:

"9.6bis. A **sanctiotype** is a specimen or illustration selected to serve as the nomenclatural type of a sanctioned name (see Arts. 7.8 and 15.1) from among any element associated with the name in the sanctioning work (see Art. 13.1(d)) and may be an element explicitly or implicitly excluded by, or from, the protologue. Lectotypes for sanctioned names designated before 1 January 2013 become sanctiotypes if associated with and included within the taxon bearing the name in the sanctioning work."

"Ex. 3bis. Clements & Shear (Gen. Fung.: 348. 1931), the first to designate a type not using an "American Code" rule, selected Agaricus infundibuliformis Schaeff.: Fr. [ut 'C. infundibulis (Schaeff.) Fr.'] as 'type' of Agaricus 'trib.' Clitocybe Fr. (Syst. Mycol. 1: 78. 1821) [ut 'Clitocybe Fr.']; therefore A. infundibuliformis is the sanctiotype of Clitocybe (Fr.) Staude and its Friesian subgeneric 'tribus' basionym."

"Ex. 3ter. Weber (in Wiggers, Fl. Holsat. Suppl.: 12-14. 1787), when publishing Patella stercorea, included Helvella lentiformis Scopoli (in Fl. Carniol., ed. 2: 481. 1772) in synonymy. Independently Bulliard (Herb. France: pl. 438 f. 4. 1790) validated (Art. 42.3) the names Peziza stercorea and Peziza ciliata (l.c.: pl. 438, fig. 2). Persoon (Observ. Mycol. 2: 89. 1799) cited Wiggers (l.c.) when he proposed the name Peziza stercorea, yet simultaneously listed H. lentiformis as a synonym of Peziza lenticularis (1.c.: 86). Fries (Syst. Mycol. 2: 87. 1822), citing Persoon (l.c. 1799) as the earliest treatment under the binomial, effectively sanctioned Peziza stercorea (Weber in Wigg.: Fr.) Pers. The basionym, Patella stercorea Weber in Wigg., is not to be automatically typified by the type of *H. lentiformis* (Art. 7.5). Denison (in Mycologia 56: 727. 1964) proposed as "lectotype" of "Peziza stercorea Persoon ex Fries" an undated Persoon specimen, not reliably linked to either the protologue or the sanctioning work. Moravec (in Czech. Mycol. 47: 11. 1993) superseded Denison's typification (Art. 9.6bis) and effectively sanctiotypified Peziza stercorea (Weber in Wigg.: Fr.) Pers. with non-original material, an illustration (Bulliard, l.c.: pl. 438, f. 2. 1790, 'P. ciliata' as differentiated from 'P. stercorea Bull.') cited by the sanctioning author. Moravec (l.c.) additionally epitypified the sanctiotype."

*Prop. K (228 – Redhead & al. in Taxon 59: 1912)* Implement the following corollary changes:

In Art. 7.5, add ", nor to their basionyms." after the phrase "does not apply to names sanctioned under Art. 15."

In Art. 8.1 add: ", sanctiotype" after the word "lectotype".

In Rec. 8A add: ", a sanctiotype" after the word "lectotype".

In Art. 9.6 add at the end: ", or in the case of sanctioned names, no specimen or illustration would qualify to serve as a sanctiotype".

In Art. 9.7, add: ", sanctiotype," after each use of "lectotype".

In Art. 9.11 add: ", or for sanctioned names, if all elements quali-

fied to serve as a sanctiotype are missing" after the word "missing" and add "or sanctiotype" after the word lectotype.

In Art. 9.14 add: "or sanctiotype" after the word lectotype, and add ", or for sanctioned names, all other elements qualified to serve as a sanctiotype" after the phrase "original material".

In Art. 9.15 add: ", sanctiotype" after the word lectotype, and add ", sanctiotypification" after the word "lectotypification".

In Art. 9.16 replace: "or lectotype" with ", lectotype or sanctiotype".

In Art. 10 Note 1, replace: 'and "lectotype" 'with ', "lectotype", and "sanctiotype".

In Art. 10.2 add: ", or if it is a sanctioned name (cf. Art. 15)" at the end of the first sentence.

Add in Art. 10: "Ex. 2bis. Clements & Shear (Gen. Fung.: 328. 1931) selected as 'type' of the sanctioned name, Peziza Dill. ex L.: Fr. [ut Peziza (Dill.) L.] (Sp. Pl. 2: 1180. 1753; Syst. Mycol. 2: 40. 1822), Peziza vesiculosa Bull.: Fr. (Herb. France 10: t. 457, fig. 1. 1790; Syst. Mycol. 2: 52. 1822), even though P. vesiculosa was not an original Linnaean taxon and several original Linnaean species were included in the sanctioning work. Clements & Shear effectively sanctiotypified Peziza Dill. ex L.: Fr., which retains its priority dating back to 1753."

"In Art. 10.5(b) add: ", including that of sanctioned names."

*Prop. L (232 – Redhead & al. in Taxon 59: 1912)* Add the following two examples in Art. 9:

"Ex. 6bis. Rossman & al. (in Stud. Mycol. 42: 86. 1999) effectively sanctiotypified the name Sphaeria rufa Pers.: Fr. (Persoon, Observ. Mycol. 1: 20. 1796; Fries, Syst. Mycol. 2(2): 335. 1823) when they designated the exsiccatum Fries Scler. n. 303 (UPS) cited by Fries (l.c.) to be the 'neotype'."

"Ex. 8ter. Hallenberg (in Mycotaxon 18: 182. 1983) proposed as a 'neotype' a modern specimen for Hericium coralloides (Scop.: Fr.) Pers. Illustrations published by Micheli (1729) and Schaeffer (1762) cited in the protologue of the basionym, Hydnum coralloides Scop.: Fr. (Fl. Carniol., ed. 2, 2: 472. 1772) and other illustrations cited by Fries (Syst. Mycol. 1: 408–409. 1821) eligible to serve as sanctiotype (Art. 9.6bis) were overlooked. The designation of a 'neotype' contravened Art. 9.6 and furthermore, because the designated specimen was not associated with the sanctioning work, it is not a sanctiotype."

*Prop. M (226 – Redhead & al. in Taxon 59: 1912)* Add a new Art. 9.17*bis* and Example:

"9.17bis. The author who first designates a sanctiotype (whether as such or when using earlier Codes, either by previously recognizing or by designating a 'type' now eligible as a sanctiotype – see Art. 9.6bis) must be followed unless (a) the designation may be superseded by being largely based upon a mechanical means (Art. 10.5(b)); or (b) it is in serious conflict with the sanctioning treatment."

"Ex. 8bis. Seaver (in Mycologia 19: 88. 1927 and in N. Amer. Cup-Fung., Operc.: 219. 1928) proposed *Peziza cochleata* L.: Fr. as type of "*Peziza* (Dill.) L." explicitly utilizing the "American Code of Botanical Nomenclature". His choice, although based upon an original species, was superseded by Clements & Shear (Gen. Fung.: 328. 1931), who chose *P. vesiculosa* Bull.: Fr., a non-original element but one included in the genus in the sanctioning publication (Fries in Syst. Mycol. 2(1): 40. 1822; see also Art. 10 Ex. 2bis)"

*Prop. N (285 – Perry in Taxon 59: 1923)* If Proposal 283 is accepted, amend Art. 9 Note 2 so that it reads as follows (new text in bold):

"Note 2. For the purposes of this Code, the original material comprises: (a) those specimens and illustrations (both unpublished

and published either prior to or together with the protologue) upon which it can be shown that the description or diagnosis validating the name descriptive matter of the protologue was based; (b) the holotype and those specimens which, even if not seen by any of the author(s) of the description or diagnosis validating the name descriptive matter of the protologue, were indicated as types (syntypes or paratypes) of the name at its valid publication; and (c) the isotypes or isosyntypes of the name irrespective of whether such specimens were seen by either the author(s) of the validating description or diagnosis descriptive matter of the protologue, or the author(s) of the name (but see also Art. 7.7, second sentence, and 7.8)."

*Prop. O (233 – Turland in Taxon 59: 1913)* Amend Art. 9.4 as follows (new text in bold):

"9.4. A syntype is any specimen cited in the protologue when there is no holotype, or any one of two or more specimens simultaneously designated as types. For this purpose, citing or designating a gathering, or part thereof, is considered citation of the included specimens."

*Prop. P (234 – Turland in Taxon 59: 1913)* Amend Art. 9.4 and 9.5 as follows (new text in bold):

"9.4. A syntype is any specimen cited in the protologue when there is no holotype, or any one of two or more specimens simultaneously designated **in the protologue** as types (see also Art. 37 Note 1)."

"9.5. A paratype is a specimen cited in the protologue that is neither the holotype nor an isotype, nor one of the syntypes if two or more specimens were simultaneously designated in the protologue as types."

*Prop. Q (025 – Rijckevorsel in Taxon 58: 661)* In Art. 9.5 replace "a specimen" by "any specimen", so that Art 9.5 reads as follows:

"9.5. A paratype is any specimen cited in the protologue that is neither the holotype nor an isotype, nor one of the syntypes if two or more specimens were simultaneously designated as types."

*Prop. R (010 – Niederle in Taxon 57: 317)* Insert the following Note and Example following Art. 9 Ex. 1:

"Note 2bis. If there is no holotype, specimens cited in all included infraspecific taxa, named or unnamed, in the protologue of the name of a species are syntypes. In particular, for Linnaean infraspecific taxa denoted  $\beta$ ,  $\gamma$ , etc., in Sp. Pl., all the specimens cited in the main entry and sub  $\beta$ ,  $\gamma$ , etc., if such exist, are syntypes of the Linnaean name."

"Ex. 1bis. In the protologue of Anemone alpina L., Sp. Pl.: 539. 1753, no specimen is cited in the main entry for the species, but Burser, Hortus siccus IX: 80 is cited under  $\beta$  and Burser, Hortus siccus IX: 81 is cited under  $\gamma$ . Consequently, these specimens are the only syntypes of Anemone alpina L. See Jarvis, Order out of Chaos: 293–294. 2007."

*Prop. S (011 – Niederle in Taxon 57: 317)* Insert the following new Example after Art. 9.10:

"Ex. 6bis. Although Burser, Hortus siccus IX: 80 and Burser, Hortus siccus IX: 81 are cited under infraspecific taxa of Anemone alpina L., Sp. Pl.: 539. 1753 (see Art. 9 Ex. 1bis), a lectotype must be chosen from among them as there are no isotypes and these are the only syntypes."

*Prop. T (024 – Rijckevorsel in Taxon 58: 660)* In Art. 9, correct and rephrase Ex. 4, so that it reads as follows:

"Ex. 4. Throughout the 20th Century, Butyrospermum parkii (G. Don) Kotschy (1865) was the well-known name for a species of which the seeds are of economic importance (yielding shea butter), with a lesser-known taxon being included later as an eastern subspecies, Butyrospermum parkii subsp. niloticum (Kotschy) J. H. Hemsl. (1961). The holotype of the name Vitellaria paradoxa C. F. Gaertn. (1807), a seed of unknown provenance (P), clearly belongs to this same species. This name has priority and therefore is the correct name

for this species. However, the two subspecies recognized within the species can only be distinguished by characters of foliage or inflorescence. The type of *Bassia parkii* G. Don (1838), the basionym of the well-known name, *Mungo Park* (BM), was designated by Hall & Hindle (in Taxon 44: 410. 1995) as the epitype (with foliage) of *V. paradoxa*. This fixes the application of the name of the typical subspecies and preserves at least some continuity of nomenclature, with the eastern subspecies retaining the epithet *nilotica*, as *V. paradoxa* subsp. *nilotica* (Kotschy) A. N. Henry & al. (1983)."

Prop. U (136 – Traverse in Taxon 59: 666) Add the following Note after Art. 9.7:

"Note 3bis. An illustration of the type of a plant microfossil can serve as its surrogate for all nomenclatural purposes (see Art. 8.5), including designation of an additional illustration as an epitype."

*Prop. V (294 – Redhead in Taxon 59: 1927)* Define the term 'teleotype' and modify other articles of the *Code* accordingly:

"9.7bis. A teleotype is a specimen or illustration representing the teleomorph of a fungus (see Art. 59.1) and designated to serve as both an interpretive and a nomenclatural supplementary type for a name typified by an anamorphic type. When a teleotype is designated, the holotype, lectotype, or neotype that it supports must be explicitly cited. Designation of a teleotype imparts teleomorphic status to a name for purposes of priority under Art. 59."

Following this paragraph in Art. 9, add the Note:

"Note 3bis. Teleotypes were not distinguished from epitypes in the Vienna Code and therefore teleomorphic "epitypification" made under the provisions of Art. 59 in that Code are considered to be effective teleotypifications, and not epitypifications as currently defined."

In Art. 9.7, delete "(but see also Art. 59.7)".

In Art. 9, Note 5, add: "or teleotype" after each use of the word "epitype".

In Art. 9.19, add "or teleotype" after each use of the word "epitype".

In Art. 9.19, add "or teleotype" after each use of the word "epitype".

In Art. 59, replace "epitype" with "teleotype" and "epitypified" with "teleotypified".

Prop. W (295 – Redhead in Taxon 59: 1928) After Art. 9.18, add a paragraph

"9.18bis. The author who first designates a teleotype must be followed unless new evidence establishes that the teleotype and the type it supports are not conspecific, in which case it may be superseded. Even if a teleotype is superseded, a name once teleotypified retains its holomorphic nomenclatural status and consequent priority under Art. 59."

*Prop. X (163 – Sennikov in Taxon 59: 1293)* Expand Art. 9 Note 4 as follows (new text in bold):

"Note 4. Correction can be effected only if the requirements of Art. 7.11 (for correction to lectotype, neotype and epitype) are met and Art. 37.6 (for correction to holotype) does not apply."

*Prop. Y (316 – Gandhi & Reveal in Taxon 59: 1931)* Add an Example to Art. 9.8 with references to Arts. 7.7 and 37.3:

"Ex. 6bis. Being contrary to Art. 37, "Crataegus laurentiana var. dissimilifolia" was not validly published by Kruschke (in Publ. Bot. Milwaukee Public Mus. 3: 35. 1965), who cited two collections as "type". When Phipps (in J. Bot. Res. Inst. Texas 3: 242. 2009) validly published this name, he made a full and direct reference to Kruschke's Latin diagnosis (Art. 7.7) but termed Kruschke K-49-145 its "lectotype". As C. laurentiana var. dissimilifolia Kruschke ex J. B. Phipps is a newly established taxon, Phipps's use of "lectotype" is an error to be corrected to holotype (see also Art. 37 Ex. 3 and Art. 37.6)."

*Prop. Z (021 – Niederle in Taxon 58: 660)* Insert the italicized sentence in Art. 9.10 as indicated:

"9.10. In lectotype designation, an isotype must be chosen if such exists, or otherwise a syntype if such exists. If no isotype or syntype is available, and an isosyntype exists, the lectotype must be chosen from among isosyntypes. If no isotype, syntype or isosyntype (duplicate of syntype) is extant, the lectotype must be chosen from among the paratypes if such exist. If no cited specimens exist, ..."

Prop. AA (080 – Proćków in Taxon 59: 304) Add the following sentence after the second sentence of Art. 9.10:

"However, if it is established in the typifying publication (or in a prior publication), that all the cited specimens are in conflict with the description, and there is other original material that is not in conflict, then preference in choice of lectotype must be given to this uncited material."

Prop. BB (081 – Proćków in Taxon 59: 304) Add the following sentence after the second sentence of Art. 9.10:

"However, if it is established in the typifying publication (or in a prior publication), that all the cited specimens lack important diagnostic features, and there is other original material that does not lack such features, then preference in choice of lectotype must be given to this uncited material."

*Prop. CC (082 – Proćków in Taxon 59: 304)* If either or both Props. 080 and 081 are accepted, add the following qualification after 'uncited material' at the end of the proposed new sentence(s) of Art. 9.10:

", with the proviso that, within this category, specimens indicated in the protologue by locality information have precedence over other original material."

Prop. DD (084 – Pathak & Bandyopadhyay in Taxon 59: 305) Insert the italicized sentence in Art. 9.10 as indicated:

"9.10. In lectotype designation, an isotype must be chosen if such exists, or otherwise a syntype if such exists. If no isotype, syntype or isosyntype (duplicate of syntype) is extant, the lectotype must be chosen from among the paratypes if such exist. If no cited specimens exist, the lectotype must be chosen from among the uncited specimens and cited and uncited illustrations which comprise the remaining original material, if such exist. This sequence must be followed unless it can be shown that a specimen which should have priority in selection is not suitable in any way for typifying the name, in which case a specimen next in the sequence may be chosen."

Prop. EE (085 – Bandyopadhyay & Pathak in Taxon 59: 305) Add the following Note in Art. 9, following Art. 9.10:

"Note 4bis. A choice contrary to Art. 9.10 does not constitute an effective lectotypification."

*Prop. FF (083 – Prado & al. in Taxon 59: 304)* Insert a new Note following Art. 9.10 and add the terms defined therein to the Glossary:

"Note 5: Isolectotypes, isoneotypes, and isoepitypes are duplicate specimens of a lectotype, neotype and epitype, respectively."

Glossary (App. VII) entries:

"isolectotype. A duplicate specimen of the lectotype (Art. 9.10, Note 5)."

**"isoneotype.** A duplicate specimen of the neotype (Art. 9.10, Note 5)."

"**isoepitype.** A duplicate specimen of the epitype (Art. 9.10, Note 5)."

*Prop. GG (104 – Yu & al. in Taxon 59: 656)* Amend Article 9.15, so that it reads as follows (new text in *italic*):

"9.15. A designation of a lectotype or neotype that later is found to refer to a single gathering but to more than one specimen must

nevertheless be accepted (subject to Art. 9.17), but may be further narrowed to a single one of these specimens by way of a subsequent lectotypification or neotypification. On or after 1 January 2013, such designation is not effective unless a unique herbarium barcode or accession number of the sheet is cited after the indication of the herbarium or other collection."

Prop. HH (139 – Proćków & Jakubska-Busse in Taxon 59: 983) Delete the second part of the sentence from the point 'b' of Art. 9.17:

"and another element is available that is not in conflict with the protologue"

*Prop. II (086 – Rabeler & Gandhi in Taxon 59: 305)* Amend Art. 9.21 by adding this statement at the end:

"and if the typification statement includes the phrase 'designated here' (hic designatus) or an equivalent."

Rapporteurs' comments – Prop. A–D are designed to address what is perceived as a conflict between Art. 9.1 and 9.2, in that the former defines a holotype as "the one specimen or illustration ... used by the author, or designated ..." whereas Art. 9.2 permits a lectotype to be chosen "if no holotype was **indicated** at the time of publication". The conflict exists only if evidence for the use of a single element (i.e. a specimen or illustration) is permitted from sources other than (1) the protologue or (2) work indicated through the protologue (e.g. the introductory portion of a paper published in parts). Of the four proposals, only Prop. C directly addresses this issue and the vote on that should reflect whether or not broadening the sources of evidence for use of a single element (specimen or illustration) is desirable. Although the intent of the proposal is relatively clear, the wording is defective as it is not the "use" of a holotype (in the absence of designation) that determines its existence, but the use of a single specimen or illustration. Prop. A addresses a somewhat different but cognate matter, the clarification, in Art. 9.1 and Art. 9 Note 1, of what constitutes a specimen for purposes of typification. It and the examples in Prop. B could be referred to the Editorial Committee regardless of the outcome of Prop. C. As noted, the intent of Prop. C, by including the words "used or indicated" in Art. 9.2, is to permit evidence not indicated in any way in the protologue to determine that an author used only one element in describing a new taxon and this should be voted on accordingly. Prop. D can also be referred to the Editorial Committee, because, of the three examples, only the first ("Ex. 3") is worded in a manner relevant to Prop. C. However, as there is in the protologue of *Polygonum parryi* in addition to the source of the type material ("Yosemite Valley, California, June, 1881. Collected by Dr C.C. Parry") the statement attributed to [Sereno] Watson that "nothing like this has before been received at Cambridge", there is indication in the protologue of material at Harvard as well as that in Greene's own herbarium, upon which this and other new taxa in the publication are apparently based.

Prop. E addresses the question of whether an illustration published as part of the protologue is original material. A strict interpretation of the present definition requires that, for such an illustration to be original material, it must be possible to show that the description or diagnosis validating the name was based, at least in part, on the illustration itself and not just on the specimen or specimens portrayed by the illustration. Acceptance would make explicit the widely held assumption that illustrations in the protologue are original material, particularly with acceptance of the associated Art. 8 Prop. A, which would ensure that features of the taxon were illustrated and would not permit, for example, a photograph of the habitat.

*Prop. F–H* address the fact that the current definition of original material does not adequately account for the special rules on

typification established in Art. 7.7 for names validly published by reference to previously published descriptive material. Prop. F is editorial, dependent on the decisions on Prop. G and H (and also Prop. I, below). Prop. G makes explicit what Art. 7.7 first sentence implies is the original material of such names in the regular case of a group with a 1 May 1753 starting point. Prop. H seeks to do the same for what is implied in Art. 7.7 second sentence to be the original material of such names in groups with a later starting point. The Nomenclature Committees for Algae, Bryophyta, and Fossil Plants have been asked to give their recommendations on Prop. H.

*Prop I*, along with Art. 7 Prop. J, aims to address a similar situation in which there is a special rule on typification, namely Art. 7.8 on names of fungi sanctioned under Art. 15. Reflecting the wording of Art. 7.8, Art. 7 Prop. J proposes that for sanctioned names all references to "protologue" are taken as referring to everything associated with the name in the sanctioning work, while this proposal (Art. 9. Prop. I) reflects the implications of Art. 7.8 for the definition of original material of sanctioned names. If deletion of Art. 7.8 (Art. 7 Prop. H) is deemed too extreme a solution, Art. 7 Prop J and Art. 9 Prop. I provide relatively simple modifications of existing terms and definitions to accommodate the typification of sanctioned name and appear to present a workable alternative to the proposals on sanctiotypes, discussed below (Prop. J–M).

Prop. J-M, along with Art. 7 Prop. I, provide an alternative approach to the typification of sanctioned names. The proposals adopt the premise that the process of typification of such names is so different from that of other names that establishing a special term, "sanctiotype", is desirable for what would otherwise be the lectotype of a sanctioned name. Those most involved in such typification should advise on whether the simpler solution of Prop. I, above, deals adequately with the situation or whether the special terminology of this set of proposals is needed. Prop. J (with Art. 9 Prop. I) is the core proposal. Prop. K is editorial, consequent on its acceptance. Prop. L and M provide examples that could well be incorporated in the Code (with suitable editorial modification) regardless of the outcome of the other proposals (except Art. 7 Prop. H to delete Art. 7.8) and may be referred to the Editorial Committee. The Nomenclature Committee for Fungi will give its recommendation on these proposals and those of Art. 7 Prop. J and Art. 9 Prop. I, above in the April issue of Taxon.

Prop. N is editorial, consequent on the decision of Art. 32 Prop. I. Prop. O would make explicit a matter that seems logical but that is not strictly covered by the current wording of Art. 9.4. A type might be indicated in accordance with Art. 37 by reference to an entire gathering, or part thereof, that comprises more than one specimen but without necessarily specifying any of those individual specimens or, prior to 1 January 1990 (Art. 37.7), the single herbarium in which the type was housed. It is logical to view the individual specimens of such a type gathering as syntypes, but this extends somewhat the current wording of Art. 9.4, which requires that a syntype be cited, whereas these constituent specimens are merely indicated by the citation of the type gathering. The proposed addition would resolve this.

*Prop. P* is another house-keeping proposal and simply clarifies the evident intent of Art. 9.4 and 9.5, that designation of syntypes and paratypes must be in the protologue and not later.

*Prop. Q* would make Art. 9.5, the definition of a paratype, consistent with Art. 9.3 and 9.4, the definitions of an isotype and syntype, respectively, which both employ the wording "any specimen" rather than "a specimen". Under current practice, if a specimen cited in the protologue is not the holotype, an isotype, or a syntype, then it must be a paratype. Prop. B would make this definition more precise,

removing any possibility of a specimen cited in the protologue not being one of those four categories of types.

Prop. R is very misleading in that it is only accurate if no autonymic infraspecific taxon is recognized. This is a common situation in 18th and early 19th century publications (cf. e.g. Art. 26 Ex. 4), but becomes extremely uncommon in the years approaching 1990 when indication of a holotype became mandatory. In that case, if one of the infraspecific taxa is clearly stated to include the type, e.g. by use of an autonymic epithet, or even by use of designations such as typicus, originalis, etc. (Art. 24.3), then specimens cited under other infraspecific taxa cannot be syntypes of the autonym, and hence cannot be syntypes of the species name. The two examples, that in Prop. R and that in Prop. S, reflecting the same case, are relevant however, and might be included editorially if it were made clear that Linnaeus did not designate a typical infraspecific taxon (and indeed did not name any infraspecific taxa). An "ed.c." vote will be so interpreted.

*Prop. T* would make corrections to Art. 9 Ex. 4, necessary because the correct name for the species is in fact *Vitellaria paradoxa*, not *Butyrospermum paradoxum*, the generic name *Vitellaria* having priority and a proposal to conserve *Butyrospermum* against it having been rejected.

*Prop. U* is a corollary to Art. 8 Prop. B, particularly designed to make explicit that an epitype may be designated for a surrogate type established under that proposal.

Prop. V and W, although part of a set of proposals dealing with Art. 59 by the Secretary of the Special Committee on the Nomenclature of Fungi with a Pleomorphic Life Cycle (see Art. 59 Prop. C–K), are somewhat independent of the controversies that surround the future of that Article being subject only to whether or not Art. 59 Prop. A is accepted. At the Vienna Congress, the epitype concept was extended to cover the designation of an interpretive teleomorphic type for a hitherto anamorphic name (Art. 59.7). It is widely accepted by mycologists that a separate term for such a type is desirable, and Prop. V would formally recognize the term "teleotype" that has already been widely used informally. Prop. W is a logical corollary paralleling Art. 9.18 for epitypes. The Special Committee on the Nomenclature of Fungi with a Pleomorphic Life Cycle has since voted on these proposals as follows: Prop. V: 8 [yes]: 1 [no]: 1 [abstain]; Prop. W: 8:1:1.

*Prop. X* is a "house-keeping" proposal recognizing that, on or after 1 January 1990, the words "typus" or "holotypus" or abbreviations and equivalents must be included for valid publication of a name and that correction under Art. 9.8 should be subordinate to that. If Art. 7 Prop. K with Art. 9 Prop. II are accepted, editorial modification will be required.

*Prop. Y* could be referred to the Editorial Committee (with "newly established taxon" corrected to "the name of a new taxon").

*Prop. Z* is designed to plug what is perceived as a logical gap in the sequence of elements of original material available for selection as a lectotype. However the current wording goes back to the *Tokyo Code* (and even before that in a Recommendation) and there has been concern that too precise a sequence, in this case forcing a distinction between syntypes and isosyntypes, could be an undue restraint for ensuring stabilizing lectotypifications.

*Prop. AA–CC* propose quite substantial changes in the way in which lectotypes may be selected in the future (although the wording seems intended not to disrupt existing lectotypes) in that uncited original material would have precedence over syntypes and paratypes, if (Prop. AA) the latter were all "in conflict with the description", or (Prop. BB) they lacked "important diagnostic features". Prop. CC is proposed only in the event of acceptance of one or both the other

proposals and would give preference to original material indicated by locality information in the protologue over other uncited material. Those who consider the situations covered by the proposals sufficiently common and the solution proposed sufficiently beneficial will doubtless support them.

*Prop. DD* has similarities to Prop. AA and BB, but is both more flexible and even more open to diverse interpretation. What is "not suitable in any way" as a lectotype is clearly a matter of individual judgement. For some this would certainly include disruptive nomenclatural change, but others might think that only situations such as those described in Prop. AA and BB (above) – the latter, in the form of damaged specimens, being the only one discussed by the proposers – should qualify.

*Prop. EE* is a corollary to Prop, DD and would appear to make retroactive the application of Prop. DD, which would almost certainly be nomenclaturally disruptive.

*Prop. FF* proposes the terms isolectotype, isoneotype, and isoepitype for inclusion in a Note in Art. 9. Certainly it is perfectly logical that these terms should be used for the duplicates of a lectotype, neotype, and epitype, respectively, but the Editorial Committee chose not do so in response to the proposal referred to it by the Vienna Congress (see McNeill & al. in Taxon 54: 1063. 2005) because it felt that terms that had no nomenclatural significance should not be included in the Code. However, there is a need in type citations to refer to these duplicates with an unambiguous term, and apparently some journal editors have been reluctant to permit use of the proposed terms because they are not mentioned in the Code. Indeed, the Code itself uses the somewhat ambiguous "dupl." instead of "isoepitype" under Jungermannia palmata and Riccia fruticulosa in App. IV (p. 438). Therefore, Prop. FF could endow the three terms with the desired formal status, although it would not be appropriate to include them in a Note because their application is not already implicit in the Code. It would be much more suitable to include them as a Recommendation following Art. 9. An "ed.c." vote will be so interpreted.

*Prop. GG* is ambiguous in using the words "such designation". From the supporting text of the proposal, this evidently refers the first step of lecto- or neotypification, not the second step. The proposal would require that all herbaria in which lectotypes or neotypes are deposited have a system of barcodes or accession numbers, which, of course is quite unrealistic. Instead, a Recommendation might be considered; see also Rec. 8A Prop. D and Rec. 37A Prop. A.

Prop. HH seeks to extend the provision to supersede a lectotypification or neotypification on grounds of major conflict with the protologue, regardless of whether or not other original material that is not in conflict exists. This is not an unreasonable suggestion and might sometimes preclude the need to propose a name for conservation to preserve current usage. On the other hand, situations in which original material is in conflict with the protologue are necessarily rare (being logically impossible for syntypes or paratypes), and some may consequently think that if the proposal is accepted the chance that some accepted lectotypes could be displaced overshadows the advantages.

*Prop. II* is linked with and discussed under Art. 7 Prop. K and the two proposals should be voted on in the same way.

## **Recommendation 9A**

*Prop. A (088 – Prado & Moran in Taxon 59: 307)* Amend the text of Rec. 9A.4 to read (changes appear in italic):

*9A.4.* When a single gathering is cited in the protologue, but a particular institution housing it is not designated, it should be assumed is recommended that the specimen housed in the institution where

the author is known to have worked is the holotype be selected as the lectotype, unless there is evidence that further other material of the same gathering was primarily used (see also Art. 9.8)."

Prop. B (028 – Bandyopadhyay & Pathak in Taxon 58: 661) Insert a new Rec. 9A.6:

"9A.6. It is recommended that if authors cite a herbarium as the place of conservation of the type of a name without actually examining that type, then the basis for the citation should be stated, e.g., an earlier published typification, a reference work such as TL-2, information from the Curator of the herbarium concerned, an assumption on the basis of the working practices of the author of the name, or any other basis."

Prop. C (029 – Bandyopadhyay & Pathak in Taxon 58: 661) Insert a new Rec. 9A.7:

"9A.7. It is recommended that when citing a lectotype, epitype or neotype designated by others, the name of the author(s) designating the type should be cited along with the place of publication and also if the designation has been subsequently corrected under Art. 9.8".

Prop. D (109 – Basu & al. in Taxon 59: 657) Insert a new Rec. 9A.6: "9A.6. It is recommended that authors of names who discover an error or errors in the data published in the protologue, either because of personal inadvertence or due to typographical mistakes, should publish a correction and attach the reference to that publication to type sheet. If publication is not possible, authors in those circumstances should at least record the error(s) along with their full names and signatures, especially for those errors that would otherwise be seriously misleading."

Rapporteurs' comments – Prop. A addresses the inappropriateness under current rules of Rec. 9A.4. Its wording was perfectly reasonable under the Berlin Code (Greuter & al. in Regnum Veg. 118. 1988), current when it was proposed, but was already somewhat at variance with the definition of "original material" adopted at the Tokyo Congress along with Rec. 9A.4, and is quite contrary to the changes made to Art. 8 at the Saint Louis Congress, at which time Rec. 9A.4 should have been editorially removed from the Code. The suggestion of changing the now unacceptable "assumption" of a specimen being a holotype to a recommendation, with appropriate qualification, for its selection as a lectotype seems a good one.

*Prop. B* and *C* propose new recommendations to encourage more precise bibliographic information on type selection. Those who feel that these worthy objectives should be included as *Code* Recommendations will support the proposals.

*Prop. D* seeks to add a Recommendation to the *Code* to encourage the publication of corrections to errors in taxonomic publications involving the names of new taxa. Some may consider that, however important it may be for errors to be made known, this is not a matter for the *Code*, unless possibly if the errors have evident nomenclatural implications.

# Recommendation 9C (new)

*Prop. A (231 – Redhead & al. in Taxon 59: 1912)* Add the following new Recommendation:

"9C.1. It is recommended that, when not nomenclaturally destabilizing and not in conflict with the sanctioning treatment, a sanctiotype be selected from original materials."

Rapporteurs' comments – Prop. A is part of the series of proposals on typification of sanctioned names upon which comment is made under Art. 9 Prop. J.

# Article 10

Prop. A (238 – Proćków & Jakubska-Busse in Taxon 59: 1914) Delete the second part of clause (a) in Art. 10.5: "and another element is available which is not in conflict with the protologue".

Prop. B (317 – Gandhi & Reveal in Taxon 59: 1931) Add a new voted Example to clarify Art. 10.5(b):

"\*Ex. 7bis. Unless authors specifically state that they are following the American Code of Botanical Nomenclature, as was done in Britton & Brown, Ill. Fl. N. U.S., ed. 2. 1913, their designation of "the first binomial species in order" as the type of the generic name is not to be regarded as largely mechanical. Thus the designation of Canna indica L., "the first binomial species in order" as the type of Canna L. by Britton (Fl. Bermuda 86. 1918) is not to be regarded as largely mechanical. Similarly the designation of Holcus sorghum L. as the type of Holcus L. by Britton (l.c., p. 11) cannot be superseded under Art. 10.5(b) but was superseded by the conservation of Holcus with H. lanatus as the type."

Prop. C (227 – Redhead & al. in Taxon 59: 1912) In Art. 10.5(a) add: "except in the case of sanctiotypes where the sanctioning treatment is treated with equivalence to a protologue" before the comma in the phrase "which is not in conflict with the protologue,"

Rapporteurs' comments – The rationale for Prop. A is that, except when a type is "otherwise chosen" under Art. 10.2, no eligible type of the name of a genus or subdivision of a genus can be in conflict with the protologue because, by definition, it must have been "definitely included" in the protologue. In the situation when no type of a species name is definitely included, the proposal might seem to permit a type of the name of a genus or subdivision of a genus that is in serious conflict with the protologue to be superseded by another element which is also in conflict with the protologue. However, Art. 10.2 already requires supersession "if it can be demonstrated that the selected type is not conspecific with any of the material associated with the protologue" and so supersession is already mandatory in the event of any conflict with the protologue. Consequently it would be logical to delete not only the words proposed but the whole of Art. 10.5(a), which is an accidental relict of the division in the Tokyo Code of the detailed rules on typification into three sets, general matters (Art. 7), those dealing with names of species and infraspecific taxa (Art. 8 and 9) and those dealing with names of genera and subdivisions of genera (Art. 10). An "ed.c." vote will be interpreted as favouring the deletion of clause "(a)" in Art. 10.5.

Prop. B, if accepted, would likely cause very significant nomenclatural disruption. A check of generic names published by Linnaeus in 1753 showed that about 20 would be subject to a change in type as a result. These would not only include Elymus (which would have to be applied to Leymus, and Sitanion adopted for Elymus), and Scabiosa (which would have to be applied to *Knautia* and a new name found for the 80 or so species of Scabiosa), but, ironically, also Erysimum, the application of which under American Code typifications to Sisymbrium, was one of the disruptive changes that led to the introduction in Seattle in 1969 of what is now Art. 10.5 and voted example \*Ex. 7. The proposers do, however, have a legitimate concern in that there is no direct guidance in the Code on how to determine which authors are "following the American Code of Botanical Nomenclature". This is not really a problem with a work such as the Flora of Bermuda, to which the proposal refers because it is perfectly clear, as Merrill (in Biogr. Mem. Natl. Acad. Sci. U.S.A. 19: 157. 1938) put it, that Britton was "a strong exponent of the so-called 'American' code of botanical nomenclature as contrasted to the international rules. As a result his own publications and most of those prepared by his associates in New York were issued under the 'American' code.". What is more uncertain is how late in time proponents (e.g. authors) of that *Code* continued to use it – was it until the Cambridge Congress of 1930, or the publication of the *Cambridge Rules* (Briquet, Int. Rules, Bot. Nomencl. 1935), or at some earlier (or even later) date? Although many consider that the problems discovered prior to the Seattle Congress in 1969 would have been better dealt with by individual conservation proposals, the provision for superseding *American Code* typifications has now been in the *ICBN* for half a century and has been widely used (particularly for generic names of fungi, as this permits the more ready adoption of the more stabilizing typifications in Clements & Shear, Gen. Fung. 1931). Abandonment or dilution now would inevitably be destabilizing. It would appear that in addition to publications stating that they were following the *American Code* there is need for a list of works that are deemed to have followed it. This would seem to be a task for a Special Committee. A "sp.c." vote will be so interpreted.

*Prop. C* is a part of a series of proposals on the typification of sanctioned names for which comments are provided under Art. 9 Prop. J.

### Article 11

Prop. A (022 – Rijckevorsel in Taxon 58: 660) Delete Art. 11 Ex. 4.

Rapporteurs' comments – Prop. A proposes deleting this Example because nomenclaturally Hemerocallis lilioasphodelus L. does not comprise two varieties, var. flava L. and var. fulva L., but also the automatically established var. lilioasphodelus, which has priority over the other two. The Example does not illustrate Art. 11.2 well because by the lectotypification of H. lilioasphodelus the correct names at varietal rank (var. fulva and var. lilioasphodelus) parallel those at specific rank (H. fulva (L.) L. and H. lilioasphodelus).

# Article 13

*Prop. A (049 – Redhead & al. in Taxon 58: 669)* Add to the end of Art. 13.1(d) the following sentence:

"Microsporidian names are governed by the *International Code* of *Zoological Nomenclature* (see Preamble 7)."

*Prop. B (165 – Silva in Taxon 59: 1294)* Proposal to eliminate later starting points for the nomenclature of blue-green algae (cyanoprokaryotes)

Delete the paragraphs with the subheadings "NOSTOCACEAE HOMOCYSTEAE" and "NOSTOCACEAE HETEROCYSTEAE" from the list of exceptions in Art. 13.1(e).

*Prop. C (089 – Sennikov in Taxon 59: 307)* Proposal to discard nomenclatural value of reprints and translations of botanical publications first printed before the relevant nomenclatural starting-point date by adding a new Art. 13.6:

"13.6. For nomenclatural purposes, all original texts and translations thereof (either separate or in composite works) first published before, but reprinted after, the relevant nomenclatural starting-point date are regarded as being published on the original date, with none of the names included therein being validly published. This provision does not apply to quotations in post-starting-point works from pre-starting-point authors or to revised editions of pre-starting-point works."

The sentence "This provision does not apply to quotations in post-starting-point works from pre-starting-point authors or to revised editions of pre-starting-point works" may be alternatively put in a separate Note after the new Art. 13.6.

See the supporting text by Sennikov (l.c.: 308) for necessary changes to the lists of conserved and rejected names in App. III.

Rapporteurs' comments – Prop. A is part of a set of proposals on microsporidian nomenclature, see Preamble Prop. A.

Prop. B represents a further attempt to remove the special provi-

sion of a later starting-point date for the nomenclature of blue-green algae (cyanoprokaryotes). The problems associated with later starting-point dates are well-known – principally the latter-day imposition of an arbitrary dividing line across a continuum in the use of binary nomenclature – prompting their abandonment by mycologists in 1981. The proposer draws attention to another problem for blue-green algae, in that both starting-point works include "species inquirendae" (i.e. "species to be investigated", the names of which are not therefore validly published under Art. 34.1(b)) and for which there is no good information on later validation. As these were pre-existing names when the starting-point works were published their status would be resolved with a 1753 starting point. The Nomenclature Committee for Algae has been asked to give its recommendations on this proposal.

*Prop.* C would result in names appearing in certain publications being no longer validly published. These would include the generic names in the 1758 publication of Linnaeus's *Opera varia* that have been generally accepted (four being conserved) and the names of Vaillant in Compositae evaluated by Greuter & al. (in Taxon 54: 149–174. 2005; see also the other references in the supporting text of Sennikov, l.c.), thus making redundant the consequent authorship changes and conservation proposals – and the subsequent proposals to suppress the Vaillant reprint, or it and all associated ones, under Art. 32.9 (Brummitt in Taxon 57: 663. 2008; Greuter in Taxon 57: 1015-1016. 2008). On the other hand, any such publications that have not yet been assessed could no longer cause similar nomenclatural change. The proposer provides a careful assessment of the nomenclatural affects of the proposal of which he is aware, but the possibility of others cannot be ruled out. Although perhaps unimportant in practice, the proposal excludes "revised editions of pre-starting-point works", but this does raise the question of what constitutes a revised edition. For example, Stafleu & Cowan (in Regnum Veg. 105: 101. 1981) write of Opera varia "the Systema naturae is a reprint with slight alterations of the fourth edition. Paris 1744". In this case the alterations are evidently minor but when does a "reprint with alterations" become a new edition? The alternative to Prop. C would be individual proposals, such as those referred to above, to include particular reprinted works in the list of "Opera oppressa" in App. VI. Given the very small number of titles quoted in the proposal, this might be a simpler and safer option.

# Article 14

*Prop. A (243 – Perry in Taxon 59: 1916)* Add a new penultimate sentence in Art. 14.1 to read:

"The name of a subdivision of a genus or of an infraspecific taxon may be conserved with a conserved type when it is the basionym of a name at the rank of genus or species respectively that could not continue to be used in its current sense without conservation. Such a conserved name is included under the corresponding generic or species name in the lists in App. III and IV, respectively."

Prop. B (006 – Moore & Rushworth in Taxon 57: 317) Change Article 14.8 to read:

"14.8. The listed type and the spelling of a conserved name may not be changed except by the procedure outlined in Art. 14.12."

*Prop. C (305 – Redhead in Taxon 59: 1929)* Add the following new paragraph in Art. 14:

"14.9bis. The type of a name covered by Art. 59.1, may be conserved as either anamorphic or teleomorphic for nomenclatural purposes. Once conserved as such, errors in biological interpretation noted later would not affect the nomenclatural application." The Special Committee on the Nomenclature of Fungi with a Pleomorphic Life Cycle has voted 9 [yes]: 0 [no]: 1 [abstain] on this proposal.

Prop. D (239 - Turland in Taxon 59: 1915) Add a new Article to Art. 14:

"14.13bis. The authors together with the places and dates of publication cited for conserved names of families in App. IIB are treated as correct in all circumstances and consequently are not to be changed."

*Prop. E (240 – Turland in Taxon 59: 1915)* Add "(but see Art. 14.13*bis*)" to the end of Art. 6 Note 2 and add "Except as provided by Art. 14.13*bis*" to the beginning of Art. 14 Note 1.

*Prop. F (241 – Turland in Taxon 59: 1915)* If Proposals (239–240) are accepted, modify the new Art. 14.13*bis* to read as follows:

"14.13bis. The authors together with the places and dates of publication cited for conserved names of families, genera, and species in App. II, III, and IV are treated as correct in all circumstances and consequently are not to be changed."

Prop. G (099 – Redhead in Taxon 59: 311) Add a new paragraph to Article 14:

"14.15. When proposals for conservation or rejection under Art. 56 are approved by the International Botanical Congress, supplementary lists of the additions to Appendices II–V will be published in the journal *Taxon* to coincide with each new edition of the *Code*. The approved listings to each of these appendices will be added to the *International Code of Botanical Nomenclature* online database of conserved and rejected names, maintained by the International Association for Plant Taxonomy as directed by the International Botanical Congress. Periodic publication of comprehensive hardcopy of the appendices may be made."

*Prop. H (098 – Redhead in Taxon 59: 311)* Add to the Preamble a new paragraph 12:

"12. Appendices IIA [Nomina familiarum algarum, fungorum, pteridiophytorum, et fossilium conservanda et rejicienda], IIB [Nomina familiarum bryophytorum et spermatophytorum conservanda], III [Nomina generica conservanda et rejicienda], IV [Nomina specifica conservanda et rejicienda] and V [Nomina utique rejicienda] form an integral part of the *Code*, whether published together with, or separately from, the hardcopy bound body of the *Code*. These Appendices may be periodically updated in the journal *Taxon* and may be made available in online databases."

*Prop. I (100 – Redhead in Taxon 59: 311)* Provide approval to the Editorial Committee to adjust the wording of the *Code* to reflect these changes where necessary.

Rapporteurs' comments – Prop. A addresses a matter that has been largely overlooked both by proposers of names for conservation and the Committees assessing them – including the Editorial Committee for the Code. The proposal provides a convenient solution to the situation in which a conserved name or one being proposed for conservation has a basionym in a rank in which conservation is not permitted. The obvious alternative, to open names at all ranks at and below genus (or family) to conservation, was not favoured at either the Saint Louis or Vienna Congresses.

*Prop. B* makes explicit what most have probably assumed, namely that the spelling of a conserved name, like its type, is *ipso facto* also conserved, regardless of whether this was specified in the original conservation proposal.

*Prop. C* is a corollary to Art. 59 Prop. K where comments are to be found

*Prop. D* and its editorial corollary, *Prop. E*, are designed to address what many see as an undue limitation on the process of conservation, in this case of names of families in App. IIB. Whereas the names themselves are conserved, the authorships and places of publication are not, and the *Code* does not currently have any provision for

this, i.e., to conserve a later publication of a name against an earlier isonym. Given the particular vicissitudes over the past decade of the entries in App. IIB, with changes in effective date and with questions of first publication of family names in the period just after 1789, now that there is a carefully compiled and checked list these proposals seem particularly beneficial in relation to App. IIB. Contrary to what the proposer suggests in the accompanying text, this provision would not, however, apply should an entry in the list of conserved names prove unquestionably not to have been validly published where listed. Not being validly published, it would cease to be a "name" (Art. 6.3 and 12.1) and so would automatically cease to be a "conserved name". A Note to this effect could be added editorially.

*Prop. F* is an extension of Prop. D, proposing that the authorships and places of publication of all conserved names be in effect also conserved. Given the purpose of conservation and the work that is entailed in preparing and reviewing such proposals, it seems eminently sensible that it should not be possible to change the authorship or place of publication of any name once it has been conserved, unless shown not to be validly published where supposed.

*Prop. G–I*, seek a mandate from this IBC to terminate hard-copy publication of Appendices II–V starting with the first edition of the *Code* after the *Melbourne Code* (see the supporting discussion by Redhead, l.c.). Instead, a list of approved changes to the Appendices would be published in *Taxon* after each Congress, and IAPT would be required to maintain an online database of conserved and rejected names. These proposals would also clarify that the Appendices are an integral part of the *Code*, regardless of where they are published, and would explicitly permit periodic publication of the full Appendices as hard copy.

# **Article 15**

*Prop. A (185 – Demoulin in Taxon 59: 1611)* Add the following sentence in Art. 15.1 and instruct the Editorial Committee to insert an Example:

"The spelling used by a sanctioning author is treated as conserved, except if it is to be corrected or standardized under Art. 60."

Prop. B (229 – Redhead & al. in Taxon 59: 1912) Add a new Art.

*Prop. B (229 – Redhead & al. in Taxon 59: 1912)* Add a new Art 15.7 and Example:

"15.7. A sanctioned name may be a later homonym automatically created under Art. 48.1 prior to publication in the sanctioning work, attributable to the author who originally excluded the type, as defined by 48.1, or a later homonym attributable only to the sanctioning author, specifically when the holotype, as defined by Art. 8.1, was first excluded explicitly when the name was sanctioned."

"Ex. 4bis. Tode (in Schriften Berlin. Ges. Naturf. Freunde 5: 53. 1784) published the generic name *Hysterium* Tode with a single species, *H. quadrilabiatum* Tode, which is therefore the original type (Arts. 9.1, 10.1). Tode (in Fung. Mecklenb. Sel. 2: V–VI, 4. 1791) excluded the original type and published a new generic description, thereby creating a later homonym (Art. 48.1). Fries (Syst. Mycol. 2: 594. 1823) also excluded *H. quadrilabiatum* while specifically citing Tode's 1791 publication. Bisby (in Trans. Brit. Mycol. Soc. 8: 186. 1923) designated *Hysterium pulicare* (Lightf.: Fr.) Pers. (in Mag. Bot. 1: 85. 1794), a species accepted by Fries (1.c.), as 'type' of "*Hysterium* Fries", which action effectively sanctiotypified *Hysterium* Tode (1791): Fr. (1823), non *Hysterium* Tode 1784."

*Prop. C (230 – Redhead & al. in Taxon 59: 1912)* In Art. 15 add a new Note:

"Note 2. The type of a sanctioned name that is conserved need not be a sanctiotype (cf. Art. 15.6)."

Rapporteurs' comments – Prop. A is designed to make explicit in the Code what sanctioning implies for the orthography of a sanctioned name. The spelling adopted by the sanctioning author is to be accepted subject to correction under Art. 60, something that was confirmed as the intent by an early (1987) rejection of a proposal to the contrary.

*Prop. B*, although included in the set of proposals on "sanctio-types" (see Art. 9 Prop. J), could be accepted (or otherwise) independently of the outcome of the other proposals (merely with minor editing of the suggested Example).

*Prop. C* is a corollary of Art. 9 Prop. J and associated proposals. The Nomenclature Committee for Fungi will give its recommendations on the proposals on Art. 15 in the April issue of *Taxon*.

# Article 16

*Prop. A (246 – Redhead in Taxon 59: 1917)* Amend Art. 16.1 as follows:

Add ahead of the semicolon in the penultimate line, "or (2), in the absence of an included legitimate family name, is formed from the genitive singular of an included legitimate generic name as specified in Art. 18.1 but with the termination denoting the rank replacing -aceae", and add "(1)" between "formed" and "by" in the third line.

*Prop. B (030 – Rijckevorsel in Taxon 58: 662)* In Art. 16.1 insert "(but see Art. 16.4)" before "or *(b)* descriptive names".

*Prop. C (031 – Rijckevorsel in Taxon 58: 662)* In Art. 16.2 replace "the same type" by "the same family name (or same generic name; see Art. 16.4)" so that the last part reads:

"... are to be based on the same family name (or same generic name; see Art. 16.4) as the corresponding higher-ranked name."

Prop. D (247 – Reveal & Gandhi in Taxon 59: 1917) Add a new Note to Art. 16:

"Note 2bis. Autonyms are not established automatically above the rank of family (Art. 22.1, 26.1)."

If [this proposal is] accepted, the Editorial Committee is urged to add references to these Notes in Art. 6.8.

*Prop. E (182 – Brummitt in Taxon 59: 1610)* Insert ", except for orders and suborders," between "or" and "(*b*)" in Art. 16.1 and re-word Art. 17.1 with the following:

"Names of orders and suborders are automatically typified names ending in *-ales* (but not *-virales*) and *-ineae* respectively. Names not so written are not to be used."

*Prop. F (181 – Brummitt in Taxon 59: 1610)* Replace Art. 16.3 with the following and accordingly delete Rec. 16A.1:

"The name of a division or phylum ends in *-phyta*, unless it is referable to the fungi when it ends in *-mycota*. The name of a subdivision or subphylum ends in *-phytina*, unless it is referable to the fungi when it ends in *-mycotina*. In the algae, the name of a class ends in *-phyceae*, and of a subclass in *-phycidae*. In the fungi, the name of a class ends in *-mycetes*, and of a subclass in *-mycetidae*. In other groups of plants, the name of a class ends in *-opsida* and of a subclass in *-idae* but not *-viridae*. Automatically typified names not in accordance with these terminations are to be corrected."

*Prop. G (178 – Brummitt in Taxon 59: 1610)* Replace Art. 16 Note 2 with the following:

"Principle III concerning priority of publication, and the rules of valid publication (Art. 32–45) and author citations (Art. 46–50), do not apply to names above the rank of family (Art. 11.10, 32.1 and 46.x)."

Rapporteurs' comments – Prop. A is designed to ensure that names above the rank of family that are formed from a generic name are automatically typified by the type of that name. Because such names above the rank of family can always be treated as descriptive

names, they are currently validly published even in the absence of a corresponding family name. The proposal ensures the commonsense treatment of such names as automatically typified.

*Prop. B* is editorial, pointing out an exception to Art. 16.1(a), i.e., that names formed under Art. 16.4 are not formed from the name of an included family based on a generic name.

*Prop. C.* is also editorial, noting that, strictly speaking, automatically typified suprafamilial names are formed from other names, and are thereby typified, rather than being based on types (Art. 10.7).

*Prop. D*, and its parallel proposal, Art. 18 Prop. C, would make it explicit that autonyms cannot exist above the rank of family (or genus). The *Code* includes no rules permitting autonyms at those ranks, but the proposed Notes may nevertheless be seen as useful. The word "automatically" in both proposals is redundant.

Prop. E would preclude the possibility of names of orders and suborders being, or being treated as, descriptive names. It is proposed because in current literature automatically typified names seem to be used consistently for orders and suborders. However, unless Art. 16 Prop. A is accepted (or the proposer's own more extensive Art. 32 Prop. A), the proposal would make no longer validly published many names of orders in current use (particularly of fungi and perhaps algae) that are not based on a legitimate family name. The question must also be asked why it is thought necessary to enforce what, under the present rules, has apparently already become consistent practice?

*Prop. F* proposes that the requirement for particular terminations for names of ranks above that of order be included in Art. 16, rather than indirectly through reference to Rec. 16A. This seems a sensible simplification that is essentially editorial. As the precise wording of the proposal assumes acceptance of Art. 16 Prop. G and Art. 32 Prop. A, those who merely wish to transfer the requirement from the Recommendation to the Article should vote "ed.c.".

*Prop. G* is part of a set of proposals designed to remove most of the requirements for valid publication for names above the rank of family (see comments on Art. 32 Prop. A).

# **Recommendation 16A**

*Prop. A (166 – Silva in Taxon 59: 1294)* Proposal to update Recommendations 16A.1 and 16A.2.

Change Rec. 16A.1 and 16A.2 to read:

"16A.1. A name of a division or phylum should end in -phyta unless the taxon is a division or phylum of fungi or algae, in which case its name should end in -mycota or -phycota, respectively.

"16A.2. A name of a subdivision or subphylum should end in -phytina unless the taxon is a subdivision or subphylum of fungi or algae, in which case its name should end in -mycotina or -phycotina, respectively."

Rapporteurs' comments – Prop. A is a reflection of the increasing use of names derived from Greek φύκος (phykos, alga or seaweed) rather than φυτόν (phyton, plant) for the higher ranks of algae, and it seems desirable to modify accordingly Rec. 16A, a Recommendation that, through Art. 16.3, has the effect of a rule.

# **Recommendation 16B**

*Prop. A (179 – Brummitt in Taxon 59: 1610)* Replace Rec. 16B.1 with the following:

"In adopting a name for a taxon above the rank of family, authors should, wherever relevant and possible, choose a name which has been used in the same sense, or in almost the same sense, by a majority of previous authors."

Rapporteurs' comments – Prop. A is part of a set of proposals designed to remove most of the requirements for valid publication for names above the rank of family (see comments on Art. 32 Prop. A).

### **Article 18**

*Prop. A* (032 – *Rijckevorsel in Taxon 58: 662*) In Art. 18.1 replace "of a name of an included genus" by "of a generic name (see Art. 10.6)", so that it starts:

"18.1. The name of a family is a plural adjective used as a noun; it is formed from the genitive singular of a generic name (see Art. 10.6) ..."

*Prop. B (033 – Rijckevorsel in Taxon 58: 662)* Change the layout of Art. 18.1, subdividing it into an opening sentence, and four clauses (cf. Art. 13.1 and 20.4), with some rewording of the opening sentence and the first clause, so that it reads:

"18.1. The name of a family is a plural adjective used as a noun and is written with an initial capital letter; it is based on a generic name (see Art. 10.6) and ends in -aceae (but see Art. 18.5):

- (a) For generic names of classical origin, and for generic names that can be treated as such, by analogy, a family name is formed from the genitive singular of the generic name by replacing the genitive singular inflection (Latin -ae, -i, -us, -is; transliterated Greek -ou, -os, -es, -as, or -ous, and its equivalent -eos) with the termination -aceae.
- (b) For generic names of non-classical origin, when analogy with classical names is insufficient to determine the genitive singular, -aceae is added to the full word.
- (c) Likewise, when formation from the genitive singular of a generic name results in a homonym, -aceae may be added to the nominative singular.
- (d) For generic names with alternative genitives the one implicitly used by the original author must be maintained, except that the genitive of names ending in *-opsis* is, in accordance with botanical tradition, always *-opsidis*."

Prop. C (248 – Reveal & Gandhi in Taxon 59: 1917) Add a new Note to Art. 18:

"Note Ibis. Autonyms are not established automatically above the rank of genus (Art. 22.1, 26.1)."

If [this proposal is] accepted, the Editorial Committee is urged to add references to these Notes in Art. 6.8.

*Prop. D (249 – Reveal & Gandhi in Taxon 59: 1917)* Delete the second paragraph from the introduction to App. IIB and move it, in a slightly modified form, to Art. 18, and add a new Example:

"18.5bis. When two names listed in App. IIB compete, the earlier must be retained unless the contrary is indicated in App. IIB or one of the competing names is listed in Art. 18.5. For any family including the type of an alternative family name in Art. 18.5, one or the other of these alternative names is to be used with priority dating from that of the earlier name."

"Ex. 8bis. Although both Hypericaceae Juss. and Guttiferae Juss. were published in 1789, Clusiaceae Lindl. (1836), the alternative name for Guttiferae, has equal priority with Hypericaceae. Likewise, Guttiferae, and thus Clusiaceae, has priority over Hypericaceae even though Guttiferae was submerged into Hypericaceae before Hypericaceae was submerged into either Guttiferae or Clusiaceae."

*Prop. E (110 – Alfarhan & al. in Taxon 59: 658)* Delete Art. 18.5 and Art. 18.6 and replace them with the following Note:

"Note 2. The following names in conformity with Art. 18.1 and earlier approved as alternatives to the designations of long usage hitherto applied to those families and indicated in parentheses below, are alone allowed for use: Asteraceae: type, Aster L. ("Compositae"); Brassicaceae: type, Brassica L. ("Cruciferae"); Poaceae: type, Poa

L. ("Gramineae"); Clusiaceae: type, Clusia L. ("Guttiferae"); Lamiaceae: type, Lamium L. ("Labiatae"); Fabaceae: type, Faba Mill. [= Vicia L.] ("Leguminosae", "Papilionaceae"); Arecaceae: type, Areca L. ("Palmae"); Apiaceae: type, Apium L. ("Umbelliferae")."

*Prop. F (111 – Alfarhan & al. in Taxon 59: 658)* Replace "Art. 18.5" by "Art. 18 Note 2, in which case it is to be used" at the end of the first sentence of the second paragraph in the introductory material to Appendix IIB and delete the second sentence.

Prop. G (112 – Alfarhan & al. in Taxon 59: 659) Add a further Note to Art. 18 as follows:

"Note 3. If Fabaceae Lindl. (1836), nom. cons. is united with Caesalpiniaceae R. Br. (1814), nom. cons, and/or Mimosaceae R. Br. (1814), nom. cons., Fabaceae is to be used (see App. IIB)."

Rapporteurs' comments – Prop. A is intended to be editorial but appears to be based on a misapprehension as to what is implied by "a name of an included genus" (and not "the name of ..."). This means any name applicable to an included genus, not necessarily the correct name. Some may also demur at the removal of the word "included" even although logically acceptable in that the type of the generic name from which the family name is formed is the type of the family name (Art. 10.6) so the genus to which the genus name applies is necessarily included in the family.

*Prop. B* is designed to provide a clearer and more structured wording for the rather lengthy Art. 18.1. It includes the rewording proposed in Prop. A, and further states that family names are written with an initial capital letter; otherwise it is editorial. It may be referred to the Editorial Committee.

*Prop. C* is parallel to Art. 16 Prop. D, under which see the comments.

Prop. D would enshrine in the main body of the Code the second paragraph of the introduction to App. IIB, which is arguably unnecessary because the Appendices are part of the Code. If there is any doubt as to the status of the Appendices, Art. 14 Prop. H would make it explicit that App. II—V are indeed an integral part of the Code. The proposed new Article would differ from the current text under App. IIB only in the addition of "with priority dating from that of the earlier name". The placement of the new Article in Art. 18 seems less than appropriate, with Art. 14 (conservation) or Art. 11 (priority) perhaps being better. The simplest option, of course, would be leave the introduction to App. IIB unchanged, perhaps with the acceptance of Preamble Prop. B (or Art. 14 Prop. H) making the integral status of the Appendices clearer.

 $Prop.\ E-G$  are a set of proposals to prohibit the use for families of the names "of long usage", such as Compositae and Gramineae, that are not based on the name of an included genus. Unlike some earlier proposals along these lines, this set appears, by the inclusion of the explanatory Note 2 (in Prop. E), to ensure that the precedence of these traditional family names continues to apply to their equivalents formed from generic names. Those who "feel that it is high time to do away with the freedom to use the names of those families based on the author's/worker's choice" will doubtless support the proposals, while those who see no danger of confusion from the present rules that do not impede use of either set of names will not.

# Article 19

*Prop. A (034 – Rijckevorsel in Taxon 58: 663)* Add a paragraph to Art. 19 (somewhere after Art. 19.4), and refer to it in Art. 11.3, 14.5 and Art. 19 Note 2:

"The name of any subdivision of a family that includes the type of a name listed in App. IIB (i.e., a name of a family conserved against all unlisted names, see Art. 14.5) is to be based on the generic name

equivalent to that type (Art. 10.6), unless this is contrary to Art. 19.4 (see also 19.7). If more than one such type is included, the correct name is determined by precedence in App. IIB, of the corresponding family names."

*Prop. B* (035 – *Rijckevorsel in Taxon 58: 663*) Add an Example to the paragraph of Prop. 034:

"Ex. n. A subfamily in Rosaceae including Malus Mill. (1754), the type of Malaceae Small (1903) a name listed in App. IIB, is to be called Maloideae C. Weber (1964), unless it also includes Rosa L. (1753), the type of the name of the family, or the type of another name listed in App. IIB that takes precedence over Malaceae. This is so, even if this subfamily also includes Pyrus L. (1753), because, although Pyroideae Burnett (1835) is a name published earlier than Maloideae and although Pyraceae Vent. (1818) is a name published earlier than Malaceae, the name Pyraceae is not listed in App. IIB."

*Prop. C (036 – Rijckevorsel in Taxon 58: 663)* Add an Example to the paragraph of Prop. 034:

"Ex. n. A subfamily in Ericaceae including both Monotropa L. (1753) and Pyrola L. (1753), the types of Monotropaceae Nutt. (1818) and Pyrolaceae Link (1829), respectively, both listed in App. IIB, is to be called Pyroloideae Kostel. (1834), unless it also includes Erica L. (1753), the type of the name of the family, or the type of another name listed in App. IIB that takes precedence over Pyrolaceae: in App. IIB, Pyrolaceae is listed as conserved over Monotropaceae."

*Prop. D (113 – Alfarhan & al. in Taxon 59: 659)* Delete Art. 19.7 and insert the following Note at the end of Art. 19:

"Note 3. Use of the designation "Papilionoideae", earlier approved for application to a subfamily of Fabaceae that included the genus Faba, is not permitted, the correct name being Faboideae."

*Prop. E (114 – Alfarhan & al. in Taxon 59: 659)* If Proposals 110 and 113 are accepted, amend the following Articles as indicated:

Art. 10.6. Delete the final sentence.

Art. 11.1. Delete the final clause of the first sentence so that the sentence reads: "Each family or taxon of lower rank with a particular circumscription, position, and rank can bear only one correct name."

Art. 18.1. Delete the parentheses "(but see Art. 18.5)" in the first sentence.

Art. 19.4. Delete the words "but see Art. 19.7" at the end of the paragraph.

App. IIB. Remove the entries that with the deletion of Art. 18.5 are no longer validly published names.

Rapporteurs' comments – Prop. A–C recognize that it is currently possible for a taxon with a given circumscription to have correct names based on different generic names depending on whether the rank is that of family or of a subdivision of a family. Because the Code does not provide for the conservation of the name of a subdivision of a family, Prop. A seeks to stabilize the nomenclature of many such names by linking them to the homotypic conserved names of families in App. IIB. The proposed Examples (Prop. B and C) clarify the application the proposed new rule.

*Prop. D* is a corollary of Art. 18 Prop. E–G dealing with the irregularly formed subgeneric name, *Papilionoideae*. Those who support the former proposals will presumably support this one also.

*Prop. E* is editorial, consequent on the acceptance or otherwise of Art. 18 Prop. E–G and Art. 19 Prop. D.

# Article 20

*Prop. A (122 – Rijckevorsel in Taxon 59: 664)* Add a new paragraph to Art. 20:

"20.4 bis. In a combination (Art. 6.7) a generic name may be

represented by an abbreviation consisting of the initial letter of the name, or the initial letter and one or more further letters of the name, and a full stop (period), provided this is unambiguous. For nomenclatural purposes such an abbreviation is to be taken as that generic name (written out in full)."

If this proposal is passed, refer to the new provision in Art. 32.1(b). In addition, it may be a good idea also to refer to it in Art. 21.4 and 24.4, and in Art. 23 \*Ex. 19.

*Prop. B (123 – Rijckevorsel in Taxon 59: 664)* If Proposal 122 is accepted, add an Example to it:

"Ex. n. The name of a new species represented as "A. bipindensis Harms n. sp." (in Bot. Jahrb. Syst. 49: 426. 1911) followed "A. bella Harms n. sp.", which in turn directly followed the heading "Afzelia Sm." and was therefore unambiguous; for nomenclatural purposes it is to be taken as Afzelia bipindensis. The name is validly published, although in the original publication its rendition was not composed only of letters of the Latin alphabet (Art. 32.1(b))."

Rapporteurs' comments – Prop. A and B result from the addition of clause (b) to Art. 32.1 in the Vienna Code. The proposer believes that because a full stop (period) is not among the "letters of the Latin alphabet", a combination in which the generic name is abbreviated with a full stop is technically not validly published. This seems an excessively literal reading of Art. 32.1(b), and most would simply accept that an abbreviated generic name (with or without a full stop) is equivalent to the full name. Adding a new Article and Example in an attempt to make this explicit seems unnecessary. If the Article were added it ought also to account for an abbreviation that did not employ a full stop.

### Article 22

*Prop. A (168 – Niederle in Taxon 59: 1295)* Change Art. 22.1, Art. 22.3, Art. 26.1 and Art. 26.3 as follows and delete Rec. 22A.1, Rec. 22B.1, Rec. 26A.1, Rec. 26A.3 and Rec. 26B.1:

"22.1. The name of any subdivision of a genus that includes the type of the adopted, legitimate name of the genus to which it is assigned is to repeat that generic name unaltered as its epithet, not followed by an author citation (see Art. 46).

22.3. The first instance of valid publication of a legitimate name of a genus automatically establishes the corresponding autonyms of subdivisions of the genus at all ranks (see also Art. 32.8). The epithet of an autonym literally repeats the name whose publication established it.

26.1. The name of any infraspecific taxon that includes the type of the adopted, legitimate name of the species to which it is assigned is to repeat the specific epithet unaltered as its final epithet, not followed by an author citation (see Art. 46).

26.3. The first instance of valid publication of a legitimate name of a species automatically establishes the corresponding autonyms of infraspecific taxa at all ranks within the species (see also Art. 32.8). The final epithet of an autonym literally repeats the epithet of the name whose publication established it."

Prop. B (318 – Gandhi & Reveal in Taxon 59: 1931) Add a new Example following Art. 22.5 that is parallel to Art. 27 Ex 1:

*"Ex. 5bis.* When Kuntze (in Post & Kuntze, Lex. Gen. Phan. 106. 1903) published *Caulinia* sect. *Hardenbergia* (Benth.) Kuntze under *Caulinia* Moench (1802), a later homonym of *Caulinia* Willd. (1801), he did not establish the autonym *"Caulinia* sect. *Caulinia"* (see also Art. 27.2 Ex. 1, Art. 55 Ex. 2bis)."

Rapporteurs' comments – Prop. A would fundamentally alter the way in which autonyms are created under the Code. Publication of the name of a genus would automatically establish autonyms at all subdivisional ranks under that genus. Publication of the name of a species would automatically establish autonyms at all infraspecific ranks under that species. Priority of the autonyms would date from the publication of the name of the genus or species.

*Prop. B* could be referred to the Editorial Committee as a welcome addition under Art. 22.5, which currently lacks an Example.

### Article 23

*Prop. A (140 – Niederle in Taxon 59: 984)* Extend Art. 23.5 and Ex. 5, 6 and 8 as follows (new text in bold):

"23.5. The specific epithet, when adjectival in form and not demonstrably used as a noun, agrees grammatically with the generic name. When the specific epithet is a noun in apposition or a genitive noun, it retains its own gender and termination irrespective of the gender of the generic name. Epithets not conforming to this rule are to be corrected (see Art. 32.7). In particular, the usage of the word elements -cola, -fuga, and -gena as an adjective is a correctable error, and the word elements -fer, -fera, -ferum, -ger, -gera, -gerum are adjectival.

Ex. 5. Adjectival epithets: Helleborus niger L., Brassica nigra (L.) W. D. J. Koch, Verbascum nigrum L.; Rumex cantabricus Rech. f., Daboecia cantabrica (Huds.) K. Koch (≡ Vaccinium cantabricum Huds.); Vinca major L., Tropaeolum majus L.; Bromus mollis L., Geranium molle L.; Erigeron florifer Hook.; Townsendia florifera (Hook.) A. Gray; Peridermium balsameum Peck, derived from the epithet of Abies balsamea (L.) Mill., treated as an adjective.

Ex. 6. Names with a noun for an epithet: Convolvulus cantabrica L., Gentiana pneumonanthe L., Lythrum salicaria L., Schinus molle L., all with epithets featuring pre-Linnaean generic names. Gloeosporium balsameae Davis, derived from the epithet of Abies balsamea (L.) Mill., treated as a genitive singular noun. Macaranga calcicola Airy Shaw; M. calcifuga (Whitmore) R. I. Milne; Gentiana nubigena Edgew.

Ex. 8. Rubus "amnicolus" is a correctable error for R. amnicola Blanch. (1906); Mesembryanthemum "nubigenum" is a correctable error for M. nubigena Schltr. (1898); Townsendia "florifer" is a correctable error for T. florifera (Hook.) A. Gray (1880) because "florifer" was not demonstrably used as a noun in its basionym Erigeron florifer Hook. (1834)."

*Prop. B (141 – Linda in Arcadia in Taxon 59: 985)* After Art. 23 Ex. 6 insert the following new Example, and renumber the present Ex. 7–19:

"Ex. 7. Epithets derived solely from Greek and ending in -ma are nouns, e.g., Verrucaria actinostoma Ach., Diploschistes actinostoma (Ach.) Zahlbr., Lecidea cladonema Wedd., Clypeococcum cladonema (Wedd.) D. Hawksw., Lichen leucostigma Ach., Coniocarpon leucostigma (Ach.) Duby, Variolaria leucostigma (Ach.) Ach., Patellaria polychroma Müll. Arg., Byssoloma polychroma (Müll. Arg.) Zahlbr."

Prop. C (127 – Rijckevorsel in Taxon 59: 665) Delete Art. 23 Ex. 14.

Rapporteurs' comments – Prop. A would modify Art. 23.5 and augment Ex. 5, 6 and 8 accordingly. The insertion of the word "demonstrably" in the first line seems reasonable, although perhaps superfluous, because it would have to be demonstrated anyway that an epithet adjectival in form was being used as a noun. The addition of the word elements -fuga and -gena, to go together with -cola already mentioned in Art. 23.4, might be favoured by those who prefer to treat these as substantival elements rather than adjectival ones. Similarly, the addition of the elements -fer, -fera, -ferum and -ger, -gera, -gerum, which are ruled to be adjectival in the proposal, might be favoured by those willing to treat all epithets ending in -fer and -ger as adjectival, even if some are substantival (as may be the case with, e.g., Lepanthes lucifer Luer & Hirtz).

*Prop. B* could be referred to the Editorial Committee. The Example would demonstrate that solely Greek-derived epithets ending in *-ma*, such as *actinostoma*, are nouns and must not be 'corrected' to agree with the gender of the generic name, e.g. "*actinostomus*".

*Prop. C*, like Art. 32 Prop. C, results from the proposer's interpretation of the effect of the addition of clause (b) to Art. 32.1 in the *Vienna Code* allowing only "letters of the Latin alphabet" in names of taxa. The proposer argues that Roman numerals are not letters of the Latin alphabet and so their occurrence in a name would prevent its valid publication, leading to the proposer's claim that Art. 23 Ex. 14 has become irrelevant. However, this seems to miss the point of Ex. 14, which illustrates that epithets such as "A[grostis]. Reygeri I." are merely informational designations used for enumeration, not validly published binomials. The matter of the interpretation of the status of Roman numerals in light of Art. 32.1(b) is dealt with under Art. 32 Prop. C. This proposal can be referred to the Editorial Committee for action depending on the outcome of that proposal.

### Article 28

*Prop. A (142 – Rijckevorsel in Taxon 59: 985)* In Art. 28 Note 2, replace the last part (from "where ...") by:

"which defines the cultivar as its basic category."

Prop. B (143 – Rijckevorsel in Taxon 59: 985) Rephrase Art. 28 Note 4:

"Note 4. Epithets in names published under the botanical Code may be retained as epithets in names under the rules of the International Code of Nomenclature for Cultivated Plants, when it is considered appropriate to treat the taxon concerned under the cultivated plant Code rather than the botanical Code."

*Prop. C (144 – Rijckevorsel in Taxon 59: 985)* Add an Example to Art. 28 Note 4:

"Ex. 1 bis. Rhododendron mishmiense Hutch. & Kingdon-Ward (1930) may be treated as a Group, which can then be designated as Rhododendron boothii Mishmiense Group; Brassica oleracea var. sabauda L. (1753) may be treated as a Group, which can then be designated Brassica oleracea Sabauda Group."

*Prop. D (145 – Rijckevorsel in Taxon 59: 985)* In Art. 28 Note 5, delete the word "cultivar", and add an Example with non-cultivar epithets:

"Ex. 3 bis. Rhododendron Jacqueline Group, Allium cepa Shallot Group, Festuca rubra Hexaploid Non-creeping Group."

Rapporteurs' comments – Prop. A–D have become necessary because the current, 8th edition of the International Code of Nomenclature for Cultivated Plants (ICNCP; Brickell & al. in Regnum Veg. 151. 2009) provides not only for cultivar epithets but also for Group and grex epithets. Rather than mention Group and grex in the botanical Code, and then perhaps have to change the wording should the ICNCP change its terminology again, the proposer suggests a more general wording which does not imply that cultivar epithets are the only ones that exist under the ICNCP. All four proposals could be referred to the Editorial Committee.

## Article 29

*Prop. A (203 – Special Committee on Electronic Publication in Taxon 59: 1907)* Reword Art. 29.1 as follows (new text in bold) and add a new Article 29.2 following it:

"29.1. Publication is effected, under this *Code*, by distribution of printed matter (through sale, exchange or gift) to the general public or at least to botanical institutions with libraries accessible to botanists generally. **Publication is also effected by electronic distribution of** 

material in Portable Document Format (PDF; see also Rec. 29A.0) in an online serial publication with an International Standard Serial Number (ISSN). Publication is not effected by communication of new names at a public meeting, by the placing of names in collections or gardens open to the public, by the issue of microfilm made from manuscripts, typescripts or other unpublished material, or by distribution electronically other than as described above."

"29.2. For the purpose of this Article, "online" is defined as accessible electronically via the World Wide Web."

Article 29.2 could alternatively be made a footnote to the word "online" in Art. 29.1.

Prop. B (204 – Special Committee on Electronic Publication in Taxon 59: 1907) If Prop. (203) is accepted, in Art. 29.1 replace "serial publication with an International Standard Serial Number (ISSN)" with "publication with an International Standard Serial Number (ISSN) or an International Standard Book Number (ISBN)".

If it were thought necessary, footnotes could be added to ISSN and ISBN noting that the prefix "e" or "e-" (e.g., eISSN, e-ISSN) is sometimes used for electronic publications, but that such designations represent the same standards.

Prop. C (205 – Special Committee on Electronic Publication in Taxon 59: 1907) Add a further new Article to Art. 29:

"29.3. The content of a particular electronic publication must not be altered after it is first issued. Any such alterations are not themselves effectively published. Corrections or revisions must be issued separately to be effectively published."

Rapporteurs' comments – Prop. A–C represent the core proposals of the Special Committee on Electronic Publication re-established at the Vienna Congress. Their report presents a single set of carefully considered and generally agreed proposals. Indeed the 25 members were unanimous in supporting Prop. A and C and 76% supported Prop. B, which would amend Prop. A to permit a broader range of electronic media for effective publication. The proposals and the Report of the Committee (in Taxon 59: 1853–1862. 2010) present a clear approach to the acceptance of electronic publication for the Nomenclature Section to debate.

# **Recommendation 29A**

Prop. A (210 – Special Committee on Electronic Publication in Taxon 59: 1908) Add a new Recommendation to begin Rec. 29A: "29A.0. Publication electronically in Portable Document Format

(PDF) should comply with the PDF/A archival standard (ISO 19005-1:2005)."

Prop. B (211 – Special Committee on Electronic Publication in Taxon 59: 1908) Replace Rec. 29A.1 with the following:

"29A.1. Publishers or authors should ensure that effectively published electronic material is archived, satisfying the following criteria as far as is practical (see also Rec. 29A.0):

"(a) The material should be placed in multiple online digital repositories;

"(b) Digital repositories should be in more than one area of the world and preferably on different continents."

Rapporteurs' comments – Prop. A incorporates as a recommendation the Committee on Electronic Publication's preferred PDF standard.

*Prop. B* proposes a revision to the present Rec. 29A.1 that would be necessary if Art. 29 Prop. A were adopted.

# Article 30

Prop. A (206 – Special Committee on Electronic Publication in Taxon 59: 1907) Add a new Article to Art. 30:

"30.n. Publication by distribution of electronic material does not constitute effective publication before 1 January 2013."

Prop. B (207 – Special Committee on Electronic Publication in Taxon 59: 1907) Add a new Article to Art. 30:

"30.6. An electronic publication is not effectively published if there is evidence that it is merely a preliminary version that was, or is to be, replaced by a version that the publisher considers final, in which case only that final version is effectively published."

*Prop. C (149 – Niederle in Taxon 59: 986)* Add a new Art. 30.5bis, as follows:

"30.5bis. Publication on or after 1 January 2012 is not effective unless the publication contains a statement saying that all protologues contained in it may be reproduced, stored and disseminated by all means without limitation and free of charge."

Rapporteurs' comments – Prop. A is a necessary corollary of acceptance of Art. 29 Prop. A.

*Prop. B* seeks to ensure that only the final version of an electronic publication will be deemed to be effectively published.

*Prop. C* may well be laudable, but it is quite unrealistic to expect commercial publishers of books and journals to allow free reproduction of their publications.

### **Recommendation 30A**

Prop. A (212 – Special Committee on Electronic Publication in Taxon 59: 1908) Add a new Recommendation to Rec. 30A:

"30A.n. Preliminary and final versions of the same electronic publication should be clearly indicated as such when they are first issued."

*Prop. B (213 – Special Committee on Electronic Publication in Taxon 59: 1908)* Reword Rec. 30A.2 as follows (new text in bold, deleted text in strikethrough):

"30A.2. To aid availability through time and place, authors publishing nomenclatural novelties should give preference to periodicals that regularly publish taxonomic articles., or else printed copies Otherwise, a copy of a publication (whether published as printed or electronic matter) should be sent to an indexing centre appropriate to the taxonomic group, (even if also distributed electronically) and publications that exist only as printed matter should be deposited in at least ten, but preferably more, botanical or other generally accessible libraries throughout the world-including a name-indexing centre appropriate to the taxonomic group."

*Prop. C (150 – Niederle in Taxon 59: 986)* Add a new Rec. 30A.1bis, as follows:

"30A.1bis. If the copyright holder of a publication dated before 1 January 2012 refuses free reproduction, storage or dissemination of protologues contained in it, the publication should be included in opera utique oppressa."

Rapporteurs' comments – Prop. A is certainly desirable although implementation of the Recommendation will not normally be within the control of authors of nomenclatural novelties.

*Prop. B* represents a rewording of the existing Rec. 30A.2 that would be necessary on the acceptance of Art. 29 Prop. A

Prop. C is unrealistic for the same reasons as Art. 30 Prop. C.

# Article 31

Prop. A (208 – Special Committee on Electronic Publication in Taxon 59: 1908) Amend Art. 31.1 as follows (new text in bold):

"31.1. The date of effective publication is the date on which the printed **or electronic** matter became available as defined in Art. 29 and 30. In the absence of proof establishing some other date, the one appearing in the printed **or electronic** matter must be accepted as correct."

Prop. B (209 – Special Committee on Electronic Publication in Taxon 59: 1908) Replace Art. 31 Note 1 with a new Article:

"31.n. When a publication is issued in parallel electronic and printed versions, these must be treated as effectively published on the same date unless the dates of the versions are different according to Art. 31.1."

Regardless of the outcome of Prop. (209), Art. 31 Note 1 would be deleted as an editorial consequence of Prop. (203) being accepted. In addition, Art. 31 Ex. 4 would cease to be useful and could be deleted or amended as the Editorial Committee saw fit.

Rapporteurs' comments – Prop. A is also a modification necessary on the acceptance of Art. 29 Prop. A.

*Prop. B* would be a desirable new rule on the acceptance of Art. 29 Prop. A.

# **Recommendation 31A**

*Prop. A (151 – Pathak & al. in Taxon 59: 986)* Insert a new Rec. 31 A 2:

"31A.2. The journal or the book should be distributed to the public immediately after its publication or if it is not possible to distribute it immediately afterwards then the date of publication should be selected (and printed) such that it is possible to distribute the publication to the public immediately after that date."

Rapporteurs' comments – Prop. A might be improved by deleting the text following the first occurrence of the word "publication", so that the Recommendation simply advises prompt distribution of published material. An "ed.c." vote will be so interpreted. The second part of the text apparently arises from confusion between the date on which a publication becomes available (the date of effective publication under Art. 31.1) and the date that is printed on a publication (to be accepted as the date of effective publication only if the date of availability cannot be determined).

# Article 32

*Prop. A (177 – Brummitt in Taxon 59: 1610)* Adjust Art. 32.1, 32.7, 35, 36.1, and 36.2 to make them applicable only to names at the rank of family or below, including changing Art. 16 to Art. 18 in references to other Articles in Art. 32.1 & 32.7, and amending Art. 6.3 and 12.1 as follows:

In Art. 6.3, after the second "name", insert "applied to a taxon at the rank of family or below" and in Art. 12.1, after "taxon", insert "at the rank of family or below".

*Prop. B (169 – George in Taxon 59: 1296)* Amend Art. 32.1 (b) by the additions shown in bold below:

"32.1. In order to be validly published, a name of a taxon (autonyms excepted) must: (a) ...; (b) be composed only of letters of the **modern** Latin alphabet (a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z), except as provided in Art. 23.3 and Art. 60.4, 60.6, 60.9, and 60.10; (c) ..."

*Prop. C (126 – Rijckevorsel in Taxon 59: 664)* Add an Example to Art. 32.1(b):

"Ex. n. The designation "Grammatophyllum Guilelmi II Kränzlin" (1894), after the German Emperor Wilhelm II, contains the Roman numeral II, a symbol which is not a letter of the Latin alphabet or a symbol provided for in Art. 60.4, 60.6, 60.9, and 60.10; it is not a validly published name."

*Prop. D (128 – Rijckevorsel in Taxon 59: 665)* Add a Note to Art. 32.1(b):

"Note n. The use of typographic signs, numerals or letters of a non-Latin alphabet in the arrangement of taxa (such as Greek letters

 $\alpha$ ,  $\beta$ ,  $\gamma$ , etc. in the arrangement of varieties under a species) does not prevent valid publication, as rank-denoting terms and devices are not part of the name."

*Prop. E (264 – Turland in Taxon 59: 1919)* Amend clause (d) of Art. 32.1 as follows (new text in bold):

"32.1. In order to be validly published, a name of a taxon (autonyms excepted) must: [...] (d) be accompanied by a description or diagnosis or by a reference to a previously and effectively published description or diagnosis (except as provided in Art. 42.3, 44.1, and H.9) or meet the requirements of Art. 33 for valid publication of a new combination, status novus, or nomen novum; [...]."

*Prop. F (250 – Reveal & Gandhi in Taxon 59: 1917)* At the end of Art. 32.1(d), after the closing parenthesis, add the phrase "of a taxon in an appropriate rank (see Art. 41)".

*Prop. G (277 – Perry in Taxon 59: 1922)* Amend Art. 32.1 clause (d) to read as follows (new text in bold):

"(d) be accompanied by a description or diagnosis or if none is provided in the protologue, by a reference to a previously and effectively published description or diagnosis (except as provided in Art. 42.3, 44.1, and H.9);"

Prop. H (281 – Perry in Taxon 59: 1923) Add a new paragraph after Art. 32.1:

"32.1bis. When more than one descriptive statement, not all by the same author or authors, are included in the protologue, but both the name and one of those descriptive statements are ascribed to the same author or authors only that descriptive statement can fulfil the requirement of Art. 32.1 for a description or diagnosis, otherwise the validating description or diagnosis must be a descriptive statement of the publishing author."

Prop. I (283 – Perry in Taxon 59: 1923) Add a new paragraph after Art. 32.1 (283 is an alternative to 281):

"32.1bis. When more than one descriptive statement, not all by the same author or authors, are included in the protologue, any one of these descriptive statements can fulfil the requirement of Art. 32.1 for a description or diagnosis."

*Prop. J (090 – Redhead in Taxon 59: 308)* Insert the following new Example following Art. 32.4:

"Ex. 6bis. Ascomycota Caval.-Sm. (as 'Ascomycota Berkeley 1857 stat nov.', Biol. Rev. 73: 247. 1998) was validly published as a phylum name, minimally fulfilling requirements for Art. 32.1(d) via the diagnosis "sporae intracellulares" that, in the opinion of the author (Art. 32.2), served to differentiate it from the only other phylum in the subkingdom in his classification. Berkeley (Intro. Crypt. Bot.: 270. 1857) had introduced the name Ascomycetes [not Ascomycota] as a replacement for 'Endotheques, Lev.' and applied it to an ambiguously ranked taxon."

*Prop. K (091 – Redhead in Taxon 59: 309)* Insert the following new Example following that in Prop. 090:

"Ex. 6ter. Doweld (Prosyllabus Tracheophytorum: LXXVII. 2001) proposed 'Blastocladiomycota nom. nov.' purposely to be an automatically typified name (Art. 16.1(a)) at the rank of phylum to replace the presumably descriptive (Art. 16.1(b)) 'infraphylum' name Allomycotina Caval.-Sm. (Biol. Rev. 73: 246. 1998), which lacked an included family with a validly published name based upon the presumed same generic stem name, Allomyces E.J. Butler. In the absence of an original Latin description or diagnosis, Doweld specifically cited the Latin description published by Cavalier-Smith for Allomycotina (l.c.), "zoospora cilio unico instructa" that minimally served to differentiate two "infraphyla" in Cavalier-Smith's classification. Through an oversight, the Latin phrase contradicts Doweld's own classification wherein other phyla within the kingdom as circumscribed by Doweld

included taxa with uniflagellate zoospores. Therefore, citation of the previously published contradictory Latin phrase (Doweld, l.c. 2001) failed to fulfil the requirements of Art. 32.2. The phylum name was later validly published as *Blastocladiomycota* T.Y. James (in Mycologia 98: 867. 2007 ['2006'])."

Rapporteurs' comments – Prop. A would make a fundamental change to the *Code* by removing the concept of valid publication above the rank of family. This would also create what some may regard as a somewhat awkward situation, where the term "name" would mean a name not validly published in many more situations than is currently the case in the *Code*. It would also mean that the rules on formation of names above the rank of family would be rules governing names that are not validly published. However, these are not practical issues and could indeed be overcome by simply introducing in Art. 32 a clause establishing that for valid publication names above the rank of family need only be (i) effectively published and (ii) have a form conforming to the provisions of Art. 16–17. Since the principle of priority does not apply above the rank of family, one may currently use whatever name one likes provided that it is validly published and correctly formed. There is therefore no practical difference in terms of what names could and would be used. The current Recommendation that "authors should generally follow the principle of priority" (Rec. 16B.1) would be replaced by what many may regard as a more sensible Recommendation to use a name which has been used in (almost) the same sense by a majority of previous authors (Rec. 16B Prop. A). This may well be a valuable opportunity to simplify the *Code* by removing all the arguably pointless requirements for valid publication of suprafamilial names – but perhaps retaining those that are referred to above.

*Prop. B* points out that "letters of the Latin alphabet" could be interpreted in different ways and proposes to change the phrase to "modern Latin alphabet" and cite the permissible 26 letters representing the ISO standard for the "basic modern Latin alphabet" (ISO/IEC 646). As this is an international standard it is perhaps unnecessary to include the letters in the text of the Article although they might be included in a footnote. Another option might be to reverse the decision made at the Vienna Congress and delete clause (b) from Art. 32.1 altogether. This would remove the need for Art. 20 Prop. A and B, Art. 23 Prop. C, Art. 32 Prop. C and D, and Art. 60 Prop. G and H, although it might, of course, lead to questions as to the valid publication of binomials in, say, Cyrillic!

*Prop. C* provides an Example of a name that the proposer does not consider validly published because he considers the Roman numeral 'II' to be a symbol that must be excluded under clause (b) of Art. 32.1, new in the *Vienna Code*. Others might conclude that the numeral in the epithet was to be interpreted as two Latin letters and so corrected to "guilelmi-II" under Art. 23.1 and 60.9. Acceptance or otherwise of the proposal should reflect the alternative interpretations.

*Prop. D* aims to clarify that use of letters and symbols not belonging to the Latin alphabet do not prevent valid publication when they are not actually part of a name.

*Prop. E* is a corollary of Art. 33 Prop. C and is discussed under that Article.

*Prop. F* would provide a helpful reference from Art. 32.1(d) to Art. 41, although it would be unnecessary if Art. 41 Prop. A is accepted.

*Prop. G* is linked to Art. 7 Prop. C and would make clear what most have understood to be the case, namely that "a previously and effectively published description or diagnosis" is only relevant when no descriptive material is provided in the protologue.

*Prop. H* would establish what many have assumed the *Code* implied and upon which Art. 46 Ex. 10 is predicated (but see Art. 46

Prop. H), namely that when, in the protologue, part of the descriptive material is ascribed to the publishing author and part to the different author to whom the name is ascribed, then the validating description is that of the author to whom the name is ascribed, with consequent implications for what constitutes the original material and hence for typification. Art. 46 Prop. I is essentially the same proposal, but refers only to the attribution of the name, whereas Art. 32 Prop. I offers an alternative approach.

As noted, *Prop. I* is an alternative to Prop. H that leaves the validating description open to choice even when both the name and some descriptive material is ascribed to someone other than the publishing author. This has advantage of greater flexibility in lectotypification at the expense of a less consistent approach. If the associated Art. 46 Prop. F were also accepted, the usual attribution of authorship in such situations would not be altered. Acceptance of the proposal would, however, also require modification to other portions of the *Code*, as indicated in, for example, Art. 9 Prop. N.

Prop. J suggests an Example to illustrate the application of Art. 32.4. Although it may prove appropriate, as worded it is misleading. Berkeley (l.c.) validly published Ascomycetes as a name of indefinite rank. It is only because Cavalier-Smith (l.c.) did not apparently provide a full and direct reference to Berkeley's publication of Ascomycetes (the citation as "Ascomycota" would seem a correctable error) that the nature of Cavalier-Smith's descriptive material becomes relevant, Cavalier-Smith's name not being validly published as a stat. nov. The suggested Example might be referred to the Editorial Committee to consider.

*Prop. K* provides another possible Example for the same article. As presented it is not appropriate, nor does it appear likely to be so. *Allomycotina* Caval.-Sm. is referred to as a validly published name of an infraphylum, in which case *Blastocladiomycota* Doweld would be validly published as a nom. et stat. nov. This seems to be confirmed by Doweld (l.c.) who indicates that Cavalier-Smith provided a Latin diagnosis for *Allomycotina*. Whether or not the diagnosis matches the organisms that Doweld included in *Blastocladiomycota* is irrelevant (Art. 7.3). It would seem that the proposal should be rejected.

# Recommendation 32Bbis (new)

*Prop. A (026 – Rijckevorsel in Taxon 58: 661)* Add a new Recommendation, to follow after Art. 32 (or Art. 34):

"Authors who have discovered, or recognized, a new taxon of plants should publish a name for it under this *Code* as soon as reasonably possible. Prior to valid publication, they should avoid circulating a name they intend to publish, especially in print."

*Prop. B (079 – Rijckevorsel in Taxon 59: 303)* If proposal 026 is accepted, add an Example to the new Recommendation:

"Ex. n. In the last decades of the 20th Century, an economically significant South American species was indicated by the designations "Syzygiopsis pachycarpa" (e.g., by Kukachka in Res. Pap. F.P.L., U.S. Forest Serv. 425. 1982), "Planchonella pachycarpa" (e.g., by Teixeira & al. in I.T.T.O. Techn. Ser. 1: 35. 1988), and finally (following the taxonomy by Pennington in Fl. Neotrop. Monogr. 52. 1990) "Pouteria pachycarpa". This final designation was widely used and was even included in a ruling (NY H88385) by the United States International Trade Commission. Such a delay in the valid publication of a name is undesirable, with a high risk of confusion (in this case confusion occurring with Chrysophyllum lucentifolium subsp. pachycarpum Pires & T.D. Penn. (1990))."

Rapporteurs' comments – Prop. A seeks to reinstate an element of what was Rec. 45A.1 in the Saint Louis Code but now with updated and relevant wording. That Recommendation was deleted at the

Vienna Congress as its wording made its recommendation inescapable and so redundant.

 ${\it Prop.~B}$  would provide an Example for the reinstated Recommendation.

### Article 33

*Prop. A (319 – Gandhi & Reveal in Taxon 59: 1931)* Add a new Note following Art. 33.1 with an Example.

"Note Ibis. Intended new combinations, for which the epithets are not associated with the relevant generic name within the text, but are so associated within the index of the publication, are validly published. The date of the new combination is the same as the date of the index, but the authorship of the new combination is the same as the authorship of the article in the text (see Art. 46.7 Ex. 37)."

"Ex. 4bis. Wight & Arnott (Prodr. Fl. Ind. Orient. 448. 1834) treated Limonia minuta G. Forst. (1786) as belonging to Micromelum, but did not combine the epithet minuta with Micromelum. However, in the index (p. 468), they made the combination, referred to p. 448, and thereby establishing M. minutum (G. Forst.) Wight & Arn.

Prop. B (119 – Hawksworth & al. in Taxon 59: 662) Insert a new paragraph Art. 33.1bis:

"33.1bis. On or after 1 January 2013, in the case of organisms treated as fungi under this *Code*, the citation of a repository identifier (Art. 37bis.1) for the new combination or new name in the publication in which it is introduced is required for valid publication."

Prop. C (265 – Turland in Taxon 59: 1920) Add a new Article following Art. 33.1:

"33.1bis. For the purpose of valid publication of a new combination, status novus, or nomen novum, the basionym or replaced synonym is restricted as follows: (a) for the name of a family or subdivision of a family, the basionym or replaced synonym must be the name of a family or subdivision of a family; (b) for the name of a genus or subdivision of a genus, the basionym or replaced synonym must be the name of a genus or subdivision of a genus; and (c) for a name of a species or infraspecific taxon, the basionym or replaced synonym must be the name of a species or infraspecific taxon."

*Prop. D (267 – Turland in Taxon 59: 1920)* In Art. 33.2, 33.5, and 33.7 change the phrase "new generic name with a basionym" to "status novus".

If this proposal is passed, the words "new generic name" in the third sentence of Art. 33 Ex. 9 should be editorially changed to "status novus", ideally followed by the relevant name and its authors, i.e. *Brachiolejeunea* (Spruce) Stephani & Spruce.

*Prop. E (251 – Reveal & Gandhi in Taxon 59: 1917)* In the first line of Art. 33.2, after the word "reference", add the phrase "(see Art. 32.6)".

*Prop. F (252 – Reveal & Gandhi in Taxon 59: 1918)* Add a new Example to Art. 33:

"Ex. 7bis. When Reveal and Hoogland (in Bull. Mus. Natl. Hist. Nat., sér. 4, sect. B Adansonia 12: 206. 1990) published Xanthophyllaceae they cited a later name published by Chodat (in Engler & Prantl, Nat. Pflanzenfam. III, 4: 329, 343. 1896) associated with diagnoses in German, which is to be corrected to Xanthophylleae Baill. (Hist. Pl. 5: 81, 91. 1874), associated with a diagnosis in French. However, when Takhtajan (Sist. Magnolif.: 192. 1987) published "Xanthophylloideae", he cited "Xanthophyllacées" (Lecomte, Fl. Indo-Chine 1: 242. 1909), which was a nomen nudum. Although Xanthophylleae Baill. was available, Takhtajan's reference to a name that was not validly published cannot be corrected and thus his "Xanthophylloideae" likewise was not validly published."

Prop. G (268 – Turland in Taxon 59: 1920) Reword Art. 33.3 as follows:

"33.3. Before 1 January 1953, if, for a presumed new combination or status novus at the rank of genus or below, no reference to a basionym is given but a previously and validly published name, or its final epithet, that applies to the same taxon is adopted, that adoption is treated as indication of the earlier name as basionym, but only if the new combination or status novus would otherwise be a validly published name."

Prop. H (269 – Turland in Taxon 59: 1920) Reword Art. 33.4 as follows:

"33.4. On or after 1 January 1953, a new combination, status novus, or nomen novum is not validly published unless its basionym or replaced synonym is clearly indicated and a full and direct reference given to its author and place of valid publication, with page or plate reference and date (but see Art. 33.5 and 33.7). On or after 1 January 2007, a new combination, status novus, or nomen novum is not validly published unless its basionym or replaced synonym is cited."

*Prop. I (023 – Rijckevorsel in Taxon 58: 660)* In Art. 33.4, in "(when a new name is proposed)", replace "new name" by "nomen novum" (or by "avowed substitute" or by "replacement name").

*Prop. J (092 – Saxena in Taxon 59: 309)* Add a new sentence to Art. 33.4 to read:

"On or after 1 January 2013, the full and direct reference to the basionym or replaced synonym should include reference to both page and plate (with figure number), in addition to reference to its name, author(s) and place and date of valid publication."

Prop. K (093 – Saxena in Taxon 59: 309) Add a new Art. 33.4bis to read:

"33.5. On or after 1 January 2013, the full and direct reference to the basionym or replaced synonym should immediately follow a proposed new combination, a new generic name with a basionym, or an avowed substitute (nomen novum). It should not be provided by mere cross-reference to a bibliography at the end of the publication or to other parts of the same publication, e.g., by use of the abbreviations loc. cit. or op. cit. The same should apply in all the cases where full and direct reference is required (see Arts. 9.19, 32.5 and 45.1)."

*Prop. L (320 – Gandhi & Reveal in Taxon 59: 1931)* Add a new sentence at the end of Art. 33.5 with an Example:

"However, the use of an incorrect indication of the novel status of a new name is to be treated as a correctable error (see Rec. 45A)."
"Ex. 15bis. When Gilmartin (in Phytologia 16: 164. 1968) published Vriesea barclayana var. minor, she stated "var. nov.", provided a Latin diagnosis, cited Tillandsia lateritia André (1888) as a synonym, and cited "André 4057" (K) as the type for both names. Since T. lateritia and V. barclayana var. minor are typified by the same element, Gilmartin's citation of 'var. nov.' is treated as an error, and V. barclayana var. minor is to be treated as an avowed substitute for T. lateritia."

*Prop. M (270 – Turland in Taxon 59: 1920)* Reword Art. 33 Note 2 as follows:

"Note 2. A new name published for a taxon previously known under a misapplied name must always be the name of a new taxon and must therefore meet the requirements of Art. 32–45 for valid publication of such names. This procedure is not the same as publishing a nomen novum for a validly published but illegitimate name (Art. 58.1), the type of which is necessarily the same as the replaced synonym (Art. 7.3)."

*Prop. N (321 – Gandhi & Reveal in Taxon 59: 1931)* Add a new Example following Art. 33.7 that is complementary to Ex. 22:

"Ex. 22bis. For the new combination Tillandsia barclayana var. minor, Butcher (2009) referred to the epithet-bringing name. Vriesea

barclayana var. minor Gilmartin (1968), without its authorship or bibliographic reference, but instead provided a full and direct bibliographic reference to the type-bringing name T. lateritia André (1888) as the basionym. Article 33.8 notwithstanding, T. barclayana var. minor (Gilmartin) Butcher was validly published as a new combination under Art. 33.7(c), because it would otherwise have been published as a nomen novum."

Prop. O (275 – Turland in Taxon 59: 1921) Delete Art. 33.8 (quoted here for reference): "33.8. On or after 1 January 1953, if an author claims to be publishing a new combination, new generic name with a basionym, or avowed substitute, but fails to provide the full information required under Art. 33.4, as qualified by Art. 33.5 and 33.7, the name is not validly published even though the author may have at the same time provided other information that would have resulted in valid publication as the name of a new taxon."

Prop. P (322 – Gandhi & Reveal in Taxon 59: 1931) Add a new Example following Art. 33.8:

"Ex. 23bis. Wilcox & al. (1993) published "Rhodanthemum" as a "comb. et stat. nov." based on Leucanthemum sect. Rhodanthemum Vogt (1991). Although the authors provided a description in Latin and cited a type, their citation of the basionym reference, even though direct, was not full. Therefore, "Rhodanthemum", which otherwise met the requirements for valid publication of a new genus, was not validly published."

Rapporteurs' comments – Prop. A extends beyond a mere Note in attempting to make a rule on date of publication at odds with Art. 45.1. In this case, if text and index were not published simultaneously, the date of valid publication is whichever was published later, whereas the proposers apparently assume that the index would always be later. Moreover, the included rule on authorship may be compatible with Art. 46 in some cases, but certainly not in all.

*Prop. B* is a corollary for new combinations of the requirement presented in Art. 37bis Prop. A (q.v.) for mandatory indexing for valid publication of names of fungi.

*Prop. C*, along with Art. 32 Prop. E, would clarify that the requirements for valid publication of new names for taxa that are already named, i.e. for new combinations (combinationes novae), names with new status, (status novi), and replacement names (nomina nova), are significantly different from those applicable to names of new taxa. It seems a very desirable clarification.

*Prop. D* is editorial depending on the decision made on Art. 6 Prop. A as to the preferred term for what the *Code* currently (Art. 7.3) terms "avowed substitute (replacement name, nomen novum)".

*Prop. E* provides a useful cross-reference from "indirect reference" in Art. 33.2 to its definition in Art. 32.6.

 $\ensuremath{\textit{Prop.}}\xspace F$  suggests an Example that could be referred to the Editorial Committee.

*Prop. G* is an attempted clarification of Art. 33.3, partly through use of the definition of status novus in Art. 6 Prop. A, and partly to better reflect the situations to which the Article applies. It seems a useful clarification.

*Prop. H* is an editorial simplification made possible by the definition of terms proposed in Art. 6 Prop. A.

*Prop. I* would improve the precision of Art. 33.4, although it would be unnecessary if the proposed rewording of Art. 33.4 in Prop. H is accepted.

*Prop. J* results from an overly strict application of Art. 33.4 claiming that a full reference to a basionym or replaced synonym is not provided if, when both a page and a plate exist, reference to only one of those is given. The proposed rule is anyway unworkable

because it assumes that both a page and a plate will always exist, whereas the present wording of Art. 33.4 ("page or plate reference") allows for the existence of either or both.

*Prop. K* seeks to make Rec. 33A.1 into a new Article following Art. 33.4, although the proposed wording (with "should" rather than "must") remains that of a Recommendation. It seems preferable to retain Rec. 33A.1 in its present form, bearing in mind that Art. 33.4 already contains several requirements for valid publication; indeed some might think too many.

*Prop. L* seems unnecessary and could even have unforeseen consequences. It is permissible under the current *Code* to publish, for example, what is stated to be a name of a new variety, satisfying all requirements for valid publication of a new variety, yet cite in synonymy a previously published name of a species. Prop. L would lead users of the *Code* to interpret such a name as new combination, status novus, or nomen novum despite the author's indication that it was the name of a new taxon.

*Prop. M* represents an editorial improvement in the wording of Art. 33 Note 2 that is succinct and appears more understandable.

*Prop. N* would provide an Example for Art. 33.7(c) in addition to the current Ex. 22. It could be referred to the Editorial Committee.

*Prop. O* is to delete Art. 33.8, a rule that was introduced into the *Code* at Vienna, and that has led to undesirable consequences. The rule is also at variance with the general thrust of the *Code*, which determines valid publication on the basis of what actually appears in the protologue, regardless of any claims of the author. Deletion of Art. 33.8 therefore seems sensible.

*Prop. P* would provide a needed Example to Art. 33.8 if Prop. O is rejected and that Article remains in the *Code*.

# **Recommendation 33A**

*Prop. A (271 – Turland in Taxon 59: 1921)* In Rec. 33A.1, Art. 46.2 and Art. 46.4, after "new combination", insert ", status novus, or".

*Prop. B (094 – Saxena in Taxon 59: 309)* If Proposal 093 [Art. 32 Prop. K] is accepted, delete Rec. 33A.

Rapporteurs' comments – Prop. A corrects what appears to have been an oversight in the Vienna Code, when the phrase "new generic name with a basionym" was introduced widely in the Code, and which earlier proposals in this set (e.g. Art. 33 Prop. D) would replace by the now defined term status novus.

Prop. B would be necessary only if Art. 33 Prop. K were accepted.

# Article 34

*Prop. A (323 – Gandhi & Reveal in Taxon 59: 1931)* Add a new Example following Art. 34.2:

"Ex 12bis. Sprague (in J. Bot. 61: 131. 1923) proposed "Cyclospermum leptophyllum" as an alternative name to "Pimpinella leptophylla" Pers. (1805). As these two names were not proposed simultaneously by the same author, C. leptophyllum was not validly published by Sprague. It was, however, later validly published by Britton & P. Wilson (Sci. Surv. Porto Rico & Virgin Isl. 6: 52. 1925)."

Rapporteurs' comments – Prop. A provides an Example that has nothing to do with Art. 34.2. It could perhaps instead illustrate Art. 34.1(a), if "Cyclospermum leptophyllum" was not accepted by Sprague, but the Code already has plenty of Examples under Art. 34.1.

# Article 35

*Prop. A (253 – Reveal & Gandhi in Taxon 59: 1918)* Alter the date given in Art. 35.2, from "1908" to "1887".

Prop. B (272 - Turland in Taxon 59: 1921) In the first sentence of

Art. 35.3 replace "A new name or combination" with "A name" and reword the second sentence as follows:

"35.3. [...] If it is the name of a new taxon, it may serve as a basionym or replaced synonym for subsequent new combinations, status novi, or nomina nova in definite ranks."

Rapporteurs' comments – Prop. A would move backward the date on or after which a rank-denoting termination may be accepted as an indication of rank for a suprageneric name. The authors claim to have researched the consequences thoroughly and state "[t]he change in date will impact essentially only those critical works of Engler and Prantl for which adoption of a rank has never been questioned."

*Prop. B* is an editorial improvement in wording that would be made possible by acceptance of the definitions in Art. 6 Prop. A.

### Article 36

*Prop. A (115 – Figueiredo & al. in Taxon 59: 659)* In Art. 36.1 add the words in bold italics so it reads as follows:

"36.1. On or after 1 January 1935 and until and including 31 December 2012, a name of a new taxon (algae and all fossil taxa excepted) must, in order to be validly published, be accompanied by a Latin description or diagnosis or by a reference to a previously and effectively published Latin description or diagnosis."

*Prop. B (170 – Williams & Brodie in Taxon 59: 1296)* In Art. 36.2 add the words in bold so it reads as follows:

"36.2. In order to be validly published, a name of a new taxon of non-fossil algae published on or after 1 January 1958 and until and including 31 December 2012 must be accompanied by a Latin description or diagnosis or by a reference to a previously and effectively published Latin description or diagnosis."

*Prop. C (186 – Demoulin in Taxon 59: 1611)* In Art. 36.1 insert "fungal" in the parenthesis at the beginning of the Article so that it reads:

"On or after 1 January 1935, a name of a new taxon (algal, fungal, and all fossil taxa excepted) must, ..."

*Prop. D (187 – Demoulin in Taxon 59: 1611)* Insert a new Article 36.1*bis* to read:

"36.1bis. On or after 1 January 1935 and until and including 31 December 2012, a name of a new taxon of organisms treated as fungi under this *Code* must, in order to be validly published, be accompanied by a Latin description or diagnosis or by a reference to a previously and effectively published Latin description or diagnosis."

*Prop. E (188 – Demoulin in Taxon 59: 1611)* Insert in Art. 36.3 the text in bold so that it reads:

"In order to be validly published, a name of a new taxon of fossil plants published on or after 1 January 1996, or of fungi published on or after 1 January 2013, must be accompanied by a Latin or English description or diagnosis ..."

Rapporteurs' comments – Prop. A would remove the Latin requirement for the validating description or diagnosis of the name of a new taxon (other than algae and fossils) published on or after 1 January 2013. This would mean that the description or diagnosis could be in any language. Those familiar with Latin might be concerned about difficulty in even being able to tell whether or not a name is validly published when the protologue is in an unfamiliar language (the so-called "Babylon" argument), but, with the increasing availability of electronic versions of protologues, online translation tools can help; while such a translation may be poor, it is usually possible to understand the text and to establish whether or not a description or diagnosis exists. Moreover, with the desire of scientists to publish in high-impact journals, papers increasingly appear in widely spoken languages, particularly English, so the "Babylon" argument against

removing the Latin requirement loses strength. The proposers argue for removal of the Latin requirement on account of its having become a redundant anachronism in the *Code*. On the same argument, some may feel that the use of Latin terminology the *Code* in preference to English is likewise anachronistic, e.g., typus, holotypus, lectotypus, etc., hic designatus, and especially the use of Latin in App. II–VI.

*Prop. B* extends the proposed removal of the Latin requirement in Prop. A to names of algae. The Nomenclature Committee for Algae has been asked to give its recommendation on this proposal.

*Prop. C–E* represent a single set of proposals that arose from the views expressed at Nomenclature Sessions of the 9th International Mycological Congress in August 2010 and that were endorsed by the General Assembly of the International Mycological Association thereafter (see Norvell & al., l.c. 2010a,b). Strong preference was expressed for adopting for fungi what is the current rule for fossil plants namely that in order to be validly published the name of a new taxon must have a description or diagnosis in English or Latin. The Nomenclature Committee for Fungi will give its recommendation on these proposals in the April issue of *Taxon*.

# **Recommendation 36A**

Prop. A (037 – Filgueiras & Prado in Taxon 58: 664) Insert a new Recommendation to follow Rec. 36A.1:

"36A.2. Authors citing names of taxa within validating Latin descriptions or diagnoses should not change the terminations of those names to accord with case."

Prop. B (116 – Figueiredo & al. in Taxon 59: 660) Delete Recommendation 36A.1.

*Prop. C (189 – Demoulin in Taxon 59: 1611)* In Rec. 36A.1. After "non fossil plants" insert "or of fungi".

Rapporteurs' comments – Prop. A seeks to make writing Latin descriptions and diagnoses easier by recommending against changing the case endings of plant names, e.g., when a change to the dative, genitive, or ablative case would be necessary. The aim is also to facilitate indexing and searching by preserving the usual spellings of names. This could result in ambiguous or nonsensical Latin phrases, and it would do nothing to ease the writing of correct Latin in the remainder of a description or diagnosis. Of course, Prop. A would become largely redundant if Art. 36 Prop. A is accepted (not completely redundant because some workers might still choose to provide a Latin description or diagnosis).

Prop. B is a necessary consequence of accepting Art. 36 Prop. A.Prop. C is a necessary consequence of accepting Art. 36 Prop. C–E.

# Article 37

*Prop. A (038 – Kumar & al. in Taxon 58: 665)* Reword Art. 37.5 by deleting "of microscopic algae or microfungi" and inserting the italicized text:

"37.5. For the purpose of this Article, the type of a name of a new species or infraspecific taxon (fossils excepted: see Art. 8.5) may be an effectively published illustration when (a) legal reasons outside the mandate of this Code prevent the collecting and/or preservation of representative material, (b) neither living nor preserved material is known to exist, or (c) (microscopic algae or microfungi only) if there are technical difficulties of preservation or if it is impossible to preserve a specimen that would show the features attributed to the taxon by the author of the name."

*Prop. B (171 – Pathak & al. in Taxon 59: 1297)* Insert the words in bold in Art. 37.7 as indicated:

For the name of a new species or infraspecific taxon published on or after 1 January 1990 of which the type is a specimen or unpublished illustration, the single herbarium or collection or institution in which the type is conserved **or will be conserved** must be specified.

*Prop. C (001 – Mottram & Gorelick in Taxon 57: 314)* Add the following sentence to Art. 37.7:

"On or after 1 Jan 2012, such a type must be lodged as specified no later than the effective publication date of the new taxon."

Prop. D (164 – Sennikov in Taxon 59: 1293) Add a new Example to Art. 37 after Ex. 3:

"Ex. 6 bis." Dendrobium sibuyanense" Lubag-Arquiza & al. (in Philipp. Agric. Sci. 88: 484, fig. 1. 2005) was described with a living collection indicated as holotype. Since such type designations are precluded by Art. 8.4, the name was not validly published. It was not validly published later, when Lubag-Arquiza & Christenson (in Orchid Digest 70: 174. 2006) designated a published drawing as "lectotype", contrary to Art. 37.6 that requires use of "holotype" starting from 1 January 1990. Valid publication was not effected also when Clements & Cootes (in Orchideen J. 2009: 27–28. 2009) published another name for this plant, "Euphlebium sibuyanense", because their indication of this drawing as holotype was precluded by Art. 37.4 starting from 1 January 2007."

Prop. E (191 – Ohashi & Ohashi in Taxon 59: 1612) Modify Art. 37 Ex. 4 (new text in bold):

"Ex. 4. In the protologue of Setaria excurrens var. leviflora Keng ex S.L. Chen (in Bull. Nanjing Bot. Gard. 1988–1989: 3. 1990) the gathering Guangxi Team 4088 was indicated as "模式" (Chinese for "type") and the herbarium where the type is conserved was specified as "中国科学院植物研究所**標本室**" (Chinese for "Herbarium, Institute of Botany, The Chinese Academy of Sciences", i.e. PE).

Prop. F (105 – Yu & al. in Taxon 59: 656) Add an Example to Article 37:

"Ex. 6. The name "Holboellia latistaminea" originally described by T. C. Chen (in Fl. Reipubl. Popularis Sin. 29: 307. 2001) was not validly published because two herbaria (IBSC, KUN) were simultaneously listed after the single cited specimen (W. P. Fang 15449), and neither was indicated as the place of deposition of the type. The name was validly published by S. Y. Jin & Y. L. Chen (Cat. Type Spec. Herb. China (Suppl. II): 112. 2007) where the specimen conserved in IBSC is indicated as holotype, and the other in KUN as isotype, and a full and direct reference to Chen's previously published Latin diagnosis (Article 45.1) was provided."

Rapporteurs' comments – Prop. A seeks to extend the situations in which an illustration may, even after 1 January 2007, be eligible as type. Whereas many will likely have sympathy with the first situation for which extension is proposed, that in which there are legal barriers to a type being preserved, some will certainly doubt whether it is justifiable to describe as new a taxon of which neither living nor preserved material is known to exist.

*Prop. B* would seem to encourage authors of names of new taxa to defer deposition of their types in herbaria until after publication, a practice that does not seem desirable.

*Prop. C*, by contrast, would require that a type be deposited prior to publication in order for a name to be validly published. Although clearly a desirable goal, the proposal does not make clear how it is to be determined whether or not the requirement has been met. Moreover, as conforming to Art. 37 is a requirement for valid publication, there would no longer be any direct way of telling, i.e. from the protologue alone, whether or not a name was validly published.

*Prop. D* provides a new example of rather unusual circumstances that appear to have stimulated Art. 9 Prop. X. It may be referred to the Editorial Committee.

*Prop. E* corrects the incomplete citation and inaccurate translation of the Chinese characters in Art. 37 Ex. 4, as revised by McNeill & al. (in Taxon 56: 585. 2007).

*Prop. F* would provide a useful Example for Art. 37.7 of a name that was not validly published because the type was indicated to be in two herbaria, i.e., not a "single herbarium or collection or institution" as required by Art. 37.7.

### **Recommendation 37A**

*Prop. A (004 – Shui & Wen in Taxon 57: 315)* Proposal to recommend citation of herbarium serial numbers of type specimens by adding a new paragraph and an Example to Rec. 37A:

"37A.2. The herbarium serial number of the holotype should be cited following the acronym of its deposited herbarium or institution at the time of publication of a name of a new species and lower taxon. It should also be cited in lectotype, neotype and epitype designations (see Art. 9)."

"Ex. 1. When the type specimen of Sladenia integrifolia Y.M. Shui & W.H. Chen (Sladeniaceae) is designated as Mo Ming-Zhong, Mao Rong-Hua & Yu Zhi-Yong 05 (holotype, KUN 0735701; isotypes, MO, PE) (in Novon 12: 539–542. 2002), the serial number 0735701 is cited following the herbarium acronym "KUN" of Herbarium of Kunming Institute of Botany (see Rec. 7A), showing that the specimen KUN 0735701 is the unique and specific sheet to Herbarium of Kunming Institute of Botany (see Art. 8.3)."

Prop. B (015 – Pathak & Bandyopadhyay in Taxon 57: 319) Insert a new Rec. 37A.2:

"37A.2. In order to facilitate precise type designation, it is recommended that while digitizing the specimens in a herbarium, every sheet should be bar coded with a unique identification number. In those herbaria where digitization is not possible in the near future, accession numbers should be given to each herbarium sheet."

Prop. C (152 – Ohashi & Ohashi in Taxon 59: 987) Proposal to add a new Recommendation in Rec. 37A:

"37A.2. Indication of the type specimen of a new species or infraspecific taxon should be published in the protologue with its data in Roman letters (See Art. 37.3 Note 2)."

Prop. D (153 – Ohashi & Ohashi in Taxon 59: 987) Proposal to add a second new Recommendation in Rec. 37A:

"37A.3. Specification of the herbarium or collection or institution in which the type is conserved should be provided in Roman letters or in the abbreviated form indicated in Art. 37 Note 4."

Rapporteurs' comments – Prop. A would add what many will consider a worthwhile recommendation to make identification of which specimen is the type of a name more readily accomplished.

*Prop. B* seeks to make a recommendation on herbarium practice which, while worthy, many will not consider appropriate as a Recommendation in a *Code* of nomenclature.

*Prop. C* and *D*, although distinct proposals, both encourage important information in the protologue (the type and its place of preservation) to be presented in the Latin alphabet.

# **Recommendation 37B**

Prop. A (005 – Pathak & Bandyopadhyay in Taxon 57: 316) Insert a new Rec. 37B.1:

"It is strongly recommended that authors publishing the name of a new species or infraspecific taxon submit the holotype and any isotypes to the herbarium (-ia) or collection(s) or institution(s) stated in the protologue immediately after publication, if not already deposited, and that the curators of such herbaria or collections or institutions ensure that incorporation of these types receives the highest priority."

Rapporteurs' comments – Prop. A, although well-intentioned, may, like Art. 37 Prop. B, suggest a dilution of the current wording of Art. 37.7, the wording of which implies that prior to publication of a name its type will already be conserved in a "single herbarium, collection or institution".

# Article 37bis (new)

Prop. A (117 – Hawksworth & al. in Taxon 59: 661) 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 (http://www.mycobank.org).

Rapporteurs' comments – Prop. A, along with Art. 33 Prop. B, would establish mandatory indexing of all new names of fungi as a requirement for valid publication. The proposals were overwhelmingly supported in the Nomenclature Sessions of the 9th International Mycological Congress in August 2010 and were endorsed by the General Assembly of the International Mycological Association thereafter (Norvell & al., 1.c. 2010a,b). The Nomenclature Committee for Fungi will give its recommendation on these proposals in the April issue of Taxon.

# Recommendation 37bisA (new)

Prop. A (118 – Hawksworth & al. in Taxon 59: 662) 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."

*Prop. B (184 – Gams in Taxon 59: 1611)* Insert a new Recommendation 37*bis*A.2 with appropriate cross-references:

"37bisA.2. In addition to meeting the requirements of Art. 11.5, 53.6, 61.3, and 62.3 for effective publication of choices of name, orthography or gender, those publishing such choices for names of organisms treated as fungi under this *Code* are encouraged to record the choice in the record of the name in a recognized repository (Art. 37bis.3) and cite this and its record number in the place of effective publication."

Insert "see also Rec. 37bisA.2" in Art. 11.5, 53.6, 61.3, and 62.3. *Rapporteurs' comments – Prop. A* is a corollary of Art. 37bis Prop. A, encouraging promptness in meeting the requirements of that proposal and the provision of additional complementary information.

*Prop. B*, although not strictly dependent on the acceptance of Art, 37bis Prop. A, is linked to it in that it would recommend that information on other nomenclatural acts be added to the record of a name in the recognized repository.

The Nomenclature Committee for Fungi will give its recommendation on both these proposals in the April issue of *Taxon*.

### Article 38

*Prop. A (192 – Doweld in Taxon 59: 1613)* Insert a new Art. 38.1 worded as follows and renumber the present Art. 38.1 and 38.2 as 38.2 and 38.3, respectively:

"38.1. In order to be validly published, a name of a new genus or subdivision of a genus of fossil plants published on or after 1 January 1912, must, in addition to the description or diagnosis, cite or refer, directly or indirectly, to a validly published species name, or be accompanied by an illustration or figure showing the essential characters or by reference to a previously and effectively published illustration or figure."

*Prop. B (193 – Doweld in Taxon 59: 1613)* Insert three examples to illustrate the provisions of a new wording of Art. 38.1 concerning valid publication of fossil generic names:

"Ex. 1. "Laconiella" when published by F. Krasser (in Akad. Wiss. Wien Sitzungsber., Math.-Naturwiss. Kl. Abt. 1. 129: 16. 1920) included only one species, termed "Laconiella sardinica" by Krasser, but not validly published as it lacked an illustration or reference to any previously and effectively published illustration or figure. "Laconiella" is not, therefore, a validly published generic name."

"Ex. 2. Batodendron Chachlov (in Izv. Sibirsk. Otd. Geol. Komiteta 2(5): 9. 1921) was published with a description and illustrations (figs 23–25), but the author failed to designate a species name for these fossils, nevertheless, being accompanied with illustrations, the generic name is validly published (although an illegitimate later homonym of Batodendron Nutt. 1843)."

"Ex. 3. Stachygynandrites Doweld (New Syll. Pl. Fam.: 999. 2005) was published with a generic description and was based on Lycopodites gutbieri Göpp. (in Germar, Lehrb. Mineral.: 440. 1840), a species originally published without any illustration [for which illustrative material was first provided by Geinitz (in Verstein. Steinkohlenform. Sachs.: 32, tab. 1, fig. 1. 1855) and was consequently neotypified by this figured specimen by Rößler & Buschmann (in Rev. Palaeobot. Palynol. 80: 261. 1994)]. Since the species was validly published without an associated illustration or reference to one, being prior to 1 January 1912, the generic name Stachygynandrites is also validly published."

*Prop. C (137 – Traverse in Taxon 59: 666)* Add to Art. 38.1:

"For plant microfossil names published before 1 January 1912, the earliest effectively published illustration of the holotype specimen showing its defining characters, is accepted as the equivalent of this illustration for purposes of interpretation, including recognition as a surrogate (Art. 8.5)."

Rapporteurs' comments – Prop. A and B address the fact that from 1 January 1912 until the publication of the Paris Code (Lanjouw & al. in Regnum Veg. 8. 1954) all names of fossil plants were required to be accompanied by an illustration, whereas, since then, this has applied only to names at specific or lower rank. As a consequence, a number of generic names that had apparently been disregarded must now be treated as validly published. Prop. A would reverse this by requiring that for valid publication of a generic name there must be reference to a validly published species name. Prop. B provides three examples of the application of the proposed new rule. The Nomenclature Committee for Fossil Plants has been asked to give its recommendation on these proposals.

*Prop. C* is a corollary to Art. 8 Prop. B and Art. 9 Prop. U to address the situation of names of microfossils published prior to 1 January 1912 that lacked an illustration in the protologue.

### Article 41

*Prop. A (288 – Rijckevorsel in Taxon 59: 1924)* If Prop. 117 [Art. 37bis Prop. A] is accepted, condense Art. 41.1, 41.2 and the first half of Art. 41.3 into a single paragraph, to be placed in Art. 32, preceding Art. 32.5 or following Art. 32.6:

"32.4bis. For the purpose of valid publication of a name, reference to a previously and effectively published description or diagnosis is restricted as follows: (a) for a name of a family or subdivision of a family, the earlier description or diagnosis must be that of a family or subdivision of a family; (b) for a name of a genus or subdivision of a genus, the earlier description or diagnosis must be that of a genus or subdivision of a genus; and (c) for a name of a species or infraspecific taxon, the earlier description or diagnosis must be that of a species or infraspecific taxon (but see Art. [Prop. 289])."

Also, move the relevant Examples from Art. 41 to Art. 32. If desired, the two Notes in Art. 41 could be moved to follow Art. 32.1 (rather than the newly rephrased provision, as they concern exceptions to the requirement for an accompanying description or diagnosis, rather than to a reference to one).

*Prop. B (289 – Rijckevorsel in Taxon 59: 1924)* If Prop. 117 [Art. 37bis Prop. A] is accepted, move the second half of Art. 41.3 to Art. 42, rephrasing accordingly:

"42.1bis. A name of a species may be validly published by a reference to a genus, if the following conditions obtain: (a) the name of the genus was previously and validly published simultaneously with its description or diagnosis and (b) neither the author of the name of the genus nor the author of the name of the species indicates that more than one species belongs to the genus in question."

Also, move Art. 41 Ex. 4 to follow the provision in its new placement.

*Prop. C (254 – Reveal & Gandhi in Taxon 59: 1918)* Add a new paragraph at the beginning of Art. 41:

"41.0. In order to be validly published, a name above the rank of family must be accompanied (a) by a description or diagnosis of the taxon, or (b) by a reference (direct or indirect) to a previously and effectively published description or diagnosis of any suprageneric taxon, or (c) by a reference (direct or indirect) to a previously and effectively published description or diagnosis of a unispecific genus. However, for names above the rank of family proposed on or after 1 January 1935, the validating description or diagnosis must be in Latin (Art. 36.1)."

*Prop. D (255 – Reveal & Gandhi in Taxon 59: 1918)* If Prop. 254 is accepted, add two new Examples following Art. 41.0:

"Ex. 0. "Malvidae" was not validly published by Wu (in Acta Phytotax. Sin. 40: 308. 2002) by reference to Malvaceae Adans. (Fam.

Pl. 2: 390. 1763) because the latter was associated with a description in French, not a description or diagnosis in Latin as required by Art. 36.1. *Malvidae* was later validated by Thorne & Reveal (in Bot. Rev. 73: 111. 2007)."

"Ex. Obis. Eucommiales Nemejc ex Cronquist (Integr. Syst. Class. Fl. Pl.: 182. 1981) was validly published by Cronquist, who provided a full and direct reference to the Latin description associated with the unispecific genus Eucommia Oliv. (in Hooker's Icon. Pl. 20: ad t. 1950. 1890).

Prop. E (256 – Reveal & Gandhi in Taxon 59: 1918) Add a new Note and a new Example to Art. 41:

"*Note n*. Names at and above the rank of genus are mononomials and are assigned to any higher taxon without a change of authorship or place of publication."

"Ex. n. The name Weddellinoideae, treated by Cusset and Cusset (in Bull. Mus. Natl. Hist. Nat., sér. 4, sect. B Adansonia 10: 169. 1988) as if it were a new name based on Weddellinoideae Engl. (in Engler & Prantl, Nat. Pflanzenfam., ed. 2, 18a: 28. 1928), is in fact an isonym, regardless of Cusset and Cusset having moved the subfamily from Podostemonaceae to Tristichaceae, this being merely a change in classification, not nomenclature."

Prop. F (257 – Reveal & Gandhi in Taxon 59: 1918) In Art. 41.1(b) add "; see Art. 32.5–6" after the word "indirect".

*Prop. G (258 – Reveal & Gandhi in Taxon 59: 1918)* In Art. 41.2(b) add "; see Art. 32.5–6" after the word "indirect".

*Prop. H (259 – Reveal & Gandhi in Taxon 59: 1918)* Add two new Examples following Art. 41.1:

"Ex. Oter. The subfamily Erismoideae Takht. (2009), was validly published by a full and direct reference to the French diagnosis of the tribe Erismeae Dumort. (1829)."

"Ex. Ibis. Chaetocarpeae G.L. Webster (in Taxon 24: 595. 1975) was validly published by a full and direct reference to the previously and effectively published Latin diagnosis associated with the name Chaetocarpinae Müll.-Arg. (in Linnaea 34: 202. 1865, "Chaetocarpeae") even though Webster cited only the name and its bibliographic reference."

*Prop. I (260 – Reveal & Gandhi in Taxon 59: 1919)* In Art. 41.3 add "(direct or indirect; see Art. 32.5–6)" after the word "reference" in clauses (b) and (c).

Rapporteurs' comments – Prop. A and B are proposed as conditional on Art. 37bis Prop. A, so that if an extra Article were inserted following Art. 37, only Art. 38–40 would need to be renumbered because Art. 41 could be incorporated into Art. 32 and 42. Certainly Art. 41.1–2 and the first half of Art. 41.3 present a rather awkward set of rules, repeating what is already given in Art. 32.1(d) before restricting that clause further. Moreover, there is currently no cross-reference from Art. 32.1(d) to Art. 41, although there is a proposal to add one (Art. 32 Prop. F). Prop. A and B would provide a more concise and readily understood presentation without changing the meaning of the rules of Art. 41.

Prop. C would extend the restrictions of Art. 41 on the ranges of ranks of taxa to which may belong a previously and effectively published description or diagnosis that validates a name, so that a suprafamilial name could no longer be validated by reference to an earlier description or diagnosis of a taxon at any rank. While this might not cause significant disruption, the final sentence of Prop. C is problematic. That sentence would require the validating description or diagnosis for all suprafamilial names published on or after 1 January 1935 to be in Latin. It is presumably not intended to apply to algal and fossil taxa because of the reference to Art. 36.1. It is also presumably intended to apply only to names of new taxa, not to suprafamilal names that are

status novi or nomina nova, otherwise an unknown number of names would be invalidated. If it does apply only to names of new taxa, then the words are redundant as this is already covered by Art. 36. If the restrictions proposed in Prop. C were seen as worthwhile, which is open to question, the final sentence should be removed.

Prop. D provides two Examples, the first of which would perhaps better placed in Art. 36. As the proposers state, "Malvidae" was not validly published (as the name of a new taxon) by Wu in 2002 because the previously and effectively published description was in French. Neither could it have been published as a status novus because "Malvaceae" was not validly published by Adanson in 1763, which was before the starting-point date of 4 August 1789 for suprageneric names in Spermatophyta (Art. 13.1(a)). The second Example illustrates how the proposed new Art. 41.0 (Prop. C) could permit, e.g., the name of an order to be based on the description of the name of a unispecific genus; it could be referred to the Editorial Committee.

Prop. E provides a Note and Example to illustrate that a name at and above the rank of genus, when reclassified with respect to a higher-ranked taxon, remains the same name without any nomenclatural act having taken place. However, this does not belong in Art. 41 but rather in Art. 16. This would actually be a helpful addition to the Code, but it would also be desirable to add parallel Notes and Examples in the relevant places in Art. 21 (names of subdivisions of genera) and Art. 24 (names of infraspecific taxa), as it seems to be a not infrequent error for, e.g., the name of a section, when reclassified from one subgenus to another within the same genus, to be treated as a new combination.

*Prop. F* and *G* would provide useful cross-references from the phrase "reference (direct or indirect)" in Art. 41.1–2 to the definitions of such references in Art. 32.5–6. It would follow that the same cross-reference should be added to the new Art. 41.0 in Prop. C. If Prop. A and B are accepted then Prop. F and G would be unnecessary.

Prop. H supposes that the names Erismoideae and Chaetocarpeae were published as the names of new taxa. However, this cannot be the case for Erismoideae because it was published in 2009 and the alleged validating diagnosis is in French. It must instead be a status novus with Erismeae as its basionym. Chaetocarpeae, on the other hand, could be argued to be the name of a new taxon validated by the Latin diagnosis of Chaetocarpinae or, more appropriately, a status novus with Chaetocarpinae as its basionym.

*Prop. I* would make Art. 41.3 parallel with Art. 41.1–2 in specifying that a reference to a previously and effectively published description or diagnosis (clause (b)) or to a genus (clause (c)) may be direct or indirect, and it would provide the same cross-references as proposed in Prop. F and G.

# Article 42

*Prop. A (194 – Prado & Hirai in Taxon 59: 1615)* Amend Art. 42.4 to read (additions in bold, deletions in strikethrough):

"42.4. For the purpose of Art. 42, an analysis is, **for vascular plants**, an figureillustration containing at least one additional figure, or group of figures; **showing details aiding identification**, commonly separate from the main **figureillustration** of the plant (though usually on the same **illustration** or page or plate), showing details aiding identification, with or without a separate caption."

Prop. B (195 – Prado & Hirai in Taxon 59: 1615) Add the following Note after Art. 42.4:

"Note 1. For the purpose of Art. 42.4, a caption is the name of the taxon itself and/or any additional attached word on the illustration."

Prop. C (196 – Prado & Hirai in Taxon 59: 1615) Add the following Example after Art. 42.4:

"Ex. 1. When Vellozo (in Fl. Flumin. Icon. 11: ad t. 76. 1827) published *Polypodium squalidum*, two figures were presented for this species (the plant habit plus a detail of a segment, neither diagnostic) on the same plate and page; consequently this name is not validly published. But this name was validated when Vellozo's species descriptions appeared in 1881 (Vellozo in Arch. Mus. Nac. Rio de Janeiro 5: 449. 1881)."

*Prop. D (290 – Brummitt in Taxon 59: 1924)* Delete Art. 42.3 and 42.4 and replace Art. 44.1 and 44.2 by:

"44.1. Prior to 1 January 1908, for a name of a species or infraspecific taxon of vascular plants to be validly published, an illustration with analysis is acceptable in place of a written description or diagnosis (Art. 32.1(d)) or in place of a descriptio generico-specifica (Art. 42). For the purposes of this Article, an analysis is a figure or group of figures separate from the main illustration (though often on the same page or plate), with or without a separate caption, illustrating part or parts of the plant in greater detail or magnification than in the main illustration."

"44.2. Prior to 1 January 1908, for a name of a species or infraspecific taxon of non-vascular plants to be validly published, any illustration (with or without an analysis) is acceptable in place of a written description or diagnosis (Art. 32.1(d)) or in place of a descriptio generico-specifica (Art. 42)."

Put appropriate cross references under Art. 32.1(d) and 42.1.

*Prop. E (039 – Braga & Joffily in Taxon 58: 666)* Change Article 42.3 to clarify the meaning of "illustration with analysis":

"42.3. Prior to 1 January 1908 an illustration with analysis showing details aiding identification is acceptable, for the purpose of this Article, in place of a written description or diagnosis."

*Prop. F (040 – Braga & Joffily in Taxon 58: 666)* Amend Article 42.4 and add the phrase indicated in italic below:

"42.4. For the purposes of Art. 42, an *illustration with* analysis is a figure or group of figures showing details aiding identification."

*Prop. G (198 – Rijckevorsel in Taxon 59: 1615)* In Art. 42.4 replace "For the purpose of Art. 42" by "for the purposes of this *Code*" or "For the purpose of Art. 42, 44 and 46".

Rapporteurs' comments – Prop. A–C would define more precisely what constitutes an analysis for the purpose of Art. 42. The words "an illustration containing" ought to be deleted because the definition here is of an analysis, not of an illustration with analysis.

Prop. D seeks to combine Art. 42.3, 42.4, 44.1, and 44.2 into a reworded Art. 44.1 and 44.2 so that the Code could become more concise. However, there is a problem in moving Art. 42.3-4 out of Art. 42, which deals with the simultaneously published names of a genus and species, into Art. 44, which deals with the names of only species and infraspecific taxa. It would mean that the name of a genus and species could no longer be simultaneously validly published under Art. 42.1 by providing an illustration with analysis in place of a written description. The proposed wording "for a name of a species or infraspecific taxon [...] or in place of a descriptio generico-specifica" needs changing because one would not use a descriptio generico-specifica to validate the name of a species or infraspecific taxon. The problem could perhaps be solved by inserting ", for the simultaneously published names of a genus and species," before "in place of a descriptio generico-specifica" in the proposed wordings of both Art. 44.1 and 44.2, although a more elegant wording should be sought. An alternative is to leave Art. 42.3–4 and Art. 44.1–2 as they currently stand.

*Prop. E* and *F*, and the connected Art. 44 Prop. A, by contrast, seek to redefine the term "illustration with analysis" so that an additional figure, as the analysis, is no longer required. This would

have the effect of validating an unknown number of names that are currently not validly published.

*Prop. G* acknowledges that Art. 42.4 applies not only to Art. 42 but also to Art. 44 (where there are references to Art. 42.4) and Art. 46 (if Art. 46 Prop L is accepted).

### Article 43

Prop. A (324 – Gandhi & Reveal in Taxon 59: 1931) Add a new Example following Art. 43.1 parallel to Ex. 1:

"Ex. 2bis. Although Carrière (in Rev. Hort. 62: 163. 1890) provided short descriptions for the non-typical elements, "Hedera hibernica (var.) aureo-marginata" and "H. hibernica (var.) marginata" he provided neither a description or diagnosis nor reference to a basionym for his species "H. hibernica." As a result none of his names is validly published. Hedera hibernica (G. Kirchn.) Bean (1914) was later validly published as a new combination based on H. helix var. hibernica G. Kirchn. (in Petzold & Kirchner, Arbor. Muscav.: 419. 1864)."

*Rapporteurs' comments – Prop. A* could be referred to the Editorial Committee.

### **Article 44**

*Prop. A (041 – Braga & Joffily in Taxon 58: 666)* Delete Article 44.2 and Example 2:

"44.2. Single figures of non-vascular plants showing details aiding identification are considered as illustrations with analysis (see also Art. 42.4)."

"Ex. 2. Eunotia gibbosa Grunow (1881), a name of a diatom, was validly published by provision of a figure of a single valve."

*Rapporteurs' comments – Prop. A* would be a necessary consequence if Art. 42 Prop. E and F were accepted.

# Article 45

*Prop. A* (050 – *Redhead & al. in Taxon 58: 669*) Remove Art. 45 Ex. 10.

*Prop. B (190 – Demoulin in Taxon 59: 1612)* Limit Art. 45.4 to the first sentence and transfer the rest, modified as follows, to a new Art. 45.5:

(i) Reword the first sentence (currently the second sentence of Art. 45.4) to read (deleted text struck-out; new text in bold): "If the a taxon is treated as belonging to the algae or fungi, any of its names need satisfy only the requirements of the pertinent nonbotanical *Code* that the author was using for status equivalent to valid publication under the present *Code* (but see Art. 54 regarding homonymy)".

(ii) Insert the sentence:

"The *Code* used by the author is determined through internal evidence, irrespective of any claim by the author as to the group of organisms to which the taxon is assigned."

(iii) Include the current last sentence of Art. 45.4 as the last sentence of Art. 45.5:

"However, a name generated in zoological nomenclature in accordance with the Principle of Coordination is not considered validly published under the botanical *Code* unless it appears in print and is applied to an accepted taxon."

Rapporteurs' comments – Prop. A is editorial, consequent on the acceptance of Preamble Prop A.

Prop. B seeks to ensure that there is a general way to address the effect of application of the International Code of Botanical Nomenclature (ICBN) to a group such as the Microsporidia (see Preamble Prop. A) regardless of whether workers on the group apply the ICBN or another Code. Although the explicit exclusion of the Microsporidia

from the *ICBN* may be the preferred option for that group, the proposed rewording of the current Art. 45.4 would seem beneficial, particularly for groups in which most workers apply the *ICBN* but some apply another *Code*. The Nomenclature Committees for Algae and Fungi have been asked to give their recommendations on this proposal; that of the latter will appear in the April issue of *Taxon*.

### **Article 46**

*Prop. A (180 – Brummitt in Taxon 59: 1610)* In Art. 46.2, line 1 and again in Art. 46.4, line 1, after "name of a new taxon", insert "at rank of family or below", and somewhere in Art. 46 add a new sentence reading "Author citations are not used after names of taxa above the rank of family."

*Prop. B (278 – Perry in Taxon 59: 1922)* Amend Art. 46.2 so that it reads as follows (new text in bold):

"46.2. A name of a new taxon must be attributed to the author or authors to whom both the name was ascribed and when the validating description or diagnosis were was also ascribed to, or unequivocally associated with that author or authors in that work, even when authorship of the publication is different."

*Prop. C (279 – Perry in Taxon 59: 1922)* If Prop. 278 is accepted reword Art. 46 Ex. 9 so that it reads as follows (new text in bold):

"Ex. 9. The appropriate author citation for Baloghia pininsularis (see Art. 37 Ex. 3) is Guillaumin, and not McPherson & Tirel, because both the name and validating description were ascribed to Guillaumin in the protologue. in the protologue the name was ascribed to Guillaumin and a full and direct reference was given to a Latin description unequivocally associated with Guillaumin."

*Prop. D (280 – Perry in Taxon 59: 1922)* If Prop. 278 is accepted add a new Example to Art. 46 following Ex. 9:

"Ex. 9bis. "Pancheria humboldtiana" was published by Guillaumin (in Mém. Mus. Natl. Hist. Nat., Ser. B, Bot. 15: 47. 1964) but as he failed to indicate a type the name was not validly published. Validation was effected by Hopkins & Bradford (in Adansonia 31: 119. 2009) where they designated "Baumann-Bodenheim 15515 (P! P00143076)" as the holotype, and attributed the name to Guillaumin and by citing "Pancheria humboldtiana Guillaumin, Mémoires du Muséum national d'Histoire naturelle, sér. B, botanique 15: 47 (1964), nom. inval.", provided a full and direct reference to a validating description that can be unequivocally associated with Guillaumin. The name must therefore be attributed to Guillaumin and not to Guillaumin ex H.C. Hopkins & J. Bradford as given by Hopkins and Bradford."

Prop. E (282 – Perry in Taxon 59: 1923) If Proposal 281 [Art. 32 Prop. H] is accepted amend Art. 46 Ex. 10 as follows (new text in hold):

"Ex. 10. The original description of the new species In the protologue of Verrucaria aethiobola Wahlenb. (in Acharius, Methodus, Suppl.: 17. 1803) is ascribed by Acharius to "Wahlenb. Msc.", and the name itself is ascribed to "Wahlenb." (not in the text of the Supplement but in the index to the Methodus, p. 392). There is a description ascribed by Acharius to "Wahlenb. Msc.", and another authored by Acharius himself. As Wahlenberg provided the name his is the validating description (Art. 32.1bis) and so the name is therefore appropriately cited as V. aethiobola Wahlenb., better not as V. aethiobola "Wahlenb. in Acharius" (unless followed by a bibliographic citation of the place of publication), and certainly not as V. aethiobola "Wahlenb. ex Ach."

*Prop. F (286 – Perry in Taxon 59: 1923)* If Proposal 283 is accepted, amend the first sentence of Art. 46.2 to read as follows (new text in bold):

"46.2. A name of a new taxon must be attributed to the author or authors to whom both the name and the validating description or diagnosis were ascribed, was ascribed when at least part of the descriptive matter available to validate the name was also ascribed to or unequivocally associated with that author or those authors in the work, even when authorship of the publication is different."

*Prop. G (287 – Perry in Taxon 59: 1923)* If Proposals 283 and 286 are accepted, amend Art. 46 Ex. 10 to read as follows (new text in bold):

"Ex. 10. The original description of the new species In the protologue of Verrucaria aethiobola (in Acharius, Methodus, Suppl.: 17. 1803), is ascribed by Acharius to "Wahlenb. Msc.", and the name itself is ascribed to "Wahlenb." (not in the text of the Supplement but in the index to the Methodus, p. 392). There is also a description ascribed by Acharius to "Wahlenb. Msc.", and another description authored by Acharius himself. As the name and part of the descriptive matter are ascribed to Wahlenberg, the name is therefore appropriately cited as V. aethiobola Wahlenb., better not as V. aethiobola "Wahlenb. in Acharius" (unless followed by a bibliographic citation of the place of publication), and certainly not as V. aethiobola "Wahlenb. ex Ach."

*Prop. H (120 – Linda in Arcadia in Taxon 59: 663)* Replace Art. 46 Ex. 10 by the following:

Ex. 10. The name Physma arnoldianum was published in a paper authored by F.C.G. Arnold (in Flora 41: 94. 1858). Arnold introduced the name as "Ph. Arnoldianum Hepp. lit. 12. Decbr. 1857", and the description is immediately followed by the phrase "Hepp. in lit.". The name is therefore appropriately cited as P. arnoldianum Hepp, better not as P. arnoldianum "Hepp in Arnold" (unless followed by a bibliographic citation of the place of publication), and certainly not as P. arnoldianum "Hepp ex Arnold".

*Prop. I (325 – Gandhi & Reveal in Taxon 59: 1932)* Insert the following sentence after the first sentence of Art. 46.2 and add a new Example:

"46.2. [...] When a publishing author ascribes a name and a validating description or diagnosis to a different author and yet also provides his own description or remarks, the authorship of the name is that of the author to whom the name and a description or diagnosis is ascribed. [...]."

"Ex. 6bis. D. Don (Prodr. Fl. Nepal. 58. 1825) ascribed the name Betula alnoides and a brief description to Buchanan-Hamilton. Even though Don added his own detailed description, the name is to be cited as Betula alnoides Buch.-Ham."

Prop. J (326 – Gandhi & Reveal in Taxon 59: 1932) Add a new Example following Art. 46.3:

*"Ex. 21bis.* In Torrey & Gray (Fl. N. Amer. 1: 535. 1840), the name *Mentzelia pumila* and its description were ascribed to "Nutt.! mss. under Bartonia". Since Nuttall did not provide the name *M. pumila*, its authorship is cited as Torr. & A. Gray."

*Prop. K (327 – Gandhi & Reveal in Taxon 59: 1932)* Insert the words shown in bold in the second sentence of Art. 46.4 and add an Example:

"46.4. [...] A new combination or a nomen novum must be attributed to the author or authors of the publication in which it appears, although it was ascribed to a different author or to different authors, when no separate statement was made that **one or more of them** contributed in some way to that publication [...]."

*"Ex. 29bis.* When Isely (1986) ascribed the new combination *Galactia microphylla* to (Chapm.) H. J. Rogers ex D. W. Hall & D. B. Ward, he stated that the name was previously used in annotation by Hall and Ward. Elsewhere in the publication Isely acknowledged

assistance from Hall alone. Isely's statement about the annotations and his acknowledgment to Hall establish that the authorship of the new combination is as cited by Isely."

Prop. L (121 – Hawksworth & Eriksson in Taxon 59: 663) Add an additional sentence to Art. 46.4:

"Where there is internal evidence that an author knowingly validated a name not ascribed to any author (or only to the validating author) in the same rank and with the same orthography as a designation in current use that had been introduced by another author, the name of that author followed by 'ex' may also be inserted even if no direct ascription to that author is given."

*Prop. M (197 – Rijckevorsel in Taxon 59: 1615)* Add a new Rule to Art. 46 (as a second, or possibly fourth, sentence in Art 46.2 or as an independent paragraph):

"However, a name that is validly published by an illustration with analysis (Art. 42.3–4, 44.1–2) (in which case there is no validating description or diagnosis) must be attributed to the author or authors to whom the name was ascribed on the illustration."

*Prop. N (235 – Turland in Taxon 59: 1913)* Add a new Note to Art. 46 (after Art. 46.3):

"Note n. A name or its validating description or diagnosis without an ascription is treated as ascribed to the author or authors of the publication as defined in Art. 46.5."

*Prop. O (236 – Turland in Taxon 59: 1913)* Add a new Note to Art. 46 (after Art. 46.3):

"Note nn. When the name of a new taxon is validly published by reference to a previously and effectively published description or diagnosis (Art. 32.1(d)), that description or diagnosis retains the same ascription as in the earlier publication."

Rapporteurs' comments – Prop. A would make it clear that author citations would not be used after names above the rank of family, to which the concept of valid publication would no longer apply under Brummitt's proposals discussed under Art. 32 Prop. A.

*Prop. B–D* are linked to, but not dependent on, Art. 32 Prop. G. Prop. B presents wording that addresses the fact that a previously published validating description will often not be directly ascribed to the publishing author as "ascription" is defined in Art. 46.3, and yet was unmistakeably provided by that author (see also Prop. O). Prop. C amends an existing example to reflect this and Prop. D provides an additional example.

 $Prop.\ E$  is editorial, consequent on the acceptance of Art. 32 Prop. H.

*Prop. F* and *G* are dependent on the acceptance of Art. 32 Prop. I. If that proposal is accepted (in preference to Art. 32 Prop. H), acceptance of Prop. F would be essential to maintain the usual attribution of authorship of a name ascribed along with some descriptive material to someone other than the publishing author. Prop. G is an editorial consequence of acceptance of Prop. F (and Art. 32 Prop. I)

*Prop. H* involves the same issue as Art. 32 Prop. H and I and Art. 46 Prop. E–G and I–K, and takes the view that the existing Art. 46 Ex. 10 is not a suitable one in light of the protologue containing descriptive material of both the publishing author and the author to whom the name is ascribed. An alternative example is proposed. Regardless of the outcome of the other proposals on the topic this can be referred to the Editorial Committee.

*Prop. I–K* address the matter of the correct attribution of a name in the situation described in Art. 32 Prop. H and I and Art. 46 Prop. H above. Prop. I would, like Art. 46 Prop. F, ensure what seems to be general practice, namely to attribute a name to the author to whom it was ascribed, when that author also provided some descriptive

material, regardless of what other descriptive material was present in the protologue. Prop. I provides an example of this situation.

Prop. L addresses a situation in which an author validates a name that is already in use, but has not hitherto been validly published, but does not ascribe the name to anyone, other, perhaps, than him- or herself. There is apparently a perception that this is unfair to whoever originally introduced the name (although it might also be argued that someone who coins a name but does not validly publish has forfeited any right to recognition). More importantly, acceptance or otherwise of the proposal would seem to rest on how workable the assessment of the evidence for an author "knowingly" introducing such a name is considered to be.

Prop. M highlights a difficulty in determining authorship of the name of a new taxon validated before 1908 solely by an illustration with analysis because there is no description or diagnosis to which an author or authors could be ascribed (see Art. 46.2 and 46.4). However, the proposed new rule would work only when the illustration with analysis included the name of the taxon ascribed to an author or authors, who would then be the correct authors of the name. If the illustration with analysis lacked a name, or bore a name that was not ascribed to anyone, then authorship of the name would remain unclear. Perhaps a more satisfactory solution would be to rule that a name so validated must always be attributed to the author of the publication as defined in Art. 46.5.

*Prop. N* would make explicit what is currently implicit, namely that a name without ascription is to be ascribed to the author or authors of the publication.

*Prop. O*, like Prop. N, is a proposal to make explicit a currently implicit ascription, in this case of a previously published description. There is some overlap with Art. 46 Prop. B. Both could be accepted and editorially combined.

# **Recommendation 46D**

*Prop. A (042 – Nobis & al. in Taxon 58: 666)* Amend Rec. 46D.1 by adding a second sentence so that it reads:

"46D.1 Authors should cite themselves by name after each new name they publish rather than refer to themselves by expressions such as 'nobis' (nob.) or 'mihi' (m.). These expressions should be used only if they are identical with the name of author in which case they should be written with an initial capital, i.e., 'Nobis' or 'Mihi', and, where necessary, preceded by first name initial."

Rapporteurs' comments – Prop. A draws attention to the problem faced by authors named Nobis or Mihi in attempting to follow Rec. 46D.1, which recommends citing authorship of new names by the name of the author(s) rather than by the Latin expressions nobis or mihi (the first-person pronoun in dative plural and singular forms, respectively).

# Article 48

*Prop. A (273 – Turland in Taxon 59: 1921)* Reword the second sentence of Art. 48.1 and Art. 48 Note 1 as follows:

"48.1. [...] Similarly, when an author who adopts a name refers to an apparent basionym or replaced synonym but explicitly excludes its type, the name of a new taxon is considered to have been published that must be attributed solely to that author. [...]."

"Note 1. Misapplication of a new combination, status novus, or nomen novum to a different taxon, but without explicit exclusion of the type of the basionym or replaced synonym, is dealt with under Art. 7.3–4."

Prop. B (291 – Perry in Taxon 59: 1925) Delete "original" in the first line of Art. 48.1 and add a new Art. 48.2:

"48.2. For the purpose of Art. 48.1, exclusion of a type means exclusion of (a) the holotype under Art. 9.1 or the original type under Art. 10 or all syntypes under Art. 9.4 or all elements eligible as types under Art. 10.2; or (b) a previously designated type under Art. 9.9–9.11 or 10.2; or (c) a previously conserved type under Art. 14.9."

*Prop. C (328 – Gandhi & Reveal in Taxon 59: 1932)* Add the following Example to Art. 48:

"Ex. 2bis. Sargent (in Gard. & Forest 4: 4. 1891), who referred to Myginda sect. Gyminda Griseb. (Cat. Pl. Cub.: 55. 1866), excluded its type, M. integrifolia Poir., from his new monospecific genus Gyminda. Therefore, the authorship is cited as Gyminda Sarg. (see Art. 48.1) and is typified by G. grisebachii Sarg."

*Rapporteurs' comments – Prop. A* represents a clarification of the provisions of Art. 48.1 and 48 Note 1 relating to new combinations, names with new status and nomina nova.

*Prop. B* seeks to clarify the circumstances under which adoption of an existing name results in the publication of a later homonym, utilizing some of the criteria of Art. 52 for what constitutes exclusion of a type, as the current use of "original type" is obscure and rarely applicable except to names of genera.

*Prop. C* has some potential to become a suitable Example for Art. 48.1, but only after considerable rewording. It could be referred to the Editorial Committee.

### **Article 49**

Prop. A (329 – Gandhi & Reveal in Taxon 59: 1932) Add a new Note and an Example to Art. 49:

"Note 1. When the name of a new genus or the final epithet of a taxon of lower rank is derived from an element included with an expression of doubt, the new name is that of a new taxon (see Art. 52 Note 1), and so there is not a basionym and hence no parenthetical authorship."

"Ex. 7bis. Peperomia tetraphylla Hook. & Arn. (1832) is a new species, not a new combination, as the authors cited *Piper tetraphyllum* G. Forst. with an expression of doubt (as 'Forst. Prodr. n. 25?')."

Rapporteurs' comments – Prop. A is concerned less with author citation and more with illustrating that a basionym or replaced synonym must, logically, be a definitely included element in a new combination, status novus, or nomen novum. Therefore, the proposed Note and Example, if they were felt at all useful, might fit better in Art. 33, perhaps following Art. 33.2, whereas they would certainly be misplaced in Art. 49. The Note also applies more generally in that an element (name, validating description or diagnosis, type, original material) included with an expression of doubt is not definitely included. Therefore, if the Code requires definite inclusion, an expression of doubt precludes this requirement being met.

# Article 51

*Prop. A (292 – Brummitt in Taxon 59: 1926)* Add to Art. 51 a new paragraph and Note:

"51.2. For compelling practical reasons of nomenclatural stability of specific and infraspecific names in the unique case of the broadly circumscribed genus Acacia Mill., the correct name for a genus to which one or more of the types of Racosperma Mart. (1835), Senegalia Raf. (1838) and Vachellia Wight & Arn. (1834) are assigned is Acacia Mill. (1754) and the correct names for all taxa assigned to that genus are combinations with Acacia. The names Racosperma, Senegalia and Vachellia, and all combinations published under them, are to be treated as incorrect. This is a purely nomenclatural convention and does not preclude the taxonomic acceptance of segregate genera."

"Note. 1. When reference needs to be made to one of the three segregates to distinguish it from the others, as for example in a non-nomenclatural context such as discussion of numbers of genera in a region or occurrence of certain characters or compounds in different genera, it may be done informally in the format Acacia (Vachellia), or Acacia (Senegalia) or Acacia (Racosperma). When reference is made in a general context to the species described by Linnaeus as Mimosa nilotica, which is now referable to Acacia (Vachellia), it should be given as Acacia nilotica (L.) Delile. If in a special context it is necessary to specify to which genus a certain species is referable, the format Acacia (Vachellia) nilotica (L.) Delile may be used."

Cross references should be added under Art. 11 and 51.1.

Rapporteurs' comments – Prop. A offers a radical solution to the controversial issue of Acacia. The names Racosperma, Senegalia, Vachellia, and all combinations under them would be deemed incorrect, to be called instead *Acacia* or combinations under *Acacia*. This would be a completely artificial convention for nomenclatural purposes only, and no particular taxonomy would be mandated. The intention is to permit the name Acacia to be applied in both its traditional sense and in its conserved sense. Of course, if any subdivisions of genera were recognized, the autonymic subdivisions (e.g. A. sect. Acacia) would apply mostly or wholly to Australian taxa. It must be said that, these supposed benefits notwithstanding, Prop. A is strongly contrary to the tradition of botanical nomenclature and is also at odds with Principle II in ruling that the name Acacia must be applied to genera that do not contain the type of Acacia (except when a broad concept of Acacia is adopted). It is also quite against tradition simultaneously to adopt the same name for more than one taxon. Even so, some might feel that an exception to the Principles and tradition is warranted in this unique case in order to put an end to divisive controversy, assuming that such a result could be achieved by the method proposed. The proposer questioned whether Prop. A would be better without mention of Senegalia in view of that name having been taken up by a number of authors. On the other hand, there is the "tradition of over 200 years of including Senegalia in a broad Acacia in Africa, resulting in a massive literature and very many herbarium specimens adopting that concept" (Brummitt, l.c.). The proposer therefore suggested "that the officers at Melbourne should invite a friendly amendment to delete mention of Senegalia in the proposal." If the proposal were to be accepted, as it involves a suspension of the normal rules of priority and the application of names being determined by nomenclatural types, it might be better placed in Art. 11, 13, or 7.

# Article 52

*Prop. A (293 – Perry in Taxon 59: 1927)* Add the following new Example to Art. 52:

"Ex. 11bis. In publishing the name Matricaria suaveolens (1755), Linnaeus adopted both the phrase name and all the synonyms of M. recutita L. (1753) and so Applequist (in Taxon 51: 757. 2002) claimed that "all original elements of M. recutita are found in the in the protologue of M. suaveolens, making it illegitimate under Art. 52". However, as M. recutita has neither a holotype, nor any syntypes (cited specimens), nor, when M. suaveolens was published, a previously designated lectotype, or a conserved type and as neither M. recutita nor a name homotypic with it was cited in the protologue of M. suaveolens, the type of M. recutita was not included in M. suaveolens and so it is a legitimate name."

*Prop. B (330 – Gandhi & Reveal in Taxon 59: 1932)* Add an Example following Art. 52.2 that is complementary to Ex. 10:

"Ex. 10bis. Apios tuberosa Moench (1794), published as an avowed substitute for the legitimate Glycine apios L. (1753), is an

illegitimate superfluous name for *A. americana* Medik. (1787), an earlier avowed substitute for *G. apios*."

*Prop. C (331 – Gandhi & Reveal in Taxon 59: 1932)* Add a new Art. 52.3*bis* and accompanying Example:

"52.3bis. A replacement name based on the type of a legitimate name is not legitimate if it includes a legitimate heterotypic synonym at the same rank."

"Ex. 16bis. When Makino (in Bot. Mag. (Tokyo) 15: 84. 1901) proposed *Polygonum reynoutria* as a new name for *Reynoutria japonica* Houtt. (non *P. japonicum* Meisn. 1856), he cited *P. cuspidatum* Siebold & Zucc. (1846) in synonymy thereby rendering his new name superfluous and illegitimate. Nonetheless, under Art. 7.5, the type of *P. reynoutria* is that of *R. japonica*, not that of *P. cuspidatum*, Makino having definitely indicated a different type."

*Prop. D (332 – Gandhi & Reveal in Taxon 59: 1932)* Add a new Note to Art. 52 with an Example:

"Note 4. Establishment of a new name at a different rank based on the type of a legitimate name with a different epithet does not make the name of the new taxon nomenclaturally superfluous (see Art. 11.2)."

"Ex. 18. Vasey (in Bull. Torrey Bot. Club 13: 53. 1886) established at species rank the names Muhlenbergia parishii for M. glomerata var. californica Vasey (1882) and M. californica for M. glomerata var. brevifolia Vasey (1882); as no other names at species rank were included by Vasey, both species names are legitimate."

Rapporteurs' comments – Prop. A presents a useful example of the application of Art. 52.2 to names of Linnaean species and may be referred to the Editorial Committee.

*Prop. B* would be an appropriate Example for Art. 52.2 and could be referred to the Editorial Committee.

*Prop. C* would add an Article that is simply incorrect: a nomen novum based on a legitimate name could of course remain legitimate while including a legitimate heterotypic synonym at the same rank. For example, the replaced synonym and the heterotypic synonym could be species names with epithets that were both unavailable (because of homonymy or tautonymy) in the genus in which the nomen novum was published. But, in the more general case, it would seem nomenclaturally more advantageous to provide for nomina nova a parallel to the provisions of Art. 52.3 for new combinations so that neither would be illegitimate in the circumstances described.

*Prop. D* provides a Note and Example attempting to illustrate a point that ought to be quite obvious from Art. 11.2. If it were felt that a frequent mistake was to regard as illegitimate under Art. 52 a new name that included the type of a name at a different rank with a different final epithet, then a suitably reworded version of the Note (with "does not make" changed to "does not in itself make") might be considered.

# Article 53

*Prop. A (043 – Rijckevorsel in Taxon 58: 667)* Restore Art. 53.1 to the pre-*Tokyo Code* version by deleting "of a family, genus or species", so that it reads as follows:

"53.1. A name, unless conserved (Art. 14) or sanctioned (Art. 15), is illegitimate if it is a later homonym, that is, if it is spelled exactly like a name based on a different type that was previously and validly published for a taxon of the same rank (see also Art. 6 Note 2, and Art. 53.2 and 53.4)."

Prop. B (261 – Reveal & Gandhi in Taxon 59: 1919) Add a new Example following Art. 53.1:

"Ex. 3bis. Moreae Britton & Rose (in N. Amer. Fl. 23: 201, 217. 1930), based on Mora Benth. (1839), is not a later homonym of Moreae

Dumort. (Anal. Fam. Pl.: 17. 1829), based on *Morus* L. (1754), as the provision of homonymy does not apply to subdivisions of families."

*Prop. C (012 – Huang & al. in Taxon 57: 318)* Add the following text to Art. 53 voted Ex. 9:

"formosana, formosanus or formosanum, and formosensis or formosense."

*Prop. D (013 – Huang & al. in Taxon 57: 318)* If Prop. 012 is accepted, add the following text immediately before that insertion:

"formosae and either of the two following sets of terms,"

Prop. E (095 – Yu & al. in Taxon 59: 310) Add the following text to Art. 53 voted Ex. 9:

"thibeticus (-a -um) and tibeticus (-a -um), thibetensis and tibetensis. thibetanus and tibetanus."

Prop. F (096 – Yu & al. in Taxon 59: 310) Add the following text to Art. 53 voted Ex. 10:

"Astragalus tibetanus Benth. ex Bunge (1868) and A. tibeticola Podlech & L. R. Xu (2004); Berberis thibetica C. K. Schneid. (1909) and B. tibetensis Laferr. (1997)."

*Prop. G (167 – Silva in Taxon 59: 1294)* Proposal to establish an Appendix to list binding decisions regarding confusability of names:

Add to the end of Art. 53.5: "These binding decisions are listed in Appendix VIII."

*Prop. H (027 – Rijckevorsel in Taxon 58: 661)* In Art. 53 Ex. 18, delete "extant" and "fossil".

Rapporteurs' comments – Prop A would render illegitimate a later homonym at any rank, not merely one at the rank of family, genus, or below genus. The proposer argues that the current restriction on ranks became unnecessary with changes to Art. 18.1 made at the Vienna Congress, avoiding homonymy in the names of families (Art. 18.1 third sentence) and (through Art. 19.1) subdivisions of families. However, later homonyms above the rank of family would also be rendered illegitimate. This would be a rare occurrence and perhaps of little significance as long as Art. 16 Prop. A is accepted. Otherwise, a suprafamilial descriptive name could be an earlier homonym of an automatically typified name, which would then be illegitimate. This is possible because a name which was intended as an automatically typified name but which did not comply with all the requirements of Art. 16.1(a) could be validly published instead as a descriptive name under Art. 16.1(b). Art. 16 Prop. A would prevent such an occurrence.

*Prop. B* provides an Example that could be useful in Art. 53 if a fundamental error were corrected: *Moreae* Britton & Rose *is* a later homonym of *Moreae* Dumort., but it is not illegitimate as a result. The concept of homonymy applies to names at all ranks, but later homonyms are illegitimate only at the ranks of family, genus, and ranks below genus (see Art. 53.1 and 53.4), but see Prop. A (above).

Prop. C seeks to add the adjectival epithets formosanus (-a, -um) and formosensis (-e) to voted Ex. 9, so that two specific or infraspecific combinations based on different types, one with the final epithet formosanus and the other with formosensis, but otherwise spelled identically (disregarding any rank-denoting term), must be treated as homonyms under Art. 53.3 or 53.4. While the meaning of -anus and -ensis are more or less the same, i.e., of or pertaining to a geographical area, and translations in other languages might be identical, the Latin spellings of the epithets are quite different and seem unlikely to be confused, unlike the examples currently included in voted Ex. 9. The proposers apparently did not foresee that Prop. C would also result in many pairs of names being treated as homonyms by analogy because their epithets end in -anus (-a, -um) and -ensis (-e), so the impact would extend far wider than Taiwan. If the proposal were accepted, it would not be necessary to include all the

gender inflections of both epithets, in keeping with the currently listed examples.

*Prop. D* would add the genitive noun *formosae* to the epithets in Prop. C. Although, as the proposers state, Rec. 23A.2 recommends against using the genitive and adjectival forms of the same word in epithets in the same genus (citing as examples *Lysimachia hemsleyana* and *L. hemsleyi*), the *Code* does not suggest that these are so similar that they are likely to be confused (see the same two names in voted Ex. 10).

*Prop. E* proposes three adjectival epithets with the stems *tibet*-and *thibet*- for inclusion in voted Ex. 9. In this case, the broader implications are much less significant (*tianschanicus* and *thianschanicus* would be an example of an analogous case). While *tibet*- and *thibet*-differ in spelling (albeit by only one letter), the pronunciation can be identical (e.g. in French), so they might be viewed as appropriate additions to voted Ex. 9, although this would result in three of fourteen examples pertaining to Tibet.

*Prop. F* would add *Astragalus tibetanus* and *A. tibeticola* and *Berberis thibetica* and *B. tibetensis* to voted Ex. 10, meaning that those pairs of names must not be treated as homonyms under Art. 53.3 and, by analogy, causing names with epithets with similar endings to be regarded as not homonyms. The Example would be neater if the second pair of names did not differ also in the stem, i.e., *thibet*- versus *tibet*-, which the same proposers regard as confusingly similar in Prop. E.

*Prop. G* would require the creation of a further Appendix to the *Code* in which all decisions on whether or not names or epithets are sufficiently alike to be confused would be included. Such an index was started by Dan Nicolson (see http://botany.si.edu/references/codes/Confusable/) but it seems only proper that if the *Code* provides for binding decisions on such cases these should be readily available as part of the *Code* (whether electronic or printed – cf. Art. 14 Prop. G).

*Prop. H* would correct an error in Art. 53 Ex. 18, where the genus *Cathaya* Chun & Kuang is stated to be "fossil *Pinaceae*", whereas in fact the type, *C. argyrophylla* Chun & Kuang, belongs to an extant taxon (see Preamble 7 footnote). After deleting "fossil", the word "extant", employed for contrast before *Flacourtiaceae*, would become redundant and would also be deleted.

# Article 54

*Prop. A (051 – Redhead & al. in Taxon 58: 669)* Add to Art. 54.1(a) after the word "plants": ", including all *Microsporidia*,".

Rapporteurs' comments - Prop. A, although part of the set of proposals to exclude the Microsporidia from the ICBN, would accord special status under the ICBN to names in that group. Although, as the rationale for the set of proposals makes clear, the *Microsporidia* have scarcely ever "been treated as plants" nomenclaturally, it is proposed that all their names compete with names established under the ICBN for purposes of homonymy. The proposers do not address the question of possible destabilizing effect of this proposal on generic names currently accepted under the ICBN. Moreover, whereas the current wording of Art. 54.1(a) implies that considerations of homonymy only apply to the names of the particular taxa that were once (but are no longer) treated as plants, and not to other related taxa, this proposal suggests that all names of *Microsporidia*, apparently even those yet to be published, would compete for purposes of homonymy with names formed under the ICBN. The Nomenclature Committee for Fungi will give its recommendation on this proposal in the April issue of *Taxon*.

# **Article 55**

Prop. A (333 – Gandhi & Reveal in Taxon 59: 1932) Add a new Example to Art. 55:

"Ex. Ibis. Calycothrix sect. Brachychaetae Nied. (in Engler & Prantl, Nat. Pflanzenfam. 3(7): 100. 1892) is legitimate even though it was published under Calycothrix Meisn. (1838), a superfluous substitute for Calytrix Labill. (1806)."

Rapporteurs' comments – Prop. A would be a useful additional Example for Art. 55.1, as it concerns the name of a subdivision of a genus, while the current Ex. 1 concerns the name of a species.

### Article 58

*Prop. A (274 – Turland in Taxon 59: 1921)* Reword the first sentence of Art. 58.1 as follows and delete "as new," in the second sentence:

"58.1. The final epithet in an illegitimate name may be re-used, either in a different combination at the same or a different rank or, if the name is of a subdivision of a genus, as a generic name, and an illegitimate generic name may be re-used as the epithet of the name of a subdivision of a genus, provided that the resulting name is not itself illegitimate. [...]."

*Prop. B (334 – Gandhi & Reveal in Taxon 59: 1932)* Insert the following after the first sentence of Art. 58.1 and add a new Example:

"An illegitimate generic name may be used similarly as an epithet in the name of a subdivision of a genus."

"Ex. 3bis. The name Geiseleria Klotzsch (1841) is illegitimate, being a superfluous substitute for Decarinium Raf. (1825). Asa Gray established Croton subg. Geiseleria in 1856 and the name has priority from that date, and is cited as Croton subg. Geiseleria A. Gray, not '(Klotzsch) A. Gray.' As Gray proposed it as a nomen novum, its type is C. glandulosus L., the type of both Decarinium Raf. and Geiseleria Klotzsch."

Rapporteurs' comments – Prop. A represents a useful rewording of Art. 58.1 clarifying that the provision applies to names of genera and subdivisions of genera.

*Prop. B* recognizes that an illegitimate generic name may be reused as the epithet of the name of a subdivision of a genus, but it does not recognize that the converse is also true, i.e., that the final epithet of an illegitimate name of a subdivision of a genus may be re-used as a generic name. The proposed rewording of Art. 58.1 in Prop. A accounts for both scenarios. The Example in Prop. B, however, could be a useful addition to Art. 58, and an "ed.c." vote will refer the Example only to the Editorial Committee.

# Chapter VI

*Prop. A (306 – Redhead in Taxon 59: 1929)* Replace the title of Chapter VI with the following (new text in bold):

"NAMES OF **ANAMORPHIC FUNGI OR** FUNGI WITH A PLEOMORPHIC LIFE CYCLE".

Rapporteurs' comments – Prop. A seeks to make the title of Chapter VI reflect more accurately its content. The Spec. Comm. on Art. 59 (see Art. 59, below) voted 6:3:1.

# **Article 59**

*Prop. A (172 – Gams & al. in Taxon 59: 1297)* Delete Art. 59.7 and all allusions to it and add a Note regarding names already published under it:

In Art. 9.7, delete "(but see also Art. 59.7)".

In Art. 59.1, delete "or epitypified under Art. 59.7, by an element representing the teleomorph".

In Art. 59.2, delete "or its epitype specimen under Art. 59.7," "(see also Art. 59.7)".

Reword Art. 59.4 to read: "Irrespective of priority, teleomorph-

typified names take precedence over anamorph-typified names, when both types are judged to belong to the same holomorphic taxon."

To vindicate the teleomorphic application of names so far 'teleotypified', a Note after Art. 59.3 such as the following is needed:

"Note 1. Names under anamorph-typified generic names that were epitypified with teleomorphic material on or after 1 January 2007 remain available for the teleomorph but are to be recombined under the appropriate generic name if such a name is available."

*Prop. B (173 – Gams & al. in Taxon 59: 1297)* Add in Art. 59.7 the passages in bold:

"Where a teleomorph has been discovered for a fungus previously known only as an anamorph and for which there is [no] neither an existing legitimate name for the holomorph nor a teleomorph-typified generic name available, from 1 January 2007 onwards an epitype exhibiting the teleomorph may be designated for the hitherto anamorphic name even when there is no hint of the teleomorph in the protologue of that name."

 $Prop.\ C\ (296-Redhead\ in\ Taxon\ 59:\ 1928)$  In Art. 59.7, replace "and" with "or".

*Prop. D (297 – Redhead in Taxon 59: 1928)* Add the following two paragraphs in Art. 59:

"59.6bis. A separate name, proposed on or after 1 January 2013, for an anamorph considered to belong to the same taxon as a previously legitimately named teleomorph or synanamorph, or for a teleomorph considered to belong to the same taxon as a pre-existing legitimately named anamorph, by the author at the time of publication, is illegitimate and to be rejected unless it was a nomen novum coined to avoid the creation of a later homonym. Where the earliest legitimate name is that of an anamorph, a teleotype is to be selected so that the anamorph name can be used as the name of the holomorph or as a replaced name for a nomen novum.

59.6ter. On or after 1 January 2013, when one or more separate anamorph names are published simultaneously with the publication of a teleomorph or other anamorph name at the same rank for what is considered at the time of publication to be the same taxon, the simultaneously published anamorph name or names are illegitimate."

*Prop. E (298 – Redhead in Taxon 59: 1928)* Delete Art. 59. 5, Art. 59 Note 1, and Art. 59 Ex. 3 and Ex. 4.

*Prop. F (299 – Redhead in Taxon 59: 1928)* In Art. 59, Ex. 2 replace the following text:

"Ravenelia cubensis is not available for use inclusive of the teleomorph." with "Ravenelia cubensis would not be available for use inclusive of the teleomorph unless its type were teleotypified (Art. 59.7)."

*Prop. G (300 – Redhead in Taxon 59: 1928)* In Art. 59.3 replace: "that of a form-taxon and is applicable only to the anamorph represented by its type, as described or referred to in the protologue" with "anamorphic with restricted priority with regard to names for teleomorphic types or teleotypes (Art. 59.1)".

*Prop. H (301 – Redhead in Taxon 59: 1928)* Reword Art. 59.2 as follows (new text in bold replaces text struck-out):

"59.2. For a binary name published prior to 1 January 2013 to qualify as a name of a holomorph, either not only must its type specimen, or its epitype specimen under Art. 59.7, must be teleomorphic, but also and the protologue must include a description or diagnosis of this morph (or be so phrased that the possibility of reference to the teleomorph cannot be excluded), or, if with an anamorphic type, it must be teleotypified (see also Art. 59.7)."

*Prop. I (302 – Redhead in Taxon 59: 1929)* Add the following new Note ahead of Art. 59.1:

"Note 1. Previous editions of the *Code* allowed for the separate naming of anamorphs from teleomorphs in "ascomycetous and basidiomycetous fungi (including *Ustilaginales*)" and referred to such names typified by anamorphs as either 'form taxa' or 'morphotaxa'. These provisions facilitated the description of fungi discovered as one morph or another in space or time in the absence of available methodologies and technology to reliably link the varying morphs. The *Code* no longer allows this for newly named fungi and all fungal names are now regarded as names of biological taxa."

*Prop. J (303 – Redhead in Taxon 59: 1929)* Replace 59.1 with:

"59.1. In non lichen-forming Ascomycota and Basidiomycota with one or more mitotic asexual morphs (anamorphs) as well as a meiotic sexual morph (teleomorph), named prior to 1 January 2013, the correct name covering the holomorph (i.e. the species in all its morphs) is the earliest legitimate name typified, or teleotypified under Art. 59.7 (as restricted by Art. 59.4), by an element representing the teleomorph, i.e. a morph characterized by the production of asci/ascospores, basidia/basidiospores, including anatomically recognizable parthenogenic asci or basidia, teliospores, other basidium-bearing organs, or specialized cells differentiated from the vegetative thallus and in which meiosis would normally occur (see Art. 59.8 when anatomical interpretation is ambiguous)."

*Prop. K (304 – Redhead in Taxon 59: 1929)* Add the following new paragraph in Art. 59:

"59.8. In the case of doubt as to the interpretation of a type as a teleomorph or an anamorph, a formal proposal may be made to declare the type to be conserved as one or the other for nomenclatural purposes."

Prop. L (307 – Gams & al. in Taxon 59: 1930) In Art. 59.3 delete "that of a form taxon and is".

Prop. M (308 – Gams & al. in Taxon 59: 1930) In Art. 59.4 insert "normally (exceptions in Art. 59.5)" before "take precedence".

*Prop. N (309 – Gams & al. in Taxon 59: 1930)* In Art. 59.5 add the words in bold and remove those struck-out:

"59.5. The provisions of this Article shall not be construed as preventing the publication and use of binary names for anamorph form-taxa when it is thought necessary or desirable to refer to anamorphs alone. The provisions of Art. 59.4 also do not preclude the preferential use of well-established anamorph names for holomorphs if desired."

Prop. O (310 – Gams & al. in Taxon 59: 1930) Add two new examples following Art. 59.5:

"Ex. 5bis. Cryptococcus neoformans, the conserved type of the generic name Cryptococcus, is much more firmly established in the medical world than the teleomorph in Filobasidiella, and the yeast form is the only expression of this fungus that is normally seen."

"Ex. 5ter. The Neosartorya teleomorph of Aspergillus fumigatus was only obtained after mating compatible isolates under special conditions. Therefore the well-established anamorph name can be used for the entire fungus; the Neosartorya name, though validly introduced, has only academic interest."

*Prop. P (311 – Gams & al. in Taxon 59: 1930)* Add at the end of Art. 59.7 two sentences and two examples:

"This provision does not support the transfer of anamorphtypified species names to teleomorph genera in the absence of teleomorphic material, merely for the sake of phylogenetic affinities. A newly discovered anamorph species may be accommodated in a related teleomorph genus only if no suitable anamorph genus is available for it."

"Ex. 8bis. The combination Calonectria citri (H.S. Fawc. & Klotz) L. Lombard & al. (2010) from Cylindrocladium into a

teleomorph- typified genus, being based on anamorphic material, conflicts with the current Art. 59 and also precludes the legitimate introduction of the same binomial once the appropriate teleomorph is discovered (other than by teleotypification)."

"Ex. 9. Damm & al. (2008) placed a new phialophora-like anamorph in the phylogenetically related holomorph genus *Jattaea* (as *J. mookgoponga*), although there was no trace of a teleomorph on the available material; this is acceptable because no genus had hitherto been described for this little-differentiated anamorph nor was there one linked to *Jattaea*."

Rapporteurs' comments – Prop. A, by a member of the Special Committee on the Nomenclature of Fungi with a Pleomorphic Life Cycle (Spec. Comm. on Art. 59) in the absence of any agreed Committee proposals, would delete entirely the provision introduced in the Vienna Code for epitypifying (teleotypifying) anamorph names such that they may be applied to a teleomorph. This was the only proposal on Art. 59 to generate any sort of conclusive opinion at the 9th International Mycological Congress in August 2010, 66% of the ballots submitted being against the deletion of Art. 59.7. The Spec. Comm. on Art. 59 has since voted on this and the other proposals on this topic. The vote on Prop. A is: 0 [yes]: 8 [no]: 2 [abstain].

*Prop. B* is an alternative to Prop. A to address complications perceived to exist in the current wording of Art. 59.7. The Spec. Comm. on Art. 59 voted 0:8:2.

*Prop.* C–K comprise a set of proposals by the Secretary of the Special Committee on the Nomenclature of Fungi with a Pleomorphic Life Cycle in the absence of agreement to any proposals by the Committee as a whole. They are designed to limit dual nomenclature. Prop. C addresses a problem with the current wording of Art. 59.7. Prop. D is the core proposal to limit dual nomenclature by making illegitimate later names for anamorphs or teleomorphs considered to belong to the same taxon as a morph with an existing legitimate name. The qualifications in the proposed new rules "considered to belong to the same taxon ... at the time of publication" and "considered at the time of publication to be the same taxon" might be difficult to establish objectively, whereas "in the publication" rather than "at the time of publication" would be more readily assessed. Prop. E-H represent necessary changes to the existing rules, consequent on acceptance of Prop. D. Prop. I–K seek to increase clarity in Art. 59. The Spec. Comm. on Art. 59 voted as follows: Prop. C: 9:0:1; Prop. D: 4:4:2; Prop. E: 4:4:2; Prop. F: 8:1:1; Prop. G: 8:1:1; Prop. H: 8:1:1; Prop. I: 4:3:3; Prop. J: 6 + 2 (subject to deletion of the date) : 1 : 1; Prop. K: 9:0:1.

*Prop. L–P* represent a series of proposals designed to avoid usage of redundant dual names by attributing more weight to anamorph names, while still preserving, as far as possible, the usage of teleomorph-typified generic names for species with teleomorph-typified names and vice versa. The Spec. Comm. on Art. 59 voted as follows: Prop. L: 2:7:1; Prop. M: 1:8:1; Prop. N: 1:8:1; Prop. O: 1:8:1; Prop. P: 1:8:1.

# Recommendation 59A

Prop. A (174 – Gams & al. in Taxon 59: 1297) Add a Rec. 59A.4: "59A.4. Even when molecular evidence of generic homogeneity is available, newly discovered anamorphic fungi should only be classified under teleomorph-typified generic names, when no suitable anamorph-typified generic name is available. In such cases the subsequent discovery of a teleomorph will require epitypification by a specimen exhibiting the teleomorph."

*Prop. B* (312 – Gams & al. in Taxon 59: 1930) At the end of Rec. 59A.1 add:

"Whenever possible, species with teleomorphic typification should be accommodated in teleomorph-typified genera, those with only anamorphic typification in anamorph-typified genera. An anamorph should only be named separately from the associated teleomorph in cases where finding the anamorph and its identification is much more likely than that of the teleomorph."

*Prop. C (313 – Gams & al. in Taxon 59: 1930)* Add a new Rec. 59A.4:

"59A.4. When describing a newly found teleomorph of a previously named anamorph taxon, preference should be given to its classification in the appropriate teleomorph genus if this is available."

Rapporteurs' comments – Prop. A is an adjunct to Art. 59 Prop. B, and should probably be dealt with in the same way as that proposal. The Spec. Comm. on Art. 59 voted as follows: 1:8:1.

*Prop. B* and *C* are adjuncts to Art. 59 Prop. L–P. The Spec. Comm. on Art. 59 voted as follows: Prop. B: 1:8:1; Prop. C: 2:7:1.

The Nomenclature Committee for Fungi will give its recommendations on all the proposals on Chapter VI, i.e. that on the title and those on Art. 59 and Rec. 59A, in the April issue of *Taxon*.

### Article 60

*Prop. A (335 – Gandhi & Reveal in Taxon 59: 1932)* Add a new Note following Art. 60.3 with an Example:

"Note Ibis. Similar names of Greek and Latin origin may differ in their etymologies, and orthographical corrections may apply."

"Ex. 6bis. The spelling of the generic name Caelospermum Blume (1826–1827) with its etymology as hollow-seeded ("Pyrenae 1-spermae ... intus concavae ...") is to be corrected to Coelospermum Blume."

*Prop. B (003 – Drobnik & Bacler in Taxon 57: 315)* In order to make clearer that the diaeresis is permissible, amend Articles 60.4, 60.5, and 60.6:

Add at the end of Art. 60.4: "The diaeresis on e is permissible too." Add "e or  $\ddot{e}$ " to the first sentence of Art. 60.5 so that it reads: "... where the letters u, v, or i, j, or e,  $\ddot{e}$  are used interchangeably ...".

Add at the end of the second sentence of Art. 60.6 (transcription rules) the clause: "French and Dutch (but not Latin)  $\ddot{e}$  becomes e."

*Prop. C (007 – Moore & Rushworth in Taxon 57: 317)* Add the following Example to Article 60:

"Ex. 8bis. Wisteria Nutt. 1818, nom. cons. is not to be 'corrected' to Wistaria, although this species was named in honour of Caspar Wistar, since Wisteria is the spelling used in the listing of nomina generica conservanda et rejicienda in the appendix."

*Prop. D (129 – Rijckevorsel in Taxon 59: 665)* Add an Example after Art. 60.6:

"Ex. 10 bis. Umlaut to be transcribed: "Lühea", dedicated to Carl Emil von der Lühe, is to be corrected to Luehea Willd. (1801)."

Prop. E (237 – Turland in Taxon 59: 1913) Append a sentence to Art. 60.9:

"60.9. [...] Except to separate identical letters, a hyphen is not permissible in adjectival epithets that should agree in gender with the generic name."

*Prop. F (097 – Rabeler & Gandhi in Taxon 59: 311)* Revise Art. 60 Ex. 21 and add a new Example:

"Ex. 21. Hyphen to be maintained: Vitis novae-angliae Fernald (1917), Piper pseudo-oblongum McKown (1928), Ribes non-scriptum (Berger) Standl. (1930), Athyrium austro-occidentale Ching (1986)."

"Ex. 21bis. Hyphen to be inserted: Aster "novae angliae" L. (1753), Coix "lacryma jobi" L. (1753), and Arctostaphylos "uva ursi" (L.) Spreng. (1825) become A. novae-angliae, C. lacryma-jobi, and A. uvaursi, respectively; Veronica "anagallis Δ" L. (1753) becomes V. ana-

gallis-aquatica (see Art. 23.3); Vaccinium sect. "Vitis idaea" W.D.J. Koch (1837) becomes V. sect. Vitis-idaea; Marattia "rolandi principis" Rosenst. (1911) becomes M. rolandii-principis (see Art. 60.11)."

*Prop. G (124 – Rijckevorsel in Taxon 59: 664)* Add a new Rule, following Art. 60.10 (or as a second sentence in Art. 60.10):

"60.10bis. The use of a full stop (period) in an epithet that is derived from a personal or geographical name that contained this full stop is treated as an error to be corrected by deletion of the full stop."

*Prop. H (125 – Rijckevorsel in Taxon 59: 664)* If Proposal 124 is accepted, add an Example to the new provision:

*"Ex. 23bis. Nesoluma "St.-Johnianum"* (Lam & Meeuse in Occas. Pap. Bernice Pauahi Bishop Mus. 14: 153. 1938), based on material collected by H. St. John and F. R. Fosberg, is to be corrected to *Nesoluma st-johnianum* H. J. Lam & B. Meeuse."

If Proposal 124 [Prop. G] is not accepted, this may, instead, become an Example accompanying Art. 32.1(b) of a designation that, retroactively, no longer is validly published.

Prop. I (047 – Dorr in Taxon 58: 668) Rephrase Art. 60 Ex. 26: "Ex. 26. Uladendron "codesuri" Marc.-Berti (1971) is not to be changed to *U. "codesurii"* (as by Brenan in Index Kew., Suppl. 16: 296. 1981) but to *U. codesurianum*, since the epithet does not commemorate a person but derives from an acronym (CODESUR, Comisión para el Desarrollo del Sur de Venezuela)."

*Prop. J* (130 – Rijckevorsel in Taxon 59: 665) Delete Art. 60 Ex. 27 and restore the introductory sentence of Rec. 60C.1 to the phrasing of the *Saint Louis Code*.

Prop. K (131 – Rijckevorsel in Taxon 59: 665) Add a new Example in Art. 60:

"Ex. 27bis. Example of a correction that requires effective publication, namely when an epithet formed from the name of a person has a Latin termination that deviates so strongly from that prescribed in Rec. 60C.1 that the correct form is not automatically obvious: Croton lanjouwii Jabl. (1965, "lanjouwensis"), with lanjouwii being chosen over "lanjouwianus" (Rijckevorsel in Taxon 59: 665. 2010). In such a case the first author who, in an effectively published text, explicitly adopts one of the available correct forms, being (implied) orthographical variants, while rejecting the others (Art. 61.3), must be followed. Similarly Centaurium maryanniae B. L. Turner (1994, "maryannum"), with maryanniae chosen over maryannianum (and maryannae) (Rijckevorsel, l.c.)."

Prop. L (132 – Rijckevorsel in Taxon 59: 665) Delete Art. 60 Ex. 31.

*Prop. M (133 – Rijckevorsel in Taxon 59: 665)* Add an Example replacing Art. 60 Ex. 31:

"Ex. 31. Acacia "Bancrofti" (Maiden in Proc. Roy. Soc. Queensland 30: 26. 1918) "commemorates the Bancrofts, father and son, the former the late Dr. Joseph Bancroft, and the latter Dr. Thomas Lane Bancroft"; it is to be corrected to Acacia bancroftiorum Maiden."

*Prop. N (134 – Rijckevorsel in Taxon 59: 665)* Add an Example in Art. 60:

"Ex. 31bis. Chamaecrista leonardiae Britton (1930, "leonardae"), Scolosanthus leonardii Alain (1968), and Frankenia leonardiorum Alain (1968, "leonardorum") were each based on type material collected by Emery C. Leonard and Genevieve M. Leonard ("E. & G. Leonard" in the case of the names by Alain). As there is no explicit dedication these names are to be accepted as dedicated to the person(s) indicated by the termination as published."

Rapporteurs' comments – Prop. A points out that similar spellings may have different etymologies depending on whether they are

derived from Latin or Greek. The provided Example assumes that *Caelospermum* Blume must derive from the Greek κοίλος (Latinized to *coelus*), meaning "hollow", rather than from the Latin *caelum* (or *coelum*), meaning "heaven", and is therefore correctable to *Coelospermum*. Blume's protologue (Bijdr.: 994. 1826–1827) does not explicitly explain the etymology, but the description includes the words "*Pyrenae 1-spermae ... intus concavae ...*", as quoted by the proposers. (The particle "kailo-", alleged by the proposers to be Greek for "whole" could not be confirmed and is probably an error.) Prop. A might be supported if it were felt that a Note is needed to point out that orthographical errors may not be obvious.

*Prop. B*, associated with Rec. 60H Prop. A, would add three additional mentions of the diaeresis on the letter 'e' in Art. 60. Those who, like the proposers, believe that this is needed in order to make clearer its permitted use beyond the current statement in Art. 60.6 ("The diaeresis, indicating that a vowel is to be pronounced separately from the preceding vowel (as in *Cephaëlis*, *Isoëtes*), is permissible") will presumably support the proposal.

*Prop. C* provides an example that could be included consequent on the acceptance of Art. 14 Prop. B.

Prop. D provides a useful Example for Art. 60.6, which is not yet exemplified. To it could be added the species name, Quercus muehlenbergii Engelm. (in Trans. Acad. Sci. St. Louis 3: 391. 1877), which was published as "Mühlenbergii" and commemorates Heinrich Ludwig Mühlenberg (Gotthilf Henry Ernest Muhlenberg). Prop. D and this possible addition could be referred to the Editorial Committee.

*Prop. E*, by providing an additional test for determining when a hyphen is permitted in compound epithets, is an attempt to make the rule more clear-cut and hence simpler to apply with minimal change to existing practice. In almost all cases in which an epithet is adjectival, i.e. it should agree in gender with the generic name, it will not be formed of "words that usually stand independently". The only exceptions appear to be adjective-adjective compounds, of which "*saudi-arabica*" is an example. Support for the proposal would endorse the position that such situations are so rare that having to use, e.g., *saudiarabica* (without a hyphen) is a small price to pay for the overall greater clarity.

*Prop. F* seeks to clarify the existing language of Art. 60.9 in recognizing that in some cases a "hyphen to be maintained", as stated in Art. 60 Ex. 21, is not actually present in the protologue and in fact "hyphen to be inserted" would be accurate.

Prop. G and H result from the addition of clause (b) to Art. 32.1 in the Vienna Code. Because a full stop (period) is not among the "letters of the Latin alphabet" and the Code does not rule on how to deal with a full stop, the proposer concludes that a name such as Nesoluma "St.-Johnianum" is technically not validly published. Prop. G would rule that the full stop be deleted. The proposer's suggestion to include it not as a separate Article but as a second sentence in Art. 60.11, which rules exactly the same for the apostrophe, seems desirable, as the existing reference to Art. 60.10 in Art. 32.1(b), exempting apostrophes from preventing valid publication, would operate likewise for full stops; otherwise it would be necessary to add to Art. 32.1(b) a reference to the new Art. 60.10 bis. The Example of Prop. H could be referred to the Editorial Committee for inclusion under either Art. 60.10 or Art. 32.1, depending on the outcome of Prop. G.

*Prop. I* is discussed under Rec. 60C Prop. A.

*Prop. J* makes a valid point that epithets which are unchanged personal names, rather than Latinized genitive or adjectival forms of a personal name, are against the tradition of botanical nomenclature (although apparently permitted under Art. 23.2) and considers that these should be restricted to the nomenclature of cultivated plants

(see Art. 28 Note 5). The proposer suggests that such epithets are arguably disallowed under Art. 60.11, although as they are not given Latin terminations Rec. 60C.1 does not apply. In view of these issues, and so as not to encourage emulation of the epithets in Ex. 27 ("barbro" and "jenny"), deletion of the Example is proposed. Prop. J also calls for the introductory sentence of Rec. 60C.1 to be restored to its wording in the Saint Louis Code: "Personal names may be given Latin terminations and used to form specific and infraspecific epithets as follows (but see Rec. 60C.2):", replacing the slightly more restricted wording in the Vienna Code (boldface added for emphasis): "When personal names are given Latin terminations in order to form specific and infraspecific epithets formation of those epithets is as follows (but see Rec. 60C.2):", the point being that epithets such as "barbro" and "jenny" were arguably correctable under Art. 60.11 ("The use of a termination ... contrary to Rec. 60C.1 is treated as an error to be corrected") with the Saint Louis wording of Rec. 60C.1 but not with the Vienna wording. Although there is indeed the tradition of not using as epithets personal names or, with some exceptions, variants of personal names as nouns in apposition, the Code does not apparently prohibit this (cf. Art. 23.2) and the suggested change in the wording of Rec. 60C.2 seems inadequate to exclude such epithets.

*Prop. K* provides an Example to demonstrate the procedure for correcting an epithet under Art. 60.11 when more than one correct form potentially exists, in which case the proposer argues that those forms are "(implied) orthographical variants" to which Art. 61.3 applies. The problem here is that the Example does not reflect Art. 61.3 accurately. Orthographical variants are not present in the original publication. Instead there exist potential orthographical variants, which come into being only when a correction under Art. 60.11 is published. The proposed mechanism could work if part of the Example were converted into an Article, perhaps in Art. 60.

*Prop. L* and *M* demonstrate that the spelling *Codium geppii* in Ex. 31 is, in fact, correct; it cannot be changed to *C. "geppiorum"*. A replacement Example is therefore provided.

*Prop. N* suggests an Example of terminations which should *not* be changed under Note 4 because they are appropriate to the sex and number of the persons being commemorated. It could be included with a "However," in the same manner as Ex. 26.

# **Recommendation 60C**

*Prop. A (046 – Dorr in Taxon 58: 667)* Amend Recommendation 60C.1 as follows:

"60C.1. When personal names or acronyms are given Latin terminations in order to form specific and infraspecific epithets formation of those epithets is as follows (but see Rec. 60C.2), except substantival epithets should not be formed from acronyms:

"(c) If the personal name or acronym ends with a vowel, adjectival epithets are formed by adding -an- plus the nominative singular inflection appropriate to the gender of the generic name (e.g. Cyperus heyne-anus for Heyne, Vanda lindley-ana for Lindley, Aspidium bertero-anum for Bertero), except when the personal name or acronym ends with -a in which case -n- plus the appropriate inflection is added (e.g. balansa-nus (m), balansa-na (f), and balansa-num (n) for Balansa, Lophopterys inpa-na (f) for INPA).

"(d) If the personal name or acronym ends with a consonant, adjectival epithets are formed by adding -i- (stem augmentation) plus -an- (stem of adjectival suffix) plus the nominative singular inflection appropriate to the gender of the generic name (e.g. Rosa webb-iana for Webb, Desmodium griffith-ianum for Griffith, Verbena hassler-iana for Hassler, Uladendron codesur-ianum for CODESUR)."

Rapporteurs' comments – Prop. A would standardize the formation of specific and infraspecific epithets that are derived from acronyms, so that, through Art. 60.11 and thence Rec. 60C.1, anything other than an adjectival epithet (ending in -anus, -ana, -anum) would be treated as a correctable error. The phrase ", except substantival epithets should not be formed from acronyms" would be better worded as ". Substantival epithets are not formed from acronyms".

### **Recommendation 60H**

Prop. A (002 – Drobnik & Bacler in Taxon 57: 314) Add a new Recommendation 60H.2 and associated Example:

"60H.2. For better understanding of names, use of  $\ddot{e}$  is recommended in order to: (1) detach groups of letters ae and oe which belong to different roots; (2) distinguish some roots derived from Greek; and (3) facilitate appropriate pronunciation."

"Ex. 1. Pseudoërnestia, Ficus neoëbudarum, Limonium tarcoënse, Aëranthes, Aloë, Isoëtes is a better spelling than Pseudoernestia, Ficus neoebudarum, Limonium tarcoense, Aeranthes, Aloe, Isoetes, respectively."

Rapporteurs' comments – Prop. A would add a new Recommendation to encourage greater use of the diaeresis, already permitted under Art. 60.6.

# Recommendation 60I (new)

Prop. A (045 – Dorr in Taxon 58: 667) Add a new Recommendation:

"601.1. An epithet derived from an acronym should be treated as if it was an adjective and agree in gender with the generic name (see Rec. 60C.1)."

Rapporteurs' comments – Prop. A would recommend for all epithets what would be effectively mandated by Rec. 60C Prop. A for the epithets of names of species and infraspecific taxa. The wording "as if it was an adjective and agree in gender" would be better as "should be adjectival and agree in gender", otherwise the Recommendation implies that the epithets should be treated as if they were adjectives even if they were not, whereas the intent of the proposal is to recommend the use of adjectival epithets.

# Article 61

Prop. A (336 – Gandhi & Reveal in Taxon 59: 1933) Add an Example following Art. 61.2:

"Ex. Ibis. Nelumbo Adans. (1763) and Nelumbium Juss. (1789) are inflectional forms of a name having Nymphaea nelumbo L. as the nomenclatural type, and Nelumbium is treated as an orthographical variant of Nelumbo. Likewise, Musineon Raf. (1820) and Musenium Nutt. (1840) are inflectional forms of the same word, with Seseli divaricatum Pursh as the common nomenclatural type."

*Prop. B (337 – Gandhi & Reveal in Taxon 59: 1933)* Add a Note following Art. 61.2 with an Example as this also applies to inflectional forms of the same word used at different ranks:

"Note 0. A name, if based either directly or indirectly on a different inflectional form at a different rank, is corrected to reflect the original form."

"Ex. 1bis. Rydberg (in Mem. New York Bot. Gard. 1: 206–207. 1900) published "Petrophyton caespitosum" and gave a full and direct reference to the basionym Spiraea caespitosa Nutt. (in Torrey & A. Gray, Fl. N. Amer. 1: 418. 1840). He stated that he had adopted the "subgeneric" name used by S. Watson (Eriogynia sect. Petrophytum S. Watson in Bot. Gaz. 15: 241–242. 1890), which serves as an indirect reference to S. [unranked] Petrophytum Nutt. (1840). Subsequently

Rydberg (Fl. Rocky Mts.: 404. 1917) used "Petrophytum (Nutt.) Rydb." Since Petrophyton and Petrophytum are inflectional forms of the same word with S. caespitosa as the common nomenclatural type, Rydberg's new genus is correctly cited as Petrophytum (Nutt.) Rydb. ('Petrophyton').

Rapporteurs' comments – Prop. A would provide an Example for Art. 61.2, which is not yet exemplified. It is, however, debatable that Nelumbo and Nelumbium are "inflectional forms", inflection being alteration of a word to indicate gender, number, case, mood, tense, etc. The names are different Latinizations of the Sinhala word for "lotus", with Nelumbo treated as a third-declension noun and Nelumbium a second-declension noun. They are not inflectional forms because both are nominative singular nouns. "Spelling forms", to use one of the other terms in Art. 61.2, would be more appropriate.

*Prop. B* seeks to remind us that the orthography of a new combination or status novus should match that of its basionym. This is general practice and is implicit from Art. 7.4 ("new name formed from a previously published legitimate name"). The wording of the Note in Prop. B is not at all readily understood and is sufficiently vague to result in unforeseen consequences. A better-worded Note might be considered by some to be a worthwhile addition to Art. 61, but, in that case, it would be better placed after Art. 61.4 rather than 61.2. If such a reworded Note were included, the Example of Prop. B might also be useful, although *Petrophyton* and *Petrophytum* are, again, spelling forms (-on a Greek termination, -um a Latin one), not "inflectional forms".

### Article 62

*Prop. A (154 – Barker & Brummitt in Taxon 59: 987)* Delete from Art. 62.4 "and those ending in *-ites* as masculine".

Rapporteurs' comments - Prop. A seeks to prevent generic names ending in -ites from having to be treated as masculine under Art. 62.4, when in fact there is a botanical tradition of treating most such names of non-fossil plants (Petasites being a notable exception) as feminine (although that tradition is now changing because of Art. 62.4!). However, the vast majority of names ending in -ites apply to fossil plants and the rule was originally introduced to make consistent their usual treatment as masculine. Some may feel that maintaining consistency in gender for all names ending in -ites outweighs the desirability of preserving botanical tradition for a relatively small number of genera many of which have very few species, particularly when the rule has been in the *Code* for nearly thirty years and has been implemented, albeit only recently, in indices such as IPNI. The proposal does, however, highlight a related issue with Art. 62.1. The first sentence of that Article rules that gender is determined by botanical tradition; then the second sentence rules that a name "without a botanical tradition retains the gender assigned by its author (but see Art. 62.4)". The qualifying cross-reference to Art. 62.4, apparently linked only to the second sentence, is unfortunate because it could be taken to imply that botanical tradition takes precedence not only over the original author's assignment but also over Art. 62.4. If that were the case, Prop. A would be unnecessary. In fact, as is the case in the *Code* in general, all the specific paragraphs (Art. 62.2–62.4) qualify the general statements in Art. 62.1; this should be made clearer editorially.

## **Division III**

Prop. A (338 – Stotler & Isoviita in Taxon 59: 1933) In Div. III.2 (3) change "Committee for Bryophyta" to read "Committee for Bryophytes"

*Prop. B (199 – Landrum in Taxon 59: 1616)* Insert a new paragraph under the first paragraph of Div.III.4:

"Changes in the *Code* will require a 60% or higher positive vote of the Nomenclature Section of the International Botanical Congress."

*Prop. C (200 – Landrum in Taxon 59: 1616)* Insert a new paragraph under the paragraph of Prop. (199):

"Approval of actions by committees as recommended by the General Committee will require a 60% or higher positive vote of the Nomenclature Section of the International Botanical Congress."

*Prop. D (201 – Landrum in Taxon 59: 1616)* Delete Div.III.4(b) (2) and rephrase the remaining text of Div.III.4(b) as follows:

"(b) The final vote at the sessions of the Nomenclature Section will be by all officially enrolled members of the Section with one vote per member and no accumulation or transfer of votes permitted."

*Prop. E (202 – Landrum in Taxon 59: 1616)* Rephrase Div.III.4(a), incorporating Note 1, to read as follows:

"(a) The preliminary mail vote will be conducted by the International Association for Plant Taxonomy with each IAPT member entitled to one vote. Non-members who are authors of proposals or members of the Permanent Nomenclature Committees will also have a vote. There will be no accumulation or transfer of votes permitted. Less than 50% support for a change in the Code in the mail vote will generally eliminate a proposal from consideration by the Nomenclature Section."

Prop. F (018 – Hawksworth & al. in Taxon 58: 659) Amend Div. III.2 to provide for the election of the Permanent Nomenclature Committee for Fungi by an International Mycological Congress:

In *Div.III.2*, insert in line 2 after "Taxonomy": "or in the case of the Committee for Fungi the International Mycological Association".

In *Div.III.2*, insert after "Congress": "except in the case of the Committee for Fungi which is elected at each International Mycological Congress".

*Prop. G (019 – Hawksworth & al. in Taxon 58: 659)* Amend *Div.III.4* to permit decision-making on proposals relating solely to organisms treated as fungi to be taken at an International Mycological Congress:

In the first sentence, replace "two" by "three", replace "and" before "(b)" by ",", and insert after "Congress" ", or (c) for proposals relating solely to organisms treated as fungi, a vote taken at the Nomenclatural Session of an International Mycological Congress".

Insert in the second paragraph after "voting": "on proposals not relating solely to organisms treated as fungi".

After *Div.III.4* (*b*), insert a new final paragraph relating to "Qualifications for voting": "(*c*) Voting at the Nomenclature Session of an International Mycological Congress (on proposals relating solely to organisms treated as fungi):

All officially registered full members of the Congress present at the Nomenclature Session have a personal vote. No accumulation or transfer of personal votes is permissible, and no institutional votes are granted."

Prop. H (020 – Hawksworth & al. in Taxon 58: 659) Insert a new Div.III.5 and footnote:

"The decisions taken at a Fungal Nomenclature Session relating solely to organisms treated as fungi are binding on the Nomenclature Section convened at the subsequent International Botanical Congress. Such decisions will, however, be open for any editorial adjustments deemed necessary by the Editorial Committee. That Committee must include either the Secretary of the Committee for Fungi, or an alternate nominated by that Committee, as one of its members."

"<sup>2</sup>The Rapporteur-général appointed for that Congress, or an alternate appointed by the Rapporteur-général, is expected to attend the Nomenclature Session as a non-voting Advisor to the Session."

Rapporteurs' comments – Prop. A reflects the fact that more than one phylum is now commonly recognized for the group of organisms for which the permanent Nomenclature Committee for Bryophyta is responsible, and the commonest name applied to one of these, the mosses, is Bryophyta (rather than the acceptable (Art. 16.1(b)) but now less favoured Musci – just as Marchantiophyta is now more commonly used than Hepaticae). Apparently the English word "bryophyte" is still understood to refer to all of the mosses, liverworts, and hornworts, even although its scientific equivalent is now more restricted. On that assumption, the change seems appropriate. The Nomenclature Committee for Bryophyta has been asked to give its recommendation on this proposal.

*Prop. B* and *C* would enshrine in the *Code* what has for long been the practice that a 60% or higher majority is needed at a Nomenclature Section to effect a change in the *Code* (Prop. B) or to approve the recommendation in the report of the General Committee (Prop. C). Prop. C, implies that the Section is not voting directly on the General Committee's report, as has been the practice, but on the "actions by committees as recommended by the General Committee", i.e., their recommendations on individual proposals.

*Prop. D* would remove all institutional voting from future Nomenclature Sections, so that each registered member of the Section had one personal vote only. No transfer of personal votes would be permitted, as is the case currently.

*Prop. E* would condense Div.III.4(a) and Note 1, adding that the mail vote will be conducted by IAPT (the *Code* does not currently rule on which organization must conduct it). Prop. E would also raise the threshold in the mail vote for a proposal to be (generally) eliminated from consideration by the Nomenclature Section, from 25% or less support (see McNeill & al. in Taxon 54: 1057. 2005) to less than 50% support, and this new figure would be included in the *Code*. This would result in fewer proposals being discussed at future Nomenclature Sections.

Prop. F–H represent the mechanism by which it is proposed that the outcome of amendments to the ICBN relating solely to fungi be determined by mycologists alone rather than by the Nomenclature Section of an International Botanical Congress that an increasingly small number of mycologists attend. Although in practice such decisions have generally been taken by Nomenclature Sections on the advice of the permanent Nomenclature Committee for Fungi and of the mycologists present, it does seem desirable that a larger and more representative group of mycologists make these decisions. The mechanism proposed does not seem to create any insurmountable difficulties, although given the different frequency of Botanical and Mycological Congresses, there may come to be practical difficulties in the timing of implementation of agreed changes. The view of the permanent Nomenclature Committee for Fungi on these proposals has been sought and will be presented in the April issue of Taxon.

# Article H.1

Prop. A (146 – Rijckevorsel in Taxon 59: 986) Add a Note to Art. H.1:

"Note n. The International Code of Nomenclature for Cultivated Plants uses the addition sign + in a similar way to indicate graft-chimaeras (see Note [Prop. 147] and [Prop. 148])."

Rapporteurs' comments – Prop. A, together with Art. H.2 Prop. A and Art. H.6 Prop. A, would introduce into the Code the term "graft-chimaera" and the addition sign (+) used to denote such an entity, but only as a cross-reference to these conventions in the International Code of Nomenclature for Cultivated Plants (ICNCP). While some may think it useful to show how the ICNCP treats cultivated plants

and to make it clear that names such as +*Crataegomespilus* have no status under the *ICBN*, others may think that Art. 28 Note 2 ("[a] dditional, independent designations ...") together with Note 4 and 5 and their Examples (cultivar names) are sufficient.

### Article H.2

Prop. A (147 – Rijckevorsel in Taxon 59: 986) Add a Note and an Example to Art. H.2:

"Note n. Similarly, the *International Code of Nomenclature for Cultivated Plants* allows a graft-chimaera to be indicated by a formula, in which an addition sign is placed between the taxa."

"Ex. n. Formulae for graft-chimaeras: Crataegus + Mespilus; Cytisus purpureus + Laburnum anagyroides; Syringa ×hinensis + S. vulgaris."

Rapporteurs' comments – Prop. A is discussed under Art. H.1 Prop. A.

### Article H.6

Prop. A (148 – Rijckevorsel in Taxon 59: 986) Add a Note to Art. H.6.1 or H.6.2:

"Note n. In dealing with graft-chimaeras between different genera, the *International Code of Nomenclature for Cultivated Plants* allows designations such as +*Crataegomespilus* (for *Crataegus* + *Mespilus*). Although such a designation has a form that is fairly similar to a nothogeneric name, it has no nomenclatural status under the botanical *Code*; no combination (Art. 6.7) including it can be validly published."

Rapporteurs' comments - Prop. A is discussed under Art. H.1 Prop. A.

# Appendix III

*Prop. A (008 – Moore & Rushworth in Taxon 57: 317)* Add the following language to the first page of Appendix III at the end of the orth. cons. entry:

"; as by Art. 14.8, the spellings of conserved names may not be changed even if they are not explicitly designated as 'orth. cons.'

*Prop. B (106 – Yu & al. in Taxon 59: 656)* Add "gend. cons." at the beginning of Appendix III, prior to "orth. cons."

Add the following sentence: "gend. cons. gender conservanda, gender to be conserved (Art. 14.11), e.g., masculine, feminine, neuter."

*Prop. C (107 – Yu & al. in Taxon 59: 657)* Add "nom. illeg." at the beginning of Appendix III, prior to orth. cons. (after *gend. cons.* as proposed).

Add the following sentence: "nom. illeg. nomen illegitimum, illegitimate name, a validly published name that is not in accordance with one or more rules (Art. 6.4), principally those on superfluity (Art. 52) and homonymy (Art. 53 and 54)."

Prop. D (244 – Perry in Taxon 59: 1916) If Proposal 243 is accepted then Insert "et nomina subdivisionum genericorum" after "generica", in the heading of App. III and "et nomina infraspecifica" after "specifica" in the, heading of App. IV.

Prop. E (245 – Perry in Taxon 59: 1916) If Proposal 243 is accepted then each of those names listed in Appendix III and Appendix IV of the Vienna Code as being the basionym of a conserved name with a conserved type, is to be treated as conserved on the same date and with the same type as the conserved name under which it is cited.

*Rapporteurs' comments – Prop. A* is an editorial consequence of acceptance of Art. 14 Prop. B.

*Prop. B* and *C* would define additional abbreviated Latin terms in the introduction of App. III. The abbreviation "gend. masc. cons." appears three times in App. III and "gend. neut. cons." once, while "nom.

illeg." is used many times. The proposed definition of an illegitimate name is taken verbatim from App. VII (the Glossary). Explaining what these abbreviations stand for and mean, which may not be apparent to all, might be regarded as useful. See also App. IV Prop. A.

 $Prop.\ D$  and E are editorial consequences of acceptance of Art. 14 Prop. A.

# **Appendix IV**

*Prop. A (108 – Yu & al. in Taxon 59: 657)* Add "*orth. cons.*" at the beginning of Appendix IV, prior to typ. cons.

Add the following: "orth. cons. orthographia conservanda, spelling to be conserved (Art. 14.11)."

Rapporteurs' comments – Prop. A is related to App. III Prop. B and C (under which see the discussion). The term "orth. cons." is used five times in App. IV, but it is defined only in the introduction of App. III.

# Appendix VII (Glossary)

*Prop. A (052 – Rijckevorsel in Taxon 58: 670)* In the Glossary, in the entry on alternative names, add a sentence so that it reads:

"alternative names. Two or more different names based on the same type proposed simultaneously for the same taxon by the same author. When published after 1 January 1953 none of these is validly published; in which case they are not names in the sense of the *Code* (see *name*). (Art. 34.2)."

*Prop. B (053 – Rijckevorsel in Taxon 58: 670)* In the Glossary, add an entry on author, to read as follows:

"author. [Not defined] – a person taking an action recognized by the *Code*; especially the valid publication of a name (the author of a name, original author, validating author)."

*Prop. C (054 – Rijckevorsel in Taxon 58: 670)* In the Glossary, add an entry on author, to read as follows:

"author. [Not defined] – a person taking an action recognized by the *Code*, especially the valid publication of a name (author of a name, original author, validating author), but not limited to that. An author may also be the person who designates a type (Art. 7.11), merely follows the *Code* (Rec. 14A.1) or studies plants (Rec. 23A.3(i))."

*Prop. D (055 – Rijckevorsel in Taxon 58: 670)* In the Glossary, add an entry on author citation to read as follows:

"author citation. The proper form, in citing a botanical name, of referring to the author(s) of that name, conforming to Art. 46–50."

*Prop. E (056 – Rijckevorsel in Taxon 58: 670)* In the Glossary, add an entry on author citation to read as follows:

"author citation. The proper form, in citing a botanical name, of referring to the author(s) of that name, conforming to Art. 46–50. For this purpose authorship is not limited to the person(s) who authored the protologue (or the relevant part of the protologue); in some cases the person who is accepted as having suggested the name or its epithet (Art. 46.4, 46.6 and Note 4) or having altered the circumscription of the taxon (Rec. 47A.1) may also be included in an author citation."

*Prop. F (057 – Rijckevorsel in Taxon 58: 670)* In the Glossary, rephrase the entry on autonym, to read as follows:

"autonym. A name that is established automatically under Art. 22.3 or 26.3 (Art. 6.8). The type of an autonym is the same as that of the name from which it is derived (Art. 7.6). It is not followed by an author citation (Art. 22.1 and 26.1)."

*Prop. G (058 – Rijckevorsel in Taxon 58: 670)* In the Glossary, rephrase the entry on autonym, to read as follows:

"autonym. A name that is established automatically under Art. 22.3 or 26.3 (Art. 6.8). The type of an autonym is the same as that of the name from which it is derived (Art. 7.6). It is not followed by an

author citation (Art. 22.1 and 26.1). It is either the name of a subdivision of a genus, its final epithet repeating the name of the genus (Art. 22.1), or the name of an infraspecific taxon, its final epithet repeating the specific epithet (Art. 26.1)."

*Prop. H (059 – Rijckevorsel in Taxon 58: 671)* In the Glossary, in the entry on basionym, add a reference to Art. 7.4.

*Prop. I (060 – Rijckevorsel in Taxon 58: 671)* In the Glossary, delete the entry on binary combination.

*Prop. J (061 – Rijckevorsel in Taxon 58: 671)* In the Glossary, add an entry on binomial, as follows:

"binomial. [Not defined] – the name of a species: a binary combination of a generic name and a specific epithet (Art. 42.2)."

*Prop. K* (062 – Rijckevorsel in Taxon 58: 671) In the Glossary, add a sentence to the entry on effective publication, so that it reads as follows:

"effective publication. Publication in accordance with Art. 29–31 (Art. 6.1). Effective publication is a requirement for any nomenclatural act, including valid publication (Art. 32.1(a)), designation of a type (Art. 7.10) and choice between names of equal priority (Art. 11.5 and 53.6), between orthographical variants (Art. 61.3) or of gender (Art. 62.3)."

*Prop. L (063 – Rijckevorsel in Taxon 58: 671)* In the Glossary, rephrase the entry on epithet, so that it reads as follows:

"epithet. [Not defined] – one of the parts of any name below the rank of genus (Art. 6.7): a combination consists of the name of a genus combined with either one epithet (Art. 21.1 and 23.1) or two epithets (Art. 24.1). An epithet consists of one or more words: if an epithet does consist of two or more words, these are to be united or hyphenated, when the epithet is used (Art. 20.3 and 23.1). An epithet may be taken from any source whatever, and may even be composed in an absolutely arbitrary manner (Art. 20.1 and 23.2)."

*Prop. M (064 – Rijckevorsel in Taxon 58: 671)* In the Glossary, rephrase the entry on epithet, so that it reads as follows:

"epithet. [Not defined] – one of the parts of any name below the rank of genus (Art. 6.7): a combination consists of the name of a genus combined with either one epithet (Art. 21.1 and 23.1) or two epithets (Art. 24.1)."

*Prop. N (065 – Rijckevorsel in Taxon 58: 671)* In the Glossary, rephrase the entry on illegitimate name, so that it reads as follows:

"illegitimate name. A name that is designated as such, in Art. 18.3, 19.5, or 52–54 (Art. 6.4): its use is prohibited (Art. 6.6). An illegitimate name cannot become legitimate later unless it is conserved or sanctioned. A combination that contains an illegitimate name can be legitimate (Art. 55.1–2), although its use is prohibited (Art. 11.4). The epithet in an illegitimate name can be re-used later in a legitimate name (Art. 58.1), the use of which is not prohibited, in itself."

*Prop. O (066 – Rijckevorsel in Taxon 58: 671)* In the Glossary, rewrite the description of later homonym, so that it reads as follows:

"later homonym. A homonym published at a date later than the first name using this same spelling (see *homonym*) (Art. 53.1)."

*Prop. P (067 – Rijckevorsel in Taxon 58: 671)* In the Glossary, in the description of legitimate name, replace "all" by "the", and include the second part of Art. 6.5. It then to read as follows:

"**legitimate name**. A name that is in accordance with the rules, i.e., one that is not an illegitimate name as defined in Art. 6.4 (Art. 6.5)."

*Prop. Q (068 – Rijckevorsel in Taxon 58: 671)* In the Glossary, in the entry on monotypic genus, add "For the purposes of Art. 42,", so that it reads as follows:

"monotypic genus. For the purposes of Art. 42, a genus for which a single binomial is validly published (Art. 42.2)."

*Prop. R (069 – Rijckevorsel in Taxon 58: 672)* In the Glossary, delete the entry on nomenclatural novelties.

*Prop. S (070 – Rijckevorsel in Taxon 58: 672)* In the Glossary, rephrase the entry on nomen nudum, so that it reads as follows:

"nomen nudum (nom. nud.). Published without a description or diagnosis, or reference to a description or diagnosis, and thus not validly published (Art. 32.1(d)). Not a name in the sense of the *Code* (see *name*) (Rec. 50B.1)."

*Prop. T (071 – Rijckevorsel in Taxon 58: 672)* In the Glossary, change the spelling of orthographic variants to orthographical variants (to conform to the spelling in Art. 61).

*Prop. U (072 – Rijckevorsel in Taxon 58: 672)* In the Glossary, rephrase the entry on provisional name, so that it reads as follows:

"provisional name. Merely proposed in anticipation of the future acceptance of the taxon concerned, or of a particular circumscription, position, or rank of the taxon and thus not validly published (Art. 34.1(b)). Not a name in the sense of the *Code* (see *name*)."

*Prop. V (073 – Rijckevorsel in Taxon 58: 672)* In the Glossary, rephrase the entry on superfluous name, so that it reads as follows:

"superfluous name. A name that was nomenclaturally superfluous when published, i.e. if the taxon to which it was applied, as circumscribed by its author, definitely included the type of a name which ought to have been adopted, or of which the epithet ought to have been adopted under the rules. A superfluous name is illegitimate unless it is based on a legitimate generic name or on a basionym (Art. 52.1 and 52.3)."

*Prop. W (074 – Rijckevorsel in Taxon 58: 672)* In the Glossary, rephrase the entry on superfluous name, so that it reads as follows:

"superfluous name. A name that was nomenclaturally superfluous when published, i.e., a name published for a taxon for which under this *Code* a different name had to be adopted (either an existing name or a new combination using an existing epithet). A superfluous name is illegitimate unless it based on a legitimate generic name or on a basionym (Art. 52.1 and 52.3)."

*Prop. X* (075 – *Rijckevorsel in Taxon 58: 672*) In the Glossary, in the entry on synonym, replace "the accepted name" by "the correct name". Add references to heterotypic synonym and homotypic synonym. Add a second sentence. The entry then to read as follows:

"synonym. (1) A name considered to apply to the same taxon as the correct name (Art. 7.2) (see *heterotypic synonym* and *homotypic synonym*). (2) a 'name' put forward in the past, but not validly published, which has been applied to the same taxon as the correct name (Art. 34.1(c) and Rec. 50A.1)."

Also, replace "the accepted name" in **heterotypic synonym** and "another name in the same rank" in **homotypic synonym** by "the correct name".

*Prop. Y (076 – Rijckevorsel in Taxon 58: 672)* In the Glossary, in the entry on tautonym, add "would". Also, add a second sentence, so that it reads as follows:

"tautonym. A binary combination in which the specific epithet would exactly repeat the generic name (Art. 23.4). No such combination can be validly published."

*Prop. Z (077 – Rijckevorsel in Taxon 58: 672)* In the Glossary, in the entry on validly published name, delete "effective" and add a sentence so that it reads as follows:

"validly published name. A name published in accordance with Art. 32–45 or H.9 (Art. 6.2). In this *Code*, unless otherwise indicated, a name means a validly published name (see *name*)."

*Prop. AA (044 – Rijckevorsel in Taxon 58: 667)* If Prop. 043 [Art. 53 Prop A] is passed, in the Glossary, in the entry on later homonym, add a second sentence:

039 Braga & Joffily, Taxon 58: 666, Art. 42 Prop. E

"Note: a later homonym is illegitimate (unless conserved or sanctioned)."

*Prop. BB (222 – Perry in Taxon 59: 1910)* Replace the entry for "original material" in the glossary with:

"original material. The specimens and illustrations from which a lectotype may be chosen (see [the appropriate Notes] for details)."

Rapporteurs' comments – Prop. A–Z aim to refine the definitions provided in the Glossary, especially with respect to avoiding use of the word "name" for a name which is not validly published and is therefore not a name in the sense of the Code (Art. 6.3 and 12.1). None of the proposals would alter the meaning of the Code, and they could be referred en bloc to the Editorial Committee, which would evaluate them and implement them as it thought appropriate as part of a review of the Glossary.

*Prop. AA* would be a necessary adjustment to the Glossary if Art. 53 Prop. A is accepted.

*Prop. BB* is a corollary to Art. 9 Props. E–I and would be an appropriate adjustment if those proposals are accepted.

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