

## PROPOSALS TO AMEND THE CODE

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### (287–296) Proposals on distinguishing between later homonyms and isonyms, with further notes on type designations

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This series of proposals deals with cases where it is necessary to decide, in the absence of type designation, whether an instance of later usage of a name can be treated as publication of a later homonym or an isonym. It also takes into account cases where original material has never been in existence, as well as some cases where type specimens are mounted on more than one preparation. A concluding proposal concerns lectotypes and neotypes that are in conflict with the protologue.

#### (287) Add a new paragraph after Art. 53.1:

“53.1bis. For the purposes of Art. 53.1 and 53.4, a name spelled exactly like an earlier name is treated as based on a different type if the two do not share any of these: (a) types previously designated or established in the protologue (holotypes) or by other authors (lectotypes or neotypes); or (b) holotypes or original types established under Art. 40.3; or (c) types previously conserved under Art. 14.9; or (d) at least one syntype under Art. 9.5 or element eligible as type under Art. 10.2; or (e) in the absence of designated or established types, at least one element of original material under Art. 9.3(a) (see also Art. 48.1).”

#### (288) Add a new Note and two new Examples after Art. 53.1 or new Art. 53.1bis:

“*Note 1bis*. When an author uses the same name for the same taxon and does not definitely exclude its type as specified in Art. 48.1, no new name is considered to have been published by that author (see also Art. 6.3bis).”

“*Ex. 7bis*. *Allium globosum* was described independently by Candolle (in Redoute, *Liliac.* 3(30): ad tab. 179. 1807) on living material originating from Marschall von Bieberstein, and then by Bieberstein (*Fl. Taur.-Caucas.* 1: 262. 1808). Although the original material of these names did not overlap, both authors were describing the same species from the same source. No nomenclatural novelty was published by Bieberstein.”

“*Ex. 7ter*. The generic name *Catalpa* Scop. (1777) was based on *Bignonia catalpa* L. (1753). Later, Walter (1788) accepted *Catalpa* with a new generic description and included a single species, *C. bignonioides* Walter (1788), but with no citation of Scopoli or of the Linnaean species name. Walter’s treatment of *Catalpa* does not constitute publication of a new generic name because Scopoli and Walter applied the same name to the same taxon and the original type of Scopoli was not explicitly excluded by Walter.”

Art. 53.1 and 53.4 in their current wordings are impossible to apply when presumed homonyms have no designated types. Nevertheless, it would be impractical to omit such cases from the scope of Art. 53 because they are too numerous and the majority of them are easy to decide (especially when the named taxa are taxonomically or geographically remote). Besides, it would be questionable whether renaming such untypified homonyms is legitimate before their typification is resolved. To allow Art. 53.1 and 53.4 to be applicable to all cases, we propose criteria for determining when names are based on different types, similar to the analogous criteria defined in Art. 48.2 for exclusion of a type. The example of *Allium globosum* was borrowed from Sennikov & Seregin (in *Taxon* 64: 1294–1300. 2015).

The new Art. 6.3bis is the subject of Prop. 289 below.

#### (289) Convert Art. 6.3 Note 2 into a separate paragraph and amend its text as follows (new text in bold, deleted text in strikethrough), and add a new Example:

“*Art. 6.3bis*. The same name based on the same type, published independently at different times perhaps by different authors, **or re-used for the same taxon without exclusion of the type of its name (Art. 48.1)**, is termed an isonym. Only the earliest of these “*isonyms*” has nomenclatural status (**can be treated as a nomenclatural novelty**). The name is always to be cited from its original place of valid publication, and later isonyms may be disregarded (but see Art. 14.15).”

“*Ex. 2bis*. *Euphorbia villosa* Waldst. & Kit. ex Willd. (1799) was validly published by Willdenow with a reference to the then unpublished work of Waldstein & Kitaibel, *Descriptiones et icones plantarum rariorum Hungariae*. A later description of the same species by Waldstein & Kitaibel does not constitute valid publication of a homonym.”

Similar to the problem with later homonyms, according to the present definitions isonyms can be recognized only when the type has already been designated. In other cases, the criterion of type exclusion may be used when a name has not been typified. A desire for this change has been already expressed by Choo & al. (in *Taxon* 63: 921–922. 2014).

We believe that it would be more convenient to users of the *Code* to have the definition of isonyms explicitly formulated in a separate paragraph, not in a Note.

If this proposal is accepted, the corresponding entry in the Glossary can be adjusted editorially.

**(290) Amend Art. 9.7 as follows (new text in bold) and add a new Example:**

“9.7. A neotype is a specimen or illustration selected to serve as nomenclatural type if no original material is extant **or has been in existence**, or as long as it is missing (see also Art. 9.16).”

“*Ex. 6bis. Vriesea fenestralis* Linden & André (in Ill. Hort. 22: 124. 1875) was stated to have been described solely on the basis of living plants (“Ad viv. desc.”) introduced from Brazil in 1872 and cultivated in the garden of Jean Jules Linden. In the absence of any original material, Plate CCXV accompanying the protologue was designated as the “lectotype” (correctable to neotype) of the name by Loyola de Moura & al. (in J. Torrey Bot. Soc. 140: 330. 2013).”

There were numerous cases in the past, especially among cultivated plants, when new species or infraspecific taxa were described on the basis of living material only and no specimens were preserved. In such cases there had never been any physical material eligible for designation as a lectotype, and consequently no original material by definition (Art. 9.3).

**(291) Add a new Note after Art. 7.1:**

“*Note 1.* As long as a name is not typified or its type is missing, its application may be determined by established interpretation of other elements of the protologue.”

This Note aims to legalize what is a common understanding in plant nomenclature, starting from Linnaeus or even before. A side aim of this Note is that it may discourage individuals from insufficiently researched typifications that are published solely on the belief that a plant name must be typified before its use of any kind.

**(292) Amend the second sentence of Art. 40.3 to read (new text in bold, deleted text in strikethrough):**

“Similarly **For the purpose of Art. 40**, for the name of a new species or infraspecific taxon, mention of a single specimen or gathering (Art. 40.2) or illustration (when permitted by Art. 40.4 or 40.5), even if that element is not explicitly designated as type, is acceptable as indication of the type (but see Art. 40.6).”

Dating from the *Berlin Code* (1988), the predecessor of the present-day Art. 40.3, then Art. 37.3, allowed the name of a species or an infraspecific taxon to be validly published on or after 1 January 1958 if a single element was mentioned in the protologue. Later this was translated into the provision that a single specimen or illustration may be mentioned to qualify for indication of the type. In the *Berlin Code*, original material (footnote to Art. 7.4) was defined to include “illustrations examined by an author prior to publication of a name and associated by the author with the concept of the named taxon”.

However, this provision came into conflict with the definition of original material when it was more precisely formulated in the *Tokyo Code* (1994). From that time onwards, original material was defined to include only those “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 was based”. This definition excludes illustrations that may have been cited or reproduced in the protologue but still not used by the original author for the validating descriptive matter.

To avoid this conflict, a change to Art. 40.3 is proposed. Without this change, in the absence of explicit type designation or cited specimens any single illustration cited in the protologue of a species name automatically qualifies for indication of the holotype. This is definitely contrary to the established practice; if strictly followed,

this rule may lead to change, among others, lectotypes of dozens of Linnaean names that are specimens designated in the presence of references to single illustrations.

One may assume that as Art. 40.1 only concerns names published on or after 1 January 1958, the provisions of Art. 40.3 do not apply to earlier publications. In the absence of any direct restriction (as placed in Art. 40.4 and 40.5), its effect is apparently applicable to other names, too. Adding this restriction also to Art. 40.3 is deemed to be the simplest and safest solution, making no harmful effect on species and infraspecific names published on or after 1 January 1958. There is no need to expand this restriction to names of new genera or subdivisions of genera because names of originally monospecific genera have always been assumed to have types established in the protologue (since in such cases there is no need to designate a type from a single element).

**(293) Amend Art. 9.1 Note 1 as follows (new text in bold, deleted text in strikethrough):**

“*Note 1.* Any designation made by the original **or typifying** author, if definitely expressed at the time of the original publication of the name of the taxon **or upon a later type designation**, is final (but see Art. 9.11, ~~and 9.15~~, **9.19, 9.20**). If the **original** author used only one element, it must be accepted as the holotype. If a name of a new taxon is validly published solely by reference to a previously published description or diagnosis, the same considerations apply to material used by the author of that description or diagnosis (see Art. 7.7; but see Art. 7.8).”

The present wording of Art. 9.1 Note 1 seems to be limited to holotypes (referring to “original author”) although, by extension, it can be logically applied to all kinds of type designations.

**(294) Add a new Example after Art. 8.3:**

“*Ex. 5bis.* The neotype of *Ceratozamia fuscoviridis* W. Ball, originally labelled “Hort. Bot. Glasnevin, 1881” (K), consists of a single leaf mounted on three herbarium sheets and a cone preserved in liquid, which have been cross-labelled as parts of the same specimen (sheets 1–3 and a jar) by herbarium curators shortly before the type designation made by Calonje & Sennikov (in *Taxon*, in press).”

This example is placed under Art. 8.3 but also serves to exemplify the amended Art. 9.1 Note 1. It demonstrates that cross-labelling of specimens for the purposes of typification can be done at any time but prior to the type designation.

**(295) Add a new Example after new Art. 8.2 Note 1 (see Taxon 64: 1338. 2015):**

“*Ex. Iter. Solidago* ×*snarskisii* Gudžinskas & Žalneravičius (in *Phytotaxa* 253: 148. 2016) was validly published with a single gathering at BILAS indicated as type, whose parts have been numbered separately in the field, mounted on separate sheets and designated as follows: 76801 (generative shoot) and 76802 (vegetative shoot), holotype on two cross-labelled sheets; 76803 and 76804, isotypes.”

This example, complementing *Ex. Ibis* proposed earlier (Sennikov in *Taxon* 64: 1338. 2015), demonstrates that field numbers can be different on each sheet within the holotype specimen mounted on more than one sheet and also its duplicates (isotypes).

**(296) Amend Art. 9.19 to read (new text in bold, deleted text in strikethrough):**

“9.19. The author who first designates (Art. 7.9 and 7.10) a lectotype or a neotype in conformity with Art. 9.11–9.13 must be followed,

but that choice is superseded if (a) the holotype or, in the case of a neotype, any of the original material is rediscovered; the choice may also be superseded if one can show that (b) **in the case of a lectotype designated from uncited specimens or cited or uncited illustrations, or in the case of a neotype**, it is in serious conflict with the protologue and another element is available that is not in conflict with the protologue **validating description or diagnosis, or other material validating the name (Art. 38.1(a))**, or that (c) it is contrary to Art. 9.14.”

This change is proposed because the present wording of Art. 9.19 is controversial and too difficult to apply, and also because it is in a certain contradiction with Art. 9.3. At present, under the provisions of Art. 9.19(b), a lectotype or neotype may be changed if it is in serious conflict with the protologue. However, syntypes, paratypes and their duplicates are automatically excluded from this rule because they are cited in the protologue (Art. 9.5); forming part of the protologue, such citations cannot be in any conflict with it. In addition, a protologue may also include elements for which their value in typification is limited or doubtful (e.g., the frequently debated cases of incomplete provenance in Linnaean protologues when lectotypes may come from outside the “original” distribution area, or neotypes designated from outside the locus classicus which are in that way in a certain conflict with the protologue).

This means that it is only those lectotypes that are designated from uncited specimens or cited or uncited illustrations that may fall into Art. 9.19(b). The status of such elements as original material is determined by their agreement with the validating description or diagnosis (Art. 9.3(a)); for this reason it would be logical to specify that such lectotypes can be superseded if in conflict with the validating description or diagnosis. At the same time the supplementary

restriction “if ... another element is available that is not in conflict with the protologue” becomes unnecessary because the elements that are in conflict with the validating description or diagnosis cannot be part of original material and thus such lectotype designations are correctable to neotypes (which can be superseded under Art. 9.19(a)).

The earlier Prop. 190 (Sennikov in Taxon 65: 406–407. 2016) on the sources of original material should not be interpreted as permitting type designations from any uncited elements but those “upon which the description or diagnosis validating the name was based” (Art. 9.3). If one author used descriptive matter of another author, for the purposes of Art. 9.3(a) the relevant materials of both authors can be treated as original if it can be shown that on these materials the validating description or diagnosis was based. No conflict of such material with the validating statement is assumed under the proposed wording of Art. 9.19.

Regarding neotypes, the same considerations about parts of the protologue may apply. Validating descriptions or diagnoses are the most important part of the protologue; if anything may resolve the conflict, it should logically be the validating descriptive matter. In the case of neotypes, the restrictive clause “if ... another element is available that is not in conflict with the protologue” is logically not applicable.

The effect of Prop. 35 (Sennikov in Taxon 64: 182. 2015) is taken into account in the proposed correction.

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