

NOMENCLATURE COMMUNICATIONS

(296–303) Proposals to clarify basionyms and replaced synonyms in Articles 6, 9 and 41

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While it is usually fairly easy to determine the basionym of a new combination or name at new rank, one problem area involves a string of new combinations with the same basionym. In an effort to clarify this particular issue, Art. 6.10 of the *Shenzhen Code* (Turland & al. in *Regnum Veg.* 159. 2018) included a new rule that states that a “basionym does not itself have a basionym”. The explanatory language accompanying the proposal that resulted in the new rule (Prop. 303, Greuter in *Taxon* 65: 898. 2016) stated that the rule was added so that a new combination (which obviously has a basionym) cannot serve as a basionym of a later name, as had been tacitly assumed by Art. 41 Ex. 25.

Article 41 Ex. 25 states: “[...]”*Machaerina iridifolia*” was proposed [...] with a full and direct reference to “*Cladium iridifolium* Baker [...]” However, *C. iridifolium* had been proposed [...] based on *Scirpus iridifolius* Bory [...]. Because Baker provided an explicit reference to Bory, Art. 41.8(a) does not apply and the combination under *Machaerina* was not validly published [...].” Based on the explanation of the proposal (Greuter, l.c.), the new language in Art. 6.10 is intended to make it clear that *C. iridifolium* cannot be the basionym of *M. iridifolia*. However, the statement that a “basionym does not itself have a basionym” can be misread to suggest that *C. iridifolium* no longer has a basionym and *M. iridifolia* is validly published.

We propose that Art. 6.10 be revised to reflect the explanatory language of Greuter’s earlier proposal.

(296) Amend Art. 6.10 as follows (new text in bold, deleted text in strikethrough):

“6.10. A new combination (combinatio nova, comb. nov.) or name at new rank (status novus, stat. nov.) is a new name based on a legitimate, previously published name, which is its basionym. The basionym ~~does not itself have a basionym~~; it provides the final epithet¹, name, or stem of the new combination or name at new rank. **A new combination or name at new rank cannot be the basionym of a later new combination or name at new rank; in this case, the basionym of all the later names is the earliest name that provides the final epithet, name, or stem of the later names (See-see also Art. 41.2)."**

Article 41 Ex. 25 raises a question: why is *Machaerina iridifolia* not validly published as a replacement name for *Cladium iridifolium*? Article 6.12 states: “A name not explicitly proposed as a substitute for an earlier name is nevertheless a replacement name either (a) if it is

validated solely by reference to that earlier name or (b) [...]” Literally read, a new name whose protologue does not contain or refer to a description or diagnosis or correctly refer to a basionym can be validly published as a replacement name by citing and providing a full and direct bibliographic reference to any earlier validly published name. In this case, the only way to validate *M. iridifolia* is by reference to *C. iridifolium*; *M. iridifolia* appears to be a validly published replacement name.

Mosyakin (in *Taxon* 70: 1391–1392. 2021) correctly noted that there is no rule that a new combination cannot be a replaced synonym. Mosyakin (l.c.) addressed these concerns by proposing a new rule in Art. 41.5. Because these concerns are addressed in Art. 6 for new combinations and names at new ranks, we prefer that they be addressed in Art. 6 for replacement names as well. To address these problems, we propose a new Article that clarifies the meaning of replaced synonyms.

(297) Add a new Article to Art. 6:

“6.n1. A new combination or name at new rank cannot be the replaced synonym of a later new combination or name at new rank, because the basionym of the earlier name would be the actual replaced synonym, unless the earlier new combination or name at new rank is the illegitimate name being replaced by a replacement name.”

If this proposal is rejected, we recommend that the Editorial Committee delete Art. 41 Ex. 25. If the proposal is accepted, we recommend the following changes to Art. 6.12 and Art. 41 Ex. 25.

(298) Amend Art. 6.12 and Art. 41 Ex. 25 as follows (new text in bold):

“6.12. A name not explicitly proposed as a substitute for an earlier name is nevertheless a replacement name either (a) if it is validated solely by reference to that earlier name, **which is its replaced synonym**, or (b) under the provisions of Art. 7.5.”

“Ex. 25. (a) The intended new combination “*Machaerina iridifolia*” was proposed by Koyama (in *Bot. Mag. (Tokyo)* 69: 64. 1956) with a full and direct reference to “*Cladium iridifolium* Baker, *Flor. Maurit.* 424 (1877)”. However, *C. iridifolium* had been proposed by Baker as a new combination based on *Scirpus iridifolius* Bory (*Voy. Îles Afrique* 2: 94. 1804). **Under Art. 6.10 and 6.n1, *C. iridifolium* cannot serve as the basionym or replaced synonym of *M. iridifolia*.** Because Baker provided an explicit reference to

Bory, Art. 41.8(a) does not apply and the combination under *Machaerina* was not validly published by Koyama.”

The last sentence of Art. 6.11 states “The replaced synonym, when legitimate, does not provide the final epithet, name, or stem of the replacement name (see also Art. 41.2 and 58.1).” It is not clear whether this rule also applies to Art. 6.12 and 6.13. In addition, the use of “does not” instead of “may not” suggests that authors may choose to use the same epithet when the replaced synonym is legitimate but are not required to do so. In fact, if it is the same epithet, it is a basionym, not a replaced synonym. We suggest that these points be added in a new Article.

(299) Add a new Article to Art. 6 and delete the last sentence of Art. 6.11 as follows (deleted text in strikethrough):

“6.n2. The replaced synonym, when legitimate, may not provide the final epithet, name, or stem of the replacement name (see also Art. 41.2 and 58.1).”

“6.11. A replacement name (nomen novum, nom. nov.) is a new name published as an explicit substitute (avowed substitute) for a legitimate or illegitimate, previously published name, which is its replaced synonym. ~~The replaced synonym, when legitimate, does not provide the final epithet, name, or stem of the replacement name (see also Art. 41.2 and 58.1).~~”

Article 41.3 states “Before 1 January 1953 an indirect reference (see Art. 38.14) to a basionym or replaced synonym is sufficient for valid publication of a new combination, name at new rank, or replacement name.” Article 41 Ex. 3, 7 and 8 address new combinations that refer to an earlier name (including a name that was not validly published) to which the basionym also refers. However, there is no Example that addresses the treatment of a name that refers to a new combination or name at new rank but not their common basionym (or replaced synonym).

This is particularly critical if the new name refers to a name that is treated as a new combination or name at new rank under Art. 41.4. (Under that rule, a name that could be validly published as the name of a new taxon or a replacement name is treated as a new combination or name at new rank if that was the author’s presumed intent and there is a potential basionym that applies to the same taxon, even though the protologue did not refer to a basionym.) If this later publication occurs on or after 1 January 1953, Art. 41.8(a) provides that a new combination or name at new rank referencing only an earlier new combination or name at new rank is validly published under certain circumstances. However, it is not clear that such a name is validly published if it was published prior to that date. To clarify this, we suggest the following new Note.

(300) Add a new Note to Art. 41:

“Note n. Before 1 January 1953, a reference to an earlier new combination, name at new rank, or replacement name is deemed to include a reference to the basionym or replaced synonym of that name.”

Articles 6.11–6.13 address replacement names and replaced synonym but do not explain why it is possible to replace a legitimate name. We propose the following new Note to clarify this point.

(301) Add a new Note to Art. 6:

“Note n. A replacement name may be published for a legitimate replaced synonym if it is not possible to publish a legitimate new combination or name at new rank because the new name would be an illegitimate later homonym or could not be validly published (such as a tautonym).”

Article 41.4 states “If, for a name of a genus or lower-ranked taxon published before 1 January 1953, no reference to a basionym is given but the conditions for its valid publication as the name of a new taxon or replacement name are fulfilled, that name is nevertheless treated as a new combination or name at new rank when this was the author’s presumed intent and a potential basionym (Art. 6.10) applying to the same taxon exists.” In many cases, it may not be possible to ascertain the intent of another party by virtue of a meagre protologue. As a result, botanists (and index authorities) are likely to take different positions on any particular name.

It is important to note that Art. 41.4 already requires a determination that the potential basionym and the later name are the same taxon. In light of that requirement, we do not see any reason to seek out the author’s intent. The *Shenzhen Code* (i.e. Art. 6.9, 41.4 and 41.8) expresses a preference for new combinations in cases where the name might also be the name of a new taxon or replacement name. In our view, this preference is warranted because it ensures that the names are homotypic and provides the earliest date of priority if there are synonyms for the name. Furthermore, we see no benefit in synonyms with the same epithet having different types, which may lead to later confusion if the taxon is later split into more than one taxon.

We also note that Art. 41.8, which addresses similar situations for names published on or after January 1953, does not require an assessment of the author’s intent. In that Article, the fact that the author referenced a different work is sufficient, even though the author obviously did not intend in some cases to publish a new combination or name at new rank. To simplify this rule, we suggest the following change to Art. 41.4.

(302) Amend Art. 41.4 as follows (deleted text in strikethrough):

“41.4. If, for a name of a genus or lower-ranked taxon published before 1 January 1953, no reference to a basionym is given but the conditions for its valid publication as the name of a new taxon or replacement name are fulfilled, that name is nevertheless treated as a new combination or name at new rank when ~~this was the author’s presumed intent and~~ a potential basionym (Art. 6.10) applying to the same taxon exists.”

We have seen more than one case where an author designated an element cited in the protologue of a new combination as a lectotype even though the protologue of the basionym did not cite that element (and the author of the basionym did not use it) and cited one or more other elements. Article 7.3 states that the type of a new combination is the type of its basionym but does not address the original material of these names. A clarification of this rule is presented below through the inclusion of a new Note in Art. 9.

(303) Add a new Note to Art. 9:

“Note n. Because a new combination, name at new rank or replacement name is typified by the type of its basionym (Art. 7.3) or replaced synonym (Art. 7.4; but see Art. 7.5), the original material is that of the basionym or replaced synonym. A lectotype may not be designated from among elements cited or used by the author of the later name that are not original material, although such an element may be designated as a neotype if no original material exists.”

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