Proposals Mainly concerning Names of Taxa Which Include the Type of the Name of the Next Higher Taxon

Author(s): R. K. Brummitt and A. O. Chater

Source: Taxon, Vol. 17, No. 6 (Dec., 1968), pp. 652-658

Published by: International Association for Plant Taxonomy (IAPT)

Stable URL: http://www.jstor.org/stable/1218009

Accessed: 05/04/2014 09:33
PROPOSALS MAINLY CONCERNING NAMES OF TAXA WHICH INCLUDE THE TYPE OF THE NAME OF THE NEXT HIGHER TAXON

R. K. Brummitt * and A. O. Chater **

The International Code of Botanical Nomenclature includes rules governing names of taxa which include the type of the name of the next higher taxon at three different taxonomic levels: Article 19 deals with such names for subdivisions of families, Art. 22 for subdivisions of genera, and Articles 25, 26 and 27 for infraspecific taxa. It might be expected that these Articles should be closely comparable in their content and in their wording, but in fact comparison of them at the three different levels shows important omissions in some as well as loose and ambiguous wording. We therefore make proposals below for the improvement of these Articles. Furthermore, a recent proposal (number 107) by C. V. Morton in Taxon 17 (2): 236–237 (1968) has drawn attention to the fact that the Code is open to conflicting interpretations on an important issue relevant to these Articles, and as we have frequently come up against this problem and always adopted a procedure contrary to that proposed by Dr. Morton we wish here to make proposals for an alternative solution.

a) Proposals to improve consistency and wording of the present articles

It appears to be simply a historical accident that the relevant rules applying at infraspecific level are numbered under three separate Articles — 25, 26 and 27 — whereas the comparable rules for names of subdivisions of families and of subdivisions of genera are under single Articles. The present Arts. 25 and 26 were derived from Arts. 34 and 35 of the Stockholm (1952) Code, the first of which included several paragraphs dealing with diverse aspects of names of infraspecific taxa, while the other covered a different point. As a result of subsequent modification of both, however, the first, the present Art. 25, now includes only two paragraphs, which are quite unconnected in meaning, but the second of which has become so closely allied to Art. 26 that it seems that they would be best treated as the same Article, as is indeed already done where names of subdivisions of families and of subdivisions of genera are concerned. Article 27 might also well have been included in Art. 26 (or abolished altogether since it is covered by the combination of Arts. 24, 25 and 64), but as this would result in renumbering all the subsequent Articles we prefer to leave it where it is. Before proposing the transfer of the second paragraph of Art. 25 to Art. 26 we must now consider some problems in the wording of these various Articles.

It is now generally accepted that in nomenclatural discussion one cannot correctly refer to ‘the type of a taxon’ — one must refer to ‘the type of the name of the taxon’. Nor can one correctly refer to ‘the type of an epithet’; the epithet officinalis has no type, but the names Stachys officinalis, Valeriana officinalis, Veronica officinalis etc., all have types (see also proposal 139 by R. McVaugh in Taxon 17 (4): 460–461. 1968). In the present Code, however, we find reference to “the type of the next higher taxon” (Art. 19, para. 3), “the type species of any subgenus” (Art. 22, para. 2), “the type of this higher taxon” (Art. 22, para. 3), “the nomenclatural type of the epithet” (Art. 22, para. 4 and Art. 26), “the nomenclatural type of the higher taxon” (Art. 25, para. 2), “the nomenclatural type of a species or taxon...” (Art. 9), “the holotype of the polygamous species Rheedia kappleri...” (Art. 9, Example), “the nomenclatu-

* Royal Botanic Gardens, Kew, Surrey, Great Britain.
** Botany Department, The University, Leicester, Great Britain.
The expression 'the nomenclatural type of a taxon' seems to be a loose and unacceptable substitute for 'the type of the name of a taxon'. In An Annotated Glossary of Botanical Nomenclature (Regnum Vegetabile 56, 1968) McVaugh, Ross & Stafleu clearly equate 'type' with 'nomenclatural type', and certainly in the Code of Nomenclature the word 'type' is used only in a nomenclatural sense. Indeed, it seems superfluous for the Code to specify 'nomenclatural type' at all, for whenever it refers to a 'type' it implicitly means 'nomenclatural type'. To refer to 'the nomenclatural type of a taxon' is just the same as to refer simply to 'the type of a taxon', and is equally unacceptable. Furthermore, one taxon may include as many [nomenclatural] types as it has synonyms, and it is significant that in Art. 22, para. 1, reference is rightly made to "the type species of the correct name of the genus" (our italics). In fact, whenever reference is made to "the type of a taxon" what is meant is "the type of the correct name of the taxon". If the word 'correct' is inserted then the rather obscure, and possibly ambiguous, sentence "This epithet can no longer be used if that of the next higher taxon is changed" at the end of Art. 26 becomes unnecessary and can with advantage be deleted. We note anyway that this sentence has never been inserted in Arts. 19 and 22 where in the present Code it should be equally applicable.

It seems unsatisfactory that mention of the type of a name of a taxon which includes the type of the name of the next higher taxon is made in Arts. 22 and 25 only as an extension of the sentence dealing with automatic establishment of such names, and is not included at all in Art. 19. The identity of the type of such names is in no way dependent on automatic establishment, and reference to it should be made after the sentence stating what the form of such names is. The principle of automatic establishment is a quite different matter which should follow in a separate paragraph. Furthermore, in all places where the Code states that valid publication of a name which does not include the type of [the correct name of] the next higher taxon automatically establishes the name of a second taxon which does include that type, it is clear that this can only apply if there has not already been such a name before. The words 'The first' should be added before 'valid publication'.

We note further that Art. 26 is not explicit in saying "the epithet of this higher taxon must be repeated unaltered but without citation of an author's name". In the example following in the Code the name of the species is Lobelia spicata Lam. and the proposed name of the variety which includes the type of this specific name is Lobelia spicata var. originalis McVaugh. Now the varietal name repeats the whole of the specific name, and therefore includes both a specific and a varietal epithet, and it might be argued that so long as "Lam." is not cited in the varietal name Lobelia spicata var. originalis this fulfils the requirements of the article! What of course the Code intends is that in the correct varietal name (in this particular case) the specific epithet must be used as the varietal epithet, and that no author's name should be cited after the varietal, not specific, epithet. In the third example the name Vochysia ruja Mart. subsp. sericea (Pohl) Stafleu includes two epithets, ruja and sericea, while the name Vochysia ruja subsp. sericea var. fulva includes three epithets, and it becomes necessary to make it clear which of these epithets is referred to. When the epithet at the lowest rank accorded to the taxon is meant it may be referred to simply as "the final epithet" of the name.

Bearing these considerations in mind we now propose in effect transfer of the second paragraph of Art. 25 to Art. 26, with appropriate rewording:
Proposal 189. i) Delete the second paragraph and example from Art. 25; ii) Modify Art. 26 to read: “The name of an infraspecific taxon which includes the type of the correct name of the next higher taxon bears as its final epithet the same final epithet as the correct name of the next higher taxon, but without citation of an author’s name after it. Its type is the same as that of the correct name of the next higher taxon. / The first valid publication of a name of an infraspecific taxon which does not include the type of the correct name of the next higher taxon automatically establishes the name of a second taxon of the same rank which does include that type”; iii) Insert the example formerly under Art. 25 under Art. 26, adding the words “the name” before “Lycopodium inundatum L.” in the last phrase.

Proposal 190. Reword Art. 27 as follows: “The final epithet in the name of an infraspecific taxon may not repeat unchanged the epithet of the correct name of the species under which the taxon is placed, except when the two names have the same type”. As we have noted above, this Article is in fact superfluous, being already covered by the combined effect of Arts. 24 (note), 25 (para. 2) and 64 (second part). However, it is convenient to retain it for emphasis and to avoid changing the numbering of subsequent Articles. It is not necessary to refer to “that of the next higher taxon”, as the case of two identical infraspecific epithets is explicitly covered by both the Note to Art. 24 and Art. 64.

The Articles covering the same ground for names of subdivisions of families and subdivisions of genera have generally lagged behind those at infraspecific level in their development through successive Congresses. In the Stockholm (1952) Code Article 32 stated merely that “The subgenus containing the type species of a generic name must bear that name unaltered”. This was extended as Art. 22 of the Paris (1956) Code to include names of sections, and automatic establishment of such names was mentioned in a new paragraph. No mention at all of names of ‘typical’ subdivisions of families was made until the Montreal (1961) Code, and even then no allowance was made for automatic establishment of such names, nor has it been added since. The equivalent of Art. 27 is also still quite lacking for subdivisions of families and of genera in Arts. 19 and 22 respectively. We hope that our proposals below will complete, or at least further advance, the natural evolution of both these Articles.

Proposal 191. Reword the first three paragraphs of Art. 22 as follows: “The name of a subgenus or section which includes the type species of the correct name of the genus to which it is assigned bears that generic name unaltered as its epithet, but without citation of an author’s name after it (see Art. 46). Its type is the same as that of the generic name. / Similarly the name of a section including the type species of the correct name of a subgenus bears as its sectional epithet the epithet of that subgeneric name, and has the same type as it. / The first valid publication of a name of a subgenus or section which does not include the type of the correct name of the next higher taxon automatically establishes the name of the other subgenus or section respectively which does include that type.”

Proposal 192. Insert the following after the third paragraph of Art. 22: “The final epithet in the name of a subdivision of a genus may not repeat unchanged the correct name of the genus, except when the two names have the same type.” This is equivalent to the rewording of Art. 27 proposed above.

Proposal 193. Amend the present fourth paragraph of Art. 22 from the comma as follows: “this species is the type of the name of the subdivision of the genus unless the original author of that name designated another type.” One should not refer to
“the author of the subdivision of the genus”; the author is responsible for creating only the name, not the taxon itself.

Proposal 194. i) In the third paragraph of Art. 19 after the words “type of” insert the words “the correct name of”; ii) Add at the end of this paragraph the sentence “Its type is the same as that of the correct name of the next higher taxon.”

Proposal 195. Insert the following after the third paragraph of Art. 19: “The first valid publication of a name of a taxon at a rank below family and above genus which does not include the type of the correct name of the next higher taxon automatically establishes the name of another taxon at the same rank which does include that type.”

We note that, according to the Code, whereas the name of a subdivision of a genus is a combination of a generic name and an epithet, the name of a subdivision of a family is a single word and does not include the family name. This is quite evident from Art. 19, and is clearly stated by McVaugh, Ross & Stafleu op. cit. p. 18. This leads to the anomalous situation of a whole name having no author citation at all: whereas the name of the subgenus of the genus Rosa L. including the type of the generic name would be cited as ‘Rosa L. subgen. Rosa’, the name of the subfamily of the Rosaceae Juss. including the type of the family is to be cited simply as ‘Rosoideae’, not ‘Rosaceae Juss. subfam. Rosoideae’. This seems to be quite contrary to the spirit of Art. 46, and could be corrected by deletion of the requirement that names of such ‘typical’ subdivisions of families, which by their nature consist of a single word, should not be followed by citation of an author’s name. Alternatively one could regard names of subdivisions of families as a combination of the family name and an infrafamilial epithet and amend the wording of Art. 19 accordingly. We here propose the two alternative solutions.

Proposal 196. i) Delete from Art. 19 paragraph 3 the words “but without citation of an author’s name (see Art. 46).” ii) Add to Art. 46 the Example “Rosoideae Focke”.

Alternative proposal 196A. Amend Art. 19 to the effect that the name of a subfamily, tribe or subtribe is a combination of a family name with an appropriate epithet.

Proposal 197. Insert under Art. 19 the following paragraph: “The name of a subdivision of a family may not be based on the same stem of a generic name as is the name of the family or of any subdivision of the same family unless it has the same type as that name.” This is equivalent to Art. 27 covering names of infraspecific taxa and the analogous proposal above to cover names of subdivisions of genera, and takes into account the fact that Art. 64 part 2 refers only to names of subdivisions of genera and of species.

Our final proposals under this heading arise from the point discussed above that one may not correctly refer to “the type of a taxon” but rather to “the type of the name of a taxon”.

Proposal 198. Amend Art. 9 as follows: i) The first sentence to read: “The type (holotype, lectotype or neotype) of a name of a species or infraspecific taxon is a single specimen...”; ii) The first Example to read: “The holotype of the name Rheedia kappleri Eyma, which applies to a polygamous species, is a male...”; iii) The second Example to read: “The type of the name Tillandsia bryoides...”.

Decemer 1968
Proposal 199. Amend Art. 10 to read: “The type of a name of a genus... that of a name of a family... Note 1. The type of a name of a family...”.

Proposal 200. i) Art. 37 to read “... only when the type of the name is indicated...; ii) Recommendation 37B to read “When the type of the name of a new taxon...”

b) Proposals concerning priority for names of taxa including the type of the name of the next higher taxon

When the present Art. 26 was first written into the Code, requiring that “In the name of an infraspecific taxon which includes the nomenclatural type of the next higher taxon, the epithet of this higher taxon must be repeated unaltered...”, it seems that no consideration was given to the problem of whether such names could have any standing in questions of priority, and no explicit guidance is in fact given in the Code. This problem does, however, frequently arise, as for example when one species under which a subspecies has been described and named is then sunk as a whole as a subspecies of another species. Which epithet does one adopt for the new subspecific name required — that applied to the species being sunk, or that of the name of the other subspecies which has been described and is now not recognized? Dr. C. V. Morton in Taxon 17 (2): 236–237 (1968) has recently made a proposal (which should be reworded “However, the names of such typical infraspecific taxa are not to be taken into consideration for the purposes of priority” — our italics) seeks to rule out the possibility of taking up the ‘typical’ epithet in such circumstances. Thus, in the example given by Morton, when Campanula gieseckiana, under which a subspecies groenlandica has been described, is sunk as a whole as a subspecies of C. rotundifolia the epithet gieseckiana could not be used in the new subspecific name but the epithet groenlandica would have to be adopted.

This procedure proposed by Dr. Morton seems to us to be most unfortunate, unnecessary, and in fact contrary to logical interpretation of the Code. It seems logical, and certainly much more useful, to allow for the retention of the epithet previously applied to the taxon with the broader circumscription and wider geographical range, if this is so desired. Thus according to our proposal below, which is entirely consistent with the present Code, one would have the choice of adopting either of the two epithets (gieseckiana or groenlandica in the example above) since both were published at the same time. The practical advantages of this seem obvious, and we suggest that in this example most botanists would prefer to retain the epithet gieseckiana. Although the meaning of an epithet has no significance from the purely nomenclatural point of view, it should be noted that Dr. Morton's proposal would in such cases always force us to use for one taxon an epithet which had been applied originally to an atypical minor part of it, and would thus in many cases give rise to an unfortunate misnomer.

The following proposal should be applied to Art. 26 if our proposal 189 above is accepted, or if not then to Art. 25.

Proposal 201. i) After the Article add a Note: “The name of an infraspecific taxon which includes the type of the correct name of the next higher taxon, its final epithet therefore repeating that of the name of the next higher taxon, must be taken into account in questions of priority. The date of publication of such a name is that of the first valid publication of the name of another taxon at the same rank under the same next higher taxon, whether or not is appeared as such at that time”.

TAXON VOLUME 17
ii) At the end of the Article add one or both of the following Examples: “When the name Utricularia stellaris L. fil. var. coromandeliana A. DC. was published in 1844, the name U. stellaris var. stellaris was also established, even though it was not explicitly mentioned. When U. stellaris was later considered a variety of U. inflexa Forssk. both of the epithets stellaris and coromandeliana were available for adoption for it, both names including these as varietal epithets having been published simultaneously. The first author to make a choice was P. Taylor in 1964, who chose the former, and the correct name of the taxon as a variety of U. inflexa is U. inflexa var. stellaris (L. fil.) P. Taylor. / When the name Heracleum sibiricum L. subsp. lecokii (Godron & Gren.) Nyman was published in 1879 the name H. sibiricum subsp. sibiricum was also established, even though it was not explicitly mentioned. When H. sibiricum, including H. lecokii Godron & Gren., was later considered a subspecies of H. sphondylium L., both of the epithets sibiricum or lecokii were available for adoption for it, both names including these as subspecific epithets having been published simultaneously. The first author to adopt one or other of these was Simonkai in 1887, who used the former, and the correct name of the taxon as a subspecies of H. sphondylium is H. sphondylium subsp. sibiricum (L.) Simonkai”.

In a discussion of the Utricularia example given above, P. Taylor in Kew Bull. 18: 196 (1964) observes that under Art. 60 of the Code it might be thought that the epithet coromandeliana should have been adopted, but he argues that under Art. 25 “when A. De Candolle established var. coromandeliana he at the same time established var. stellaris and I may thus choose either epithet. The practical advantages of retaining the old specific epithet in the lower rank are obvious, although I am well aware that nomenclaturists do not all agree that this is an allowable interpretation of the Code”. Similarly, in the Heracleum example, when the widespread and well-known H. sibiricum is regarded as a subspecies of H. sphondylium it is much preferable to retain the epithet sibiricum for it rather than be forced to adopt the epithet lecokii which has been applied only to a local variant. The name H. sphondylium subsp. sibiricum has in fact been adopted for Flora Europaea 2 (in press), but according to Dr. Morton’s proposal this would be incorrect and a new combination would be necessary.

Among other similar examples which have come to our notice the following three may be mentioned, in all of which a new combination would have to be made according to Dr. Morton’s proposal: Pittosporum mannii subsp. ripicola (J. Léonard) Cufodontis, Fl. Zambesia 1: 302 (1960), based on P. ripicola J. Léonard under which there was already a subsp. katanense J. Léonard; Indigofera welwitschii Bak. var. remotiflora (Taub. ex Bak. f.) Cronquist, Fl. Congo Belge 5: 172 (1954), based on I. remotiflora Taub. ex Bak. f. under which there was already a var. angolensis Bak. f. (see Gillett in Kew Bull. addit. ser. 1: 134 (1958)); and Bersama abyssinica Fresen. var. ugandensis (Sprague) Verdcourt in Kew Bull. 12: 351 (1957), based on B. ugandensis Sprague under which there was already a var. serrata Bak. f. (see Verdcourt, Fl. Trop. E. Afr., Melianthaceae: 6 (1958)).

We cannot agree with Dr. Morton that names of ‘typical’ infraspecific taxa repeating the specific epithet are “mere formulas or conventions.” They are undoubtedly names in the sense of the Code, as Articles 25 and 26 clearly state. In this connection we may note that if our proposal is in fact adopted, the date of publication of the name of an infraspecific taxon including the type of the name of the next higher taxon may in many cases be a matter of some significance. It is therefore perhaps unfortunate that when the present Article 26 was introduced into the Code following the Stockholm Congress it was decided that such epithets should not be followed by an author citation (1952 Code, Art. 35). Thus, in the first example we give above it would have been useful to have cited Utricularia stellaris L. fil. var. stellaris (L. fil.) A. DC. or perhaps just var. stellaris A. DC. However, present practice is now so well established that it seems too late to introduce such a procedure.
Now although Dr. Morton’s proposal was related only to names of infraspecific taxa, these considerations clearly apply in the same way to names of subdivisions of genera and of subdivisions of families. At generic level the problem will probably arise frequently when two genera are combined. For example, current taxonomic opinion tends to regard *Celsia* as not generically distinct from *Verbascum*; but Bentham, in De Candolle’s Prodr. Mus., recognized under *Celsia* an ‘atypical’ section *Arcturus*, and if, as may be reasonable, the whole of *Celsia* is to be regarded as a section of *Verbascum* the question arises as to whether it can be called sect. *Celsia* or whether it must be called sect. *Arcturus*. It seems desirable to retain the well-known name *Celsia* as the sectional epithet under *Verbascum*. Similarly, although families are sunk at a rather lesser rate than are species or genera, we are still far from general agreement over family limits, while the nomenclatural problems in subfamily, tribal and subtribal names are certainly very far from being settled. What, for example, is the correct name for the family Illecebraceae, in which Bentham & Hooker recognized tribes, when it is itself regarded as a tribe of the Caryophyllaceae? Similar examples must occur within some of the larger families at tribal and subtribal level, as in the Compositae and Leguminosae where there have already been published many tribal and subtribal names. Further taxonomic work will almost certainly necessitate reorganisation of existing systems of classification in such families, and with sinking of subfamilies and tribes already including subordinate taxa the nomenclatural problems with which we are concerned here are likely to occur frequently. Some guidance in the Code is evidently required to cover such cases, and we accordingly make the two following proposals.

**Proposal 202.** Add to Art. 22 the following Note: “The name of a subdivision of a genus which includes the type of the correct name of the next higher taxon, its final epithet therefore repeating either that of the name of the next higher subdivision of the genus or the name of the genus itself, must be taken into account in questions of priority. The date of publication of such a name is that of the first valid publication of the name of another taxon at the same rank under the same next higher taxon, whether or not it appeared as such at that time”.

**Proposal 203.** Add to Art. 19 the following Note: “The name of a subdivision of a family which includes the type of the correct name of the next higher taxon, its name therefore being based on the same stem as is that of the next higher taxon, must be taken into consideration in questions of priority. The date of publication of such a name is that of the first valid publication of the name of another taxon at the same rank under the same next higher taxon, whether or not it appeared as such at that time.”