

(000–000) Proposals on hybrids, mostly on Chapter H

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The 1981, Sydney Congress settled the question of what rank to use for the name of a hybrid when the parents are of unequal rank. The idea that the hybrid must be given a name in the higher rank (whereby the formulas *P. australe* × *P. vulgare* subsp. *vulgare* and *P. australe* × *P. vulgare* subsp. *prionodes* were taken to represent the same hybrid, namely *P. australe* × *P. vulgare*) was abandoned in favour of a name in the lower rank (whereby the two cited formulas represent two different hybrids). Somehow, Art. 52 Ex. 19 and Art. H.5 Ex. 1 never caught up with the new reality.

Another matter: there is an odd difference between Art. H.8.1 and H.8.2. The latter deals with the application of a name. The examples following Art. H.8.1 suggest that this is the intent of Art. H.8.1 as well, but the requirement that “the parental names used in its formation must be those” focuses on its formation, a matter of valid publication. However, Art. H.8.1 is not mentioned in Art. 32.1, so Art. H.8.1 does not appear to impact valid publication in any binding way. It proves this imbalance is the result of another change adopted at Sydney, based on Prop. 184 (by Yeo, in *Taxon* 30: 271–272. 1981), which does not appear to give any reason for the proposed change. Before that time Art. H.8.1 did deal with the application of names (the supporting Ex. 1 was not substantially altered to accord with a possible new purpose). The present Art. H.8.1 would seem to be trying to do two things at once, but not to be very effective at either purpose.

If it is desirable to have a requirement on the parental names used in the formation of such names and epithets, this would seem to belong in Art. H.9, which is mandatory for valid publication.

(000) Amend Art. 52 Ex. 19, to read:

“Ex. 19. The name *Polypodium* ×*shivasiae* Rothm. (in *Kulturpflanze*, Beih. 3: 245. 1962) was proposed for hybrids between *P. australe* Fée and *P. vulgare* subsp. *prionodes* (Asch.) Rothm. Although inappropriate for this hybrid formula (Art. H.5.2), *P.* ×*shivasiae* would be the correct name for the hybrid between *P. australe* and *P. interjectum* Shivas, the latter name a replacement name for *P. vulgare* subsp. *prionodes* (the combination *P. prionodes* being pre-occupied) and thus homotypic. *P.* ×*shivasiae* can also be the correct name for the hybrid between *P. cambricum* L. and *P. interjectum*, if *P. australe* is taxonomically treated as a synonym of *P. cambricum*. When the name *P.* ×*rothmaleri* Shivas (in *Brit. Fern. Gaz.* 10: 152. 1970) was proposed for this same hybrid between *P. australe* and *P. interjectum*, this was superfluous when published; nevertheless, it is not an illegitimate name on account of using this hybrid formula. It is illegitimate because the protologue cites as a synonym *P.* ×*shivasiae*, the name that ought to have been adopted.”

When the 1981, Sydney Congress changed Art. H.5.2 to its present meaning, settling the question of what rank to use when parents of hybrids are of unequal rank, this Example was already in the *Code* (it had been adopted one Congress earlier). At that time the Example should have been adjusted to accord with the altered provision, but this never happened. The correct name for either formula in the present Example must be a name at the rank of

subspecies. Today, *P. ×shivasiae* is a name in current use for *P. australe* (or *P. cambricum*) × *P. interjectum*.

link *P. prionodes* <https://www.biodiversitylibrary.org/page/11624372>
pdfs of protologue of *P. interjectum* and *P. ×rothmaleri* separate

(002) Adjust Art. H.5 Ex. 1, to read:

"Ex. 1. The protologue of the combination *Elymus ×laxus* (Fr.) Melderis & D. C. McClint. (in *Watsonia* 14: 394. 1983), based on *Triticum laxum* Fr. (Novit. Fl. Suec. Mant. 3: 13. 1842), states this to be a hybrid with parentage *E. farctus* subsp. *boreoatlanticus* (Simonet & Guin.) Melderis × *E. repens* (L.) Gould. Therefore this combination is at a rank inappropriate to the stated hybrid formula. If *E. farctus* subsp. *boreoatlanticus* is regarded to be a species of *Elymus*, its correct name is *E. junceiformis* (Á. Löve & D. Löve) Hand & Buttler. The correct name for *E. junceiformis* × *E. repens* is this combination *E. ×laxus*, just as *×Thinoelymus laxus* (Fr.) Sonnb. would be correct for that same hybrid if its parentage is judged to be represented by the formula *Thinopyrum junceiforme* (Á. Löve & D. Löve) Á. Löve × *E. repens*."

This Example originated as Ex. 5 of Prop. 89B (Yeo in *Taxon* 35: 186–187. 1986), which proposed that names "must be published in the highest-ranking category" of the names of parental taxa. At the Congress the proposal was withdrawn and a substitute proposal, retracting the proposed change, was referred to the Editorial Committee (in *Englera* 9: 205–207. 1989); however, the Example was not adjusted accordingly. Whether *E. ×laxus* is the correct name for all hybrids between *E. farctus* × *E. repens* will vary with the taxonomy adopted (see Prop. 012). Also, it seems awkward to say that a later combination (Art. 6.10) "was published for a hybrid", especially when the basionym was for a non-hybrid (see Art. 50.1).

Links:

Elymus ×laxus : <https://www.biodiversitylibrary.org/page/45069952>

Triticum laxum : [https://babel.hathitrust.org/cgi/pt?](https://babel.hathitrust.org/cgi/pt?id=hvd.32044106465685&view=1up&seq=113)

[id=hvd.32044106465685&view=1up&seq=113](https://babel.hathitrust.org/cgi/pt?id=hvd.32044106465685&view=1up&seq=113)

IPNI on homotypy : <https://www.ipni.org/n/400554-1>

(003) Adjust the wording of Art. H.8.1, so that it reads (new text in bold, deleted text in strikethrough):

"H.8.1. When the name or the epithet in the name of a nothotaxon is a condensed formula (Art. H.6 and H.7), **the name of a nothotaxon is applicable only if** the parental names used in its formation ~~must be~~ **are** those that are correct for the particular circumscription, position, and rank accepted for the parental taxa **of that nothotaxon.**"

This would bring Art. H.8.1 into line with H.8 Ex. 1–2 and with H.8.2, borrowing some of the wording of the latter. If it should be desirable to have an explicit provision requiring that the parental names used in the formation of a hybrid name or epithet are taxonomically accepted by the author of the name, then the logical place for it would be in Art. H.9.

(004) Amend the wording of Art. H.8.2, so that it reads:

"H.8.2. A nothogeneric name ending in *-ara* (Art. H.6.3 and H.6.4(b)), equivalent to a condensed formula (Art. H.6.1), is applicable only to a nothotaxon if the

parental names cited in the protologue are those that are correct for the particular circumscription, position, and rank accepted for the parental taxa of that nothotaxon.”

This would bring the wording of the last part of Art. H.8.2 into line with that of the last part of Art. H.8.1, removing some ambiguities. Names apply to “nothotaxa” rather than to “hybrids”. Also, it seems dubious whether the only means by which it can be determined if a hybrid derives from particular parents must be taxonomical. And Art. H.8.2 does not specify where these parents are named, which may be especially confusing because this provision is about comparing two sets of names of parental taxa (one set in the protologue, and one set in the current taxonomic treatment).

(000) Add a new paragraph to Art. H.9, supported by an Example:

“H.9.2. In order to validly publish the name of a nothogenus or a nothotaxon at the rank of a subdivision of a genus, all parental taxa must be cited in the protologue by the name that is correct for the particular circumscription, position, and rank adopted for the parental taxa by the author of the name of the nothotaxon.”

“Ex. 4. The designation ‘×*Neocupropsis*’ de Laub. (in Novon 19: 305. 2009) was proposed for the hybrid formula *Neocupressus* de Laub. × *Callitropsis* Oerst. Because *Neocupressus* (in Novon 19: 301. 2009) is an illegitimate name, and thus not correct for this taxon, ‘×*Neocupropsis*’ is not validly published.”

This proposal would move this requirement from Art. H.8.1 (see Prop. 003) to its logical location, and would be explicit about it. It is not really obvious if this requirement should be part of the *Code* at all. But, as pointed out above, Art. H.8.1 is ambiguous on this fundamental issue, and surely it is quite desirable that the *Code* would be clear on this point. If a hybrid formula contains an illegitimate name, the resulting name of a nothotaxon (of a genus or a subdivision of a genus) may not ever be used anyway (Art. H.8.1–2), but should it be validly published, at all?

(000) Subdivide Chap. H into three sections: general provisions, provisions on genera and subdivisions of genera, and provisions on species and infraspecific taxa.

Chapter H consists of twelve Articles which makes it the Chapter not divided into sections with the most Articles (Chap. VII has the next-most: Art. 51–58); admittedly these Articles tend to be short, but the Chapter still runs for ten pages. Dividing it into Sections may help the reader. No rearrangement of provisions should be necessary on this account, although it would seem logical to move Rec. H.5A.

(000) Add an Example to Art. H.2:

“Ex. 3. Various names for the same nothotaxon, depending on the taxonomic (generic) placement of the parent taxa, and the consequences for the placement of the hybrid sign. *Callitropsis* × *leylandii* (A. B. Jacks. & Dallim.) D. P. Little for *Callitropsis macrocarpa* (Hartw.) D. P. Little × *Callitropsis nootkatensis* (D. Don) Oerst.; × *Cupressocyparis leylandii* (A. B. Jacks. & Dallim.) Dallim. for *Cupressus macrocarpa* Hartw. × *Chamaecyparis nootkatensis* (D. Don) Spach; *Cupressus* × *leylandii* A. B. Jacks. & Dallim. for *Cupressus macrocarpa* × *Cupressus nootkatensis* D. Don; × *Cuprocyparis leylandii* (A. B. Jacks. & Dallim.) Farjon for *Cupressus macrocarpa* × *Xanthocyparis nootkatensis* (D. Don) Farjon & D. K. Harder; × *Hesperotropis leylandii* (A. B. Jacks. & Dallim.) Garland & Gerry Moore for *Hesperocyparis macrocarpa* (Hartw.) Bartel × *Callitropsis nootkatensis*.”

A famous/notorious case (see Garland & Moore, in *Taxon* 61: 667–670. 2012). This Example would show the interaction between nomenclature and taxonomy and it would show the effects of this on the placement of the hybrid sign. After all, a reader may well expect the hybrid sign to be located in the same place in whatever name is correct for what, after all, is one and the same hybrid.

Cuprocyparis leylandii - <https://www.biodiversitylibrary.org/page/642766>

×*Neocupropsis leylandii* - <https://www.biodiversitylibrary.org/page/40330548>

×*Hesperotropsis leylandii* - <https://onlinelibrary.wiley.com/doi/epdf/10.1002/tax.613015>

(000) Add a Note to Art. H.3.2:

“*Note n.* The name of a nothogenus or a nothotaxon at a rank of a subdivision of a genus cannot be validly published unless all parental taxa are named (Art. H.6–H.9).”

(000) Amend Art. H.4.1, move part of it to a new Art H.8.3, and part to a new Note to Art. H.10:

“*H.4.1.* A nothotaxon includes all individuals recognizably derived from the crossing of representatives of the parent taxa stated in the hybrid formula, when a hybrid formula can be stated or postulated. Thus, a nothotaxon includes not only the F₁ but subsequent filial generations and also back-crosses and combinations of these.”

“*H.8.3.* The correct name of a nothogenus or a nothotaxon at the rank of a subdivision of a genus is the earliest legitimate name (Art. 6.5) at the appropriate rank (Art. H.5) that is applicable (Art. H.8.1 or H.8.2).”

[Art. H.10] “*Note n.* The correct name of a nothotaxon (Art. H.3.2) at the rank of species or below is determined by Art. 11.4 .”

The present Art. H.4.1 tries to do three things; this proposal would reduce it to only one thing. For names at the rank of genus or a subdivision of a genus, Art. H.8 already goes quite a way towards setting the correct name, so it would make sense to complete the process there. Article H.10 states that the names of hybrids at the rank of species or below are governed by the non-hybrid parts of the *Code* (including when a name is correct), so that it is odd to have Art. H.4.1 attempt to override this. The statement on “one correct name corresponding to a particular hybrid formula” would need to be qualified to be generally true: see Prop. 012.

(000) Add a sentence to Art. H.6.1, or a new paragraph after it:

“*H.6.1bis.* No nothogeneric name may exceed eight syllables.”

The requirement that a nothogeneric name may not exceed eight syllables is oddly distributed. It is included in Art. H.6.3 for nothogeneric names on *-ara* (for an intergeneric hybrid derived from four or more genera). Presumably Art. H.6.4(b) intends this to also apply to nothogeneric names on *-ara* (for trigeneric hybrids), but it goes out of its way to create ambiguity about this. On the other hand, Art. H.6.4(a) does require this (for trigeneric hybrids) for names not on *-ara*. The only category to which this requirement clearly does not apply at present is that of names for bigeneric hybrids, although rationally these should be the shortest. If the proposal is accepted, Art. H.6.3 and H.6.4 can be adjusted accordingly.

(000) Add a Note to Art. H.9.1:

“*Note n.* In order to be validly published, the name of a nothogenus or a nothotaxon

at the rank of a subdivision of a genus must be formed, or have an epithet formed, conforming to Art. H.6 and H.7: see Art. 32.1(c)."

It is slightly odd that, in order to be validly published, the name of a nothotaxon at the rank of genus or a subdivision of a genus must meet the requirements of Art. H.6, H.7, and H.9.1, but that only Art. H.9.1 makes a direct statement on this. Nowhere in Chap. H (except in Art. H.6 Ex. 2) does it say that such a name must meet the requirements of Art. H.6 and H.7 in order to be validly published. Adding a Note may help the reader from getting confused. It would also be possible to integrate this in Art. 9.1, adding this as a requirement (perhaps moving this from Art. 32.1(c)).

(012) Add a Note to Art. H.10, supported by two Examples:

"*Note n.* The name of a nothotaxon at the rank of species or below does not necessarily apply only to a single hybrid formula, unlike the application of the name of a nothotaxon at the rank of genus or a subdivision of a genus, which is so restricted (Art. H.8.1–H.8.2). It is applicable to any hybrid formula of parental taxa, in the appropriate rank and appropriate taxonomic placement (as to genus or species), of which the respective adopted circumscriptions of the adopted parental taxa include the respective types of the parental names cited in the protologue of the name of the nothotaxon, or in the statement as indicated in Art. H10.n[/Note 1]."

"*Ex. n.* The protologue of the combination *Elymus ×obtusiusculus* (Lange) Melderis & D. C. McClint. (in *Watsonia* 14: 394. 1983) states this to be a hybrid with parentage *E. farctus* subsp. *boreoatlanticus* (Simonet & Guin.) Melderis × *E. pycnanthus* (Godr.) Melderis. This combination is at a rank inappropriate to the stated hybrid formula but would be correct for the formula *E. junceiformis* × *E. pycnanthus* (because *E. junceiformis* is homotypic with *E. farctus* subsp. *boreoatlanticus*, see Art. H.5 Ex. 1). However, the use in the *Heukels' Flora van Nederland*, 24th edition, of *E. ×obtusiusculus* as the correct name for the formula *E. athericus* (Link) Kerguelen × *E. farctus* (Viv.) Runemark ex Melderis (Duistermaat, l.c.: 280. 2020) is quite in order, reflecting, as it does, the taxonomy adopted in that work, which treats *E. pycnanthus* as a synonym of *E. athericus* and *E. junceiformis* as a synonym of *E. farctus*."

"*Ex. n+1.* The combination *Elymus ×laxus* (see Art. H.5 Ex. 1 for the parentage) can also apply to the formula *E. farctus* × *E. repens*, but only when the circumscription adopted for *E. farctus* includes the type of *E. farctus* subsp. *boreoatlanticus*. If this last is treated as a species (see Art. H.5 Ex. 1) the combination *E. ×laxus* can no longer apply to *E. farctus* × *E. repens*, and a different name would have to be chosen for hybrids (if any) of that formula."

Pointing out another difference between names of nothotaxa at the rank of genus or a subdivision of a genus, on the one hand, and names of nothotaxa at the rank of species or below, on the other hand.

(000) Raise most of Art. H.10 Note 1 to become a Rule, supported by a Note, to read:

"*H.10.n.* Names of species or infraspecific taxa that were validly published for non-hybrid taxa may later be changed in status to become names of nothotaxa; this requires a statement (see Art. H.3.2) in an effectively published text. Similarly for the reverse change, or any further change in such status."

"Note 1. Such a change in status from hybrid to non-hybrid, or vice versa, results in a change in the presence or absence of a hybrid sign, but does not affect authorship (see Art. 50), date, priority (see Art. H.3.3), rank (except for the prefix "notho"; see Art. 3.2, 4.4), typification, or any other aspect of the name."

It seems odd that nowhere in the *Code* there is any requirement about how a change of status of a name from the non-hybrid category to the hybrid category, or the reverse, is to be effected. A statement in an effectively published text seems to be an absolute minimum requirement for anything that affects nomenclature. It may be well to start thinking about further requirements, like citing the place of publication of the name of which the status is changed, or citing all parental taxa. Perhaps in case of an alteration of parentage, as illustrated in Art. H.10 Ex. 6, there should also be a requirement to publish a statement of this alteration.

(000) Adjust Art. 50.1, to read:

"50.1. When a name for a taxon at the rank of species or below was validly published for a non-hybrid taxon but is later changed in status to become the name of a nothotaxon or vice versa (Art. H.10.n), the authorship of the name remains unchanged. The authorship citation may be followed by an indication in parentheses of the original status."

The *Code* deals with names for taxa (leaving taxa to taxonomists). The present wording of Art. 50.1 does not seem to take that into account, suggesting authorship of a taxon. The aspect of "rank" does not seem to merit a mention here; the *Code* hardly ever allows names to be changed in rank (some descriptive names above the rank of family being the one exception). At most rank should be mentioned in Art. H.10.n (but it is really unnecessary even there; there is only one aspect of the name that changes, so why rule on any other individual aspect that it does not change?).