

## (110–114) Proposals to delete Articles 18.5, 18.6 and 19.7, replacing them with three Notes, and to provide consequent changes to App. IIB and to Articles 10.6, 11.1, 18.1, and 19.4

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As per Art. 18.5 of the *International code of botanical nomenclature (ICBN)* (McNeill & al. in *Regnum Veg.* 146. 2006), names of certain families which do not agree with the accepted termination (*-aceae*) of family names are treated as validly published and alternative names ending in *-aceae* are given in parenthesis. As per the Art. 18.6, the use as alternatives of these family names indicated in parentheses in Art. 18.5 is authorized.

The origin of the first component of these rules goes back to Art. 22 3° of Candolle's *Lois de la nomenclature botanique* of 1867. In the *Vienna rules* (Briquet, Règles Int. Nomencl. Bot. 1906), it appeared as Art. 22 that reads: "The following names, owing to long usage, are an exception to the rule: *Palmae*, *Gramineae*, *Cruciferae*, *Leguminosae*, *Guttiferae*, *Umbelliferae*, *Labiatae*, *Compositae*".

Principle IV of the *ICBN* states that each taxonomic group with a particular circumscription, position, and rank can bear only one correct name, the earliest that is in accordance with the *Rules*, except in specified cases. However, the Cambridge Congress of 1930 introduced the second component of these rules authorizing botanists "to use as alternatives the appropriate names ending in *-aceae*" (cf. Art. 23 of the "Cambridge rules" (Briquet & al. *Int. Rules Bot. Nomencl.*, ed. 3. 1935). This became the present Arts. 18.5 and 18.6 in the *Leningrad Code* (Stafleu & al. in *Regnum Veg.* 97. 1978). Nearly 80 years have passed since the first authorization of alternative names, several generations of taxonomists have passed, several floras have been written, and the freedom to use either of those family names still remains. A perusal of the various floras including local, district, national, and regional so far published revealed that the family names with both regular and irregular terminations which are treated as validly published and listed under Art. 18.5 are used, sometimes without any uniformity and consistency. Listing the names of all such floras with such use of names would consume much space and hence is not provided here.

By retaining the provisions of Arts. 18.5 and 18.6, workers are given freedom to use any of the names of the families covered under Art. 18.5 for many more years to come, thereby defeating the above Principle, and in turn the very purpose of the *Code*; and there will not be a single usage of names of those families in future works also. Hence, we 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.

In Art. 18.5 the family name *Fabaceae* is given as alternative name for the families *Leguminosae* and *Papilionaceae*. This creates further confusion and instability to nomenclature. The family name *Papilionaceae* is in contradiction to Art. 18.1 which states that the name of a family is a plural adjective used as a noun formed from the genitive singular of a name of an included genus by replacing the genitive singular inflection with the termination *-aceae*. There is no generic name *Papilion-us* (*-a -um*), and the traditional family or

subfamily name was derived from the butterfly-like flowers (Latin *Papilio* means butterfly). But as the name *Papilionaceae* is listed in Art. 18.5, its use is currently allowed. In the present context of the proposal to delete Arts. 18.5 and 18.6 and replace them with a Note, the provision to allow the use of the family name *Papilionaceae* is inappropriate and hence in order to bring uniformity, consistency and stability of nomenclature no provision is made for its continued use.

### (110) 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*")."

If the above Proposal 110 is approved, the following changes are also essential for the refinement and effectiveness of the related articles of the *Code*.

In order not only to avoid inconsistency in the introduction to the list of conserved family names (Appendix IIB), but also to ensure that the priority of the current "alternative names" is retained, the following is proposed.

### (111) 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.

Since the introduction of provision for use of alternative names, *Fabaceae* has been in use as an alternative name for *Leguminosae* for a family inclusive of the subfamilies *Papilionoideae*/*Faboideae*, *Caesalpinioideae* and *Mimosoideae*. If the present Proposal 110 is approved, the use of *Leguminosae* would cease and *Fabaceae* alone would be in use. The family names *Fabaceae*, *Caesalpiniaceae*, and *Mimosaceae* are conserved, and as per Art. 14.5 when a conserved name competes with one or more names based on different types against which it is not explicitly conserved, the earliest of the competing names is adopted in accordance with Art. 11. And, accordingly, but for Prop. 111 above, *Caesalpiniaceae* (1814) and *Mimosaceae* (1814) would have priority over *Fabaceae* (1836), and for those who unite *Fabaceae* with *Caesalpiniaceae* and/or *Mimosaceae*, there should be no effect on the stability of nomenclature of the family. The following proposal is to make clear that *Fabaceae* should continue

to be used when united with *Caesalpiniaceae* nom. cons. and *Mimosaceae* nom. cons.

**(112) 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).”

If Proposal 110 to delete Arts. 18.5 and 18.6 is approved, a concomitant and long extant issue needs a simultaneous solution. This is again to do away with the liberty of using the alternative family and subfamily names *Papilionaceae/Fabaceae* and *Papilionoideae/Faboideae*, respectively, based on personal preferences, and to bring universal uniformity in their use. According to Art. 19.4, the name of any subdivision of a family that includes the type of the adopted legitimate name of the family to which it is assigned is to be based on the generic name equivalent to that type.

Article 19.7 states that when the *Papilionaceae* are included in the family *Leguminosae* (nom. alt., *Fabaceae*) as a subfamily, the name *Papilionoideae* may be used as an alternative to *Faboideae*. In the context of the present proposal to delete Art. 18.5, we propose to delete Art. 19.7 to disallow further use of *Papilionoideae*, as neither it, nor *Papilionaceae* already disallowed if Proposal 110 is accepted, is based on the generic name of the type of the subfamily. A replacement Note is proposed.

**(113) 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*.”

With the deletion of the Arts. 18.5, 18.6 and 19.7, and the introduction of explanatory Notes in those Articles, the long-existent

incongruity and inconsistency in the use of the family names *Leguminosae*, *Fabaceae* and *Papilionaceae*, and the subfamily names *Faboideae* and *Papilionoideae* would be settled and stability of nomenclature attained.

If Proposals 110 and 113 are accepted, a number of changes will be required to other Articles of the *Code*; these are detailed below.

**(114) 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.

In addition adjustment to Art. 19 Ex. 3 and adoption of regularly formed family names in Art. 53. Ex. 1, Ex. 10 and Ex. 18 would be required.

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## (115–116) Proposals to eliminate the Latin requirement for the valid publication of plant names

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Article 36.1 in the *International code of botanical nomenclature* requires that, as from 1 January 1935, all names of new plant taxa (algae and fossils excepted) must be accompanied by a Latin description or diagnosis in order to be validly published. In this issue (Figueiredo & al. in *Taxon* 59: 617–620) it is argued that the Latin requirement must be removed now as it represents a relic that does not serve the purposes for which it was originally intended. We propose that, as from the effective date of the Melbourne *Code*, a diagnosis or description in any language would suffice to effect valid publication of a plant name, once the other Articles have been complied with.

In order to effect these changes the following two proposals are made:

**(115) 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.”