

(205–207) Three proposals to remove alternative family names

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(205) Replace Art. 18.5 by the following text and delete Art. 18.6: “The names *Leguminosae* and *Papilionaceae* (type of both *Faba* Mill.) are treated as validly published. When the *Papilionaceae* are regarded as a family distinct from the remainder of the *Leguminosae*, the name *Papilionaceae* is conserved against *Leguminosae*”.

(206) On acceptance of proposal (205) above, add to the remaining Art. 18.5 the following: “The name *Palmaceae* Juss., Gen. Pl.: 38 (1789) (type *Areca* L.) is also treated as validly published”.

Alternative names for a few well known families, such as *Asteraceae/Compositae*, have been allowed since the first modern rules governing plant nomenclature. This is, however, against the spirit of Principle IV aiming to establish one name for any one taxon with a particular circumscription, position and rank. The general trend over the last decades has been strongly towards an increased usage of those family names ending with *-aceae*, thus complying with the general rule on family endings. This trend is well documented by the recent article of McNeil & Brummitt (Taxon 42(4): 853–856, 2003), where they themselves are resigned to abandoning their longstanding practice of using most of the traditional names ending in *-ae* and switching to the *-aceae* names. I think that the time has come to choose one of the alternatives as the one and only family name, and since most publications now seem to use the *-aceae* names this seems to be the preferred choice. Even in Europe, the long-time stronghold of opinion for the traditional *-ae* names, practice has swung clearly towards the *-aceae* names in recent years. Arguments both for and against the aims of this proposal have been summarised by McNeil & Brummitt (l.c.), but the practical advantages of having only one name for each family seem to heavily outweigh the advantages of allowing alternatives. The first proposal above would mean that the names *Palmae*, *Gramineae*, *Cruciferae*, *Guttiferae*, *Umbelliferae*, *Labiatae* and *Compositae* which are not validly published under Art. 18.1 would no longer be treated as validly published and so would enforce use of the equivalent seven names ending in *-aceae*. But, with the deletion of Art. 18.6, it would also enforce retention of the name *Leguminosae* for the broad concept of that

family, since this has date priority over *Papilionaceae* and *Fabaceae*. Proposal (206) above would also enforce usage of *Palmaceae* instead of either *Palmae* or *Areceae*.

In the two above proposals, special consideration has been given to the two cases in which McNeil & Brummitt (l.c.) have found a relatively high level of retention of the traditional *-ae* names, *Leguminosae* and *Palmae*. Because there seems to be a very strong case in favour of the former, with international support already given, the solution to this is included in proposal (205). The case of the *Palmae* is perhaps more controversial, and a separate proposal 206 is therefore made which may be debated separately.

As noted by McNeil & Brummitt (l.c.), even within the eight families listed in Art. 18.5, *Leguminosae* is a special case. The group is a large, well known and economically important one, sometimes treated in a broad sense with three subfamilies and sometimes as three separate families. In practice the name *Leguminosae* is used only for the broad taxonomic concept including three subfamilies, virtually never for the segregate family known as either *Papilionaceae* or *Fabaceae*. It has therefore come to have considerable significance in indicating the taxonomic concept adopted. Similarly when *Papilionaceae* is adopted it always means that the narrow taxonomic concept is being adopted. The name *Fabaceae* has in the past been widely adopted for either the broad or the narrow concept as an alternative to *Leguminosae* or *Papilionaceae* respectively. There is a very practical advantage to keeping the name *Leguminosae* in use for the broad concept (which these days seems to be gaining ground over splitting into three), as emphasised by G. P. Lewis & B. D. Schrire, *Leguminosae* or *Fabaceae*?, in B. B. Klitgaard & A. Bruneau, *Advances in Legume Systematics*, 10, *Higher Level Systematics*: 1–3, 2003). The international legume community has been urged to use only *Leguminosae* for the broad concept of the family. A similar advantage would be derived from using only *Papilionaceae* for the narrow concept, but the taxonomic case for this is not strongly supported.

Already this family has been subject to special exceptions in the *Code*, Art. 18.5 specifying that *Papilionaceae* is conserved over *Leguminosae* when the narrow concept is adopted, and Art. 19.7 ruling that when

the broad concept is adopted the name *Papilionoideae* may be used as an alternative to *Faboideae*. It seems very desirable to maintain the unique consideration already accorded to this family (these families) in accordance with long and well established practice. Under the above proposal *Leguminosae* would be exclusively used for the broad family concept, and *Papilionaceae* would be used exclusively for the narrow concept. It would then be desirable to reconsider the subfamily names.

(207) Reword Art. 19.7 to read: “When the *Papilionaceae* are included in the *Leguminosae* as a subfamily, the name *Papilionoideae* must be used”.

If the eight alternative names for families are eliminated, it will be appropriate also to get rid of the one case of an alternative subfamily name. Once *Papilionaceae* is established as the only family name to be used for this taxon, it would be very strange to choose *Faboideae* as the accepted name of it as a subfamily. The above proposal would establish *Papilionoideae* as correct.

The name *Areceae* has come into usage only relatively recently, and, as demonstrated by McNeil & Brummitt (l.c.), has been taken up less than the other *-aceae* names. This name has proved unpopular with many people because of repeated confusion with the very similar family names *Araceae*, *Acoraceae*, *Aceraceae*, *Araucariaceae* and *Ericaceae*. The name *Palmae* immediately conveys to most people, including non-botanists, an understanding that palms are being referred to, but *Areceae* has no such immediate broadly recognised connotation. In wanting to speak of the palm family, many people not working in the family every day have to hesitate and think which name to use. Nomenclature must be practical, and while we are considering the fate of the other traditional *-ae* family names we should also be looking for a practical solution for the palms. Here we have a chance to move to a much more practical name before the unfortunate *Areceae* becomes too deeply embedded in the literature.

I am told on good authority that the name *Palmaceae* is actually still occasionally used in smaller herbaria. Would this not provide a much needed answer to the problem? Unfortunately there are some technical difficulties with this name, which is not currently listed as a validly published name in J. L. Reveal's family names database (<http://www.inform.umd.edu/PBIO/usda/usdaa.html>). Unlike all the other seven alternative names ending in *-ae*, it might be possible to argue that it could be based on the stem of an included generic name since the name *Palma* Mill. 1754 exists. However, that is an illegitimate substitute for *Phoenix* L. 1753, and Art. 18.1 requires that family names be based on the stem of a legitimate generic name. Furthermore, changing the type

of the family name from *Areca* to *Phoenix* would have an undesirable effect on infrafamilial nomenclature. We are dealing with another special case, just as is proposed for *Leguminosae* above, and we need to adopt practical solutions which will be acceptable to the wide range of users of family names. If the proposal is accepted, the name should be treated as validated by Jussieu, Gen. Pl.: 38 (1789) and typified by *Areca* L. Jussieu actually published *Palmae*, which is easily convertible to *Palmaceae*, and he did include *Areca* L. and did not include *Palma* Mill.

It seems more possible for the Congress to agree to this somewhat unconventional but nonetheless practical solution to an important problem than it is to try to push a proposal to conserve *Palmaceae* through various committees. Acceptance of the proposal would cut through the knot of surrounding nomenclatural niceties at a stroke. Future generations would be grateful to us for taking such a step. Failure to accept the proposal would, I think, be regretted repeatedly by future generations.