

basionym of that name is *Sphenopteris hoeninghausii* Brongn. 1822, of which the type is a compression specimen of sterile foliage. The type of the generic name *Lyginopteris* Potonié is a structurally preserved pteridosperm stem, *Lyginopteris oldhamia* (Binney) Potonié. Although it is widely believed that that species bore leaves of the *Sphenopteris hoeninghausii* type, the leaf morphospecies *S. hoeninghausii* cannot be placed in the stem morphogenus *Lyginopteris* of which the type is a different plant part, in a different state of preservation. The Cleal and Thomas specimen should therefore be cited as *Sphenopteris hoeninghausii* Brongn.

### (214) Add the following example:

*Ex 26 ter.* A common Jurassic leaf compression fossil is referred to by different authors either as *Ginkgo huttonii* (Sternb.) Heer or *Ginkgoites huttonii* (Sternb.) M. Black. Both names are in accordance with the Code, and either name can correctly be used, depending on whether this Jurassic morphospecies is regarded as rightly assigned to the living (non-fossil) genus *Ginkgo* L. or whether it is more appropriate to assign it to the morphogenus *Ginkgoites* Seward (type, *G. obovata* (Nath.) Seward, a Triassic leaf compression).

## (215–217) Proposals offered by the Committee for Algae

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### (215) To avoid homonymy, permit formation of family names from the nominative singular of a generic name:

Insert the following sentence before the last sentence of Art. 18.1: “Likewise, when formation from the genitive singular of a generic name results in a homonym, -aceae is added to the nominative singular.”

Add new example: “*Ex. 3.* Family names formed on the nominative singular of a generic name to avoid homonymy: Dictyosphaeriumaceae G. S. West 1916 (from *Dictyosphaerium* Näg.) vs. Dictyosphaeriaceae Kütz. 1849 (from *Dictyosphaeria* Decne. ex Endl.), Trigoniumaceae Glezer 1986 (from *Trigonium* Cleve) vs. Trigonaceae Endl. 1841 (from *Trigonia* Aubl.).”

In the absence of this orthographic exception, it would not be possible for a monogeneric family, such as that which is coextensive with *Trigonium* Cleve, to have a legitimate name.

### (216) Editorially improve Art. 18.1:

Change the last two words of the second sentence of Art. 18.1 from “full word” to “nominative singular”.

### (217) To avoid unnecessary nomenclatural complexity, add the following new sentence at the end of Art. 45.4:

“However, names generated in zoological nomenclature in accordance with the Principle of Coordination are not considered validly published under the present botanical code unless such a name appears in print and is applied to an accepted taxon.”

According to Art. 45.4, when a taxon originally assigned to a group not covered by the *International Code of Botanical Nomenclature (ICBN)* is treated as belonging to the algae, any of its names need satisfy only the requirements of the pertinent non-botanical Code for status equivalent to valid publication under the *ICBN*. Recently, Alexander Doweld (National Institute of Carpology, Moscow) called our attention to a previously unappreciated provision of the *International Code of Zoological Nomenclature (ICZN)*, namely, the Principle of Coordination. In accordance with this principle, a name established for any taxon simultaneously establishes names for all other taxa within the

same rank-group based on the same type. All coordinate names bear the same author and date as the initial name. The three rank-groups with their constituent taxa are as follows: family-group (superfamily, family, subfamily, tribe), genus-group (genus, subgenus), and species-group (species, subspecies). As an example of how this principle operates, publication of *Micrantholithus basquensis* subsp. *crassus* Bouché 1962 under the *ICZN* simultaneously established the species *Micrantholithus crassus* Bouché 1962. Similarly, publication of *Phacotina* (Phacotoideae) Bütschli 1884 as a subfamily of Chlamydomonadina (Chlamydomonadaceae) under the *ICZN* simultaneously established (along with other coordinate taxa) the family Phacotidae (Phacotaceae) Bütschli 1884, which has priority over Phacotaceae (‘Phacotae’) Francé 1894 published under the *ICBN*.

Although a system of nomenclature that embodies the principle of coordination has its merits, any attempt to superimpose it on traditional botanical nomenclature leads to unnecessary complication and confusion. If the present proposal is accepted, *Micrantholithus basquensis* subsp. *crassus* Bouché 1962, but not *M. crassus* Bouché 1962, will be treated as validly published under the *ICBN*. Similarly, Phacotoideae Bütschl 1884, but not Phacotaceae Bütschli 1884, will be treated as validly published under the *ICBN*. *Micrantholithus crassus* Bouché 1962 and Phacotaceae Bütschli 1884 are names of phantom taxa and as such should not be allowed to complicate botanical nomenclature. Should, however, an author publishing under the *ICZN*, say in this case Loeblich, consider *Micrantholithus basquensis* subsp. *crassus* worthy of specific rank and make it clear that *M. crassus* applies to a taxon that he accepts, the latter name would be treated as being validly published as of Loeblich. The authorship would be Bouché ex Loeblich or just Loeblich.

So-called bireginal taxonomic groups most affected by the Principle of Coordination include green flagellates, chrysophytes, coccolithophorids, silicoflagellates, raphidophytes, and cryptophytes.