U.S.A.; C. H. Stirton, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB, UK; A. Traverse, Dept. of Geosciences, Pennsylvania State University, Deike Building, University Park, PA 16802, U.S.A. and Wu Chi-Sheng, Dept. of Biology, East China Normal University, 3663 North Zhong Shang Road, 200062 Shanghai, People's Republic of China.

(317) Proposal to clarify typification of a name published by one author on the basis of a description provided by another.

As discussed in Perry and McNeill (1986), the Code does not clearly indicate the basis for typification of a name provided by one author for a taxon described by another. I believe that in such cases, it is preferable for the type to be chosen from the context of the description, even if there is a specimen of the taxon in the publishing author's herbarium. For this reason I am suggesting that the following new paragraph be added to Art. 32 of the Code which will make this more evidently permissable.

"Art. 32.3. A name validly published by a description or diagnosis provided by another is to be typified by an element selected from the context of the validating description or diagnosis, unless the publishing author has definitely designated a different type."

In addition, in Art. 7.4, replace "If no holotype was indicated by the author who *described a taxon* . . ." by "If no holotype was indicated *at the time of publication of a name of* a taxon . . .".

Finally, in Art. 7.7, replace "A syntype . . . cited by the author . . ." by "A syntype . . . cited by the *publishing* author . . .".

Literature Cited

Perry, G. and J. McNeill. 1986. The nomenclature of *Eragrostis cilianensis* (Poaceae) and the contribution of Bellardi to Allioni's *Flora pedemontana. Taxon* 35: 696–701.

Proposed by: G. Perry, Western Australian Herbarium, George Street, South Perth, Western Australia 6151, Australia.

(318) Proposal on names of subdivisions of families.

Art. 4.1 of the Code allows for recognition of ranks of *subfamilia, tribus* and *subtribus* as subdivisions of *familia.* Arts. 18.1, 19.1 and 19.2 stipulate that names at these ranks must be formed by adding an appropriate termination to the stem of a legitimate name of an included genus. However, Art. 4.2 allows for intercalation of further supplementary ranks, provided that confusion or error is not thereby introduced, but there is nowhere any statement that for subdivisions of families such names must also be formed from the legitimate name of an included genus.

In compilation of *Index Kewensis* we occasionally come upon such intercalated ranks. A recent example has arisen in a generic revision of the Orchidaceae by F. G. Brieger in Rudolph Schlechter's *Die Orchideen,* Band 1, Lief. 11–12, pp. 633–752 (1981), where the author has divided the subtribe *Dendrobiinae* into six taxa to which he gives the rank 'ser. gen.' or in German 'Gattungsreihe'. Two of the six names are based on a generic name (ser. gen. *Dendrobia* based on *Dendrobium,* and ser. gen. *Eriae* based on *Eria*), whereas the other four are not (ser. gen. *Apoda, Caulescentes, Parcivaginata* and *Dimorphophyllae*). In fact types are not designated for any of these names, though they may be inferred for *Dendrobia* and *Eriae,* and four names must be regarded as invalid. These do, however, raise the question of whether names at such intercalated ranks above genus, or such names without clear indication of rank published before 1953 (see Art. 35), must be based on the name of an included legitimate name of a genus or not. The problem probably arises in early literature on many families, and another example in Orchidaceae which we have come upon recently involves the groups *Diandrae, Monandrae, Convolutae, Duplicatae,* etc. published by Pfitzer, Entw. Nat. Anordn. Orchid. (1887). It seems desirable that all names above rank of genus up to family, and not only those of family, subfamily, tribe and subtribe, should be based on a legitimate generic name, and the following proposal seeks to establish this. The combination of Art. 32.1(b) with our proposal would rule that such names not based on a legitimate generic name would be invalid except as allowed for by Art. 18.3.

(318) Proposal to add to Art. 19.2 a new sentence: "Names of any other subdivisions of a family must also be based on the stem of a legitimate name of an included genus".

Proposed by: Rosemary A. Davies and R. K. Brummitt, The Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE, UK.

(319-320) Two proposals to modify the wording of Articles 7, 9 and 53.

7.3 delete 'or other element'
7.5 delete 'or other element'
7.8 delete 'or other element', substitute 'specimens' for 'material', substitute 'are either' for 'is', add 'or were not designated'
9.1 delete 'or other element'
Add 9.2a 'If no specimens were cited in the protologue then a specimen (neotype) is selected to serve as the nomenclature type'
9.3 delete 'or if such a name is without a type specimen'
53.1 delete 'description or figure', substitute 'specimen' for 'element'

(320) Proposal to amend the Guide for the Determination of Types

T.1. substitute 'cited' for 'included', substitute 'specimen' for 'element'
T.4(a) substitute 'specimen' for 'element', 4(b) delete entirely, 4(c) Add 'if no specimen was cited in the protologue a neotype must be selected', 4(e) substitute 'specimen(s)' for 'element(s)' throughout, delete 'included in or'
T.5. substitute 'no specimen was originally cited or those cited or studied by the author and their' for 'all the originally cited material or material seen by the author but not cited, and its'

Comment: In this time of advanced technology it is incongruous that the type of a name of a species or infraspecific taxon should be an illustration or, worse, a description. If plant systematists are to be considered seriously as scientists it should be obligatory that the type of a name of a species or infraspecific taxon be a specimen. Comparatively few amendments to the Code are needed. The changes will make little difference to what botanists do or how they do it, but they will remove the uncertainty of the application of names such as *Ipomoea indica* (Burman) Merrill (see Fosberg, 1976). I propose that when a name of a species is not typified by a specimen (either holotype or lectotype) then the name must be neotypified by a specimen.

In practice there should be little difficulty. For example the type of the name *Acacia mangium* Willd. is based wholly on the description and figure of Rumphius's *Mangium montanum* (Merrill, 1917). Rumphius could have collected only one of the approximately 800 phyllodinous species of *Acacia*. The application of the name is not in doubt and it could be neotypified with ease and with certainty. Considerable difficulties could have arisen if Rumphius had worked in an area with a richer *Acacia* flora. Selection of a neotype by a competent taxonomist familiar with the particular group of plants would save both time and much unproductive discussion as well as avoiding instability of nomenclature.

Literature Cited

Fosberg, F. R. 1976. *Ipomoea indica* taxonomy: A tangle of Morning Glories. *Botaniska Notiser* 129: 35–38.
Merrill, E. D. 1917. *An interpretation of Rumphius's Herbarium amboinense.* Bureau of Printing, Manila.

Proposed by: L. Pedley, Queensland Herbarium, Meiers Road, Indooroopilly, Queensland 4068, Australia.

(321) Proposal to alter a Recommendation in Appendix I of the Code.

Recommendation H.10B reads as follows: "For hybrids between named infraspecific taxa the use of hybrid formulae is more informative, and entails less danger of confusion, than the naming of nothotaxa."