the sole example in the 1972 Code despite an appeal for good examples to be sent to the Editorial Committee (Regnum Vegetabile 81: 70. 1972).

If anybody can produce a convincing example of a name which is not validly published because it is merely mentioned incidentally, I shall be happy to withdraw my proposal 115 and retain only proposal 116. If, however, no examples can be found I hope that this will indicate that the first proposal must be accepted and one of the most misleading statements in the Code eliminated.

Proposal 117. The Editorial Committee be requested to number or letter paragraphs within Articles, either in all Articles or at least in the longer ones.

I make this formal proposal after discussion with Dr P. F. Yeo who has informally suggested it already. In the longer Articles, such as 7, 33 and 34, there is great difficulty in concisely referring to individual parts of the Articles. To some people the Examples are not counted as paragraphs, while to others they are, and there may be similar doubts about Notes. In Art. 33 does the reference to Fries’ Systema mycologorum come in paragraph 4 or 6 or 9? With the dropping of the numbering of some Notes in Art. 7 in the 1972 Code there are now 14 unnumbered paragraphs under Note 1, which makes concise reference to the later ones a somewhat laborious process. I would suggest that some numbering or lettering system be adopted throughout the Code where there is more than one paragraph per Article, but if this is considered excessive then the Editorial Committee might still look favourably on the idea of doing so in the more difficult cases.

FORM-GENERA VERSUS ORGAN-GENERA; A PROPOSAL

J. Jansonius*

Introduction

The Preamble of the International Code of Botanical Nomenclature states:

Botany requires a precise and simple system of nomenclature. The purpose of giving a name to a taxonomic group is not to indicate its characters or history, but to supply a means of referring to it. Important is the avoidance of the useless creation of names. The only proper reasons for changing a name are (either) a more profound knowledge of the facts resulting from adequate taxonomic study (or the necessity to give up incorrect nomenclature).

Principle IV 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.

Art. 3, Note 1, reads as follows:

Note 1. Since the names of species, and consequently of many higher taxa, of fossil plants are usually based on fragmentary specimens, and since the connection between these specimens can only rarely be proved, organ-genera (organo-genera) and form-genera (forma-genera) are distinguished as taxa within which species may be recognized and given names according to this Code.

An organ-genus is a genus assignable to a family. A form-genus is a genus unassignable to a family, but it may be referable to a taxon of higher rank (see Art. 59). Form-genera are artificial in varying degree.

Examples: Organ-genera: Lepidocarpon Scott (Lepidocarpaceae, Mazocarpon (Scott) Benson (Sigillariaceae), Siltaria Traverse (Fragaceae).

Form-genera: Dadoxylon Endl. (Coniferopsida), Pecopteris (Brongn.) Sternb. (Pteropsida), Stigmaria Brongn. (Lepidophyta and Lepidospermales), Spermatites Miner (Cormophyta, excl. Eocormophyta et Palaeocormophyta microphylla).

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The wording of Note 1 suggests that there exist two kinds of genera for fragmentary specimens; this interpretation is reinforced by the following examples, where entries for the two categories are made in separate paragraphs: organ-genera and form-genera.

Discussion

A genus cannot be validly proposed without a proper diagnosis or description, in which those features are enumerated that appear to be characteristic, and/or in which the particular taxon differs from existing ones. In other words: a genus is defined on the basis of morphological characters.

In the case of fossil plant fragments, such as spores and pollen, a taxon of generic rank either can (with more or less justified confidence) be assignable to a family of (fossil or Recent) plants, or can only be related to a systematic subdivision of higher rank. Traditionally, such an artificial genus is called an “organ-genus” when included within a plant family, or a “form-genus” when assignable only to a taxon of higher rank (or even defying any such assignment).

Some authors have interpreted the ICBN as requiring a new name, whenever a previous unassignable artificial genus is (thought to be) assignable to a family. Yet, a new taxon must be differentiated from the older one on basis of morphological differences. If merely a different understanding or new interpretation induces an author to assign an older form genus to a family, this procedure does not necessitate or require the creation of a new name in the “rank” or organ-genus. Potonié (1958, p. 14) therefore writes about Laevigatisporites: “Laevigatisporites is no longer a form-genus, as Leschik judges, but, through restriction, has become an organ-genus of the Sigillariaceae. The type species only should determine what is to be included in the genus”.

In Art. 7, Note 2, it is stated explicitly that the typification of names of form- and organ-genera does not differ from the procedure for natural genera. In other words: the type of a form-genus is a species, not a “form-species”. If, as a result of new understanding, this species were to be included in an “organ-genus”, the name of the older “form-genus” would have priority and should have been adopted. The later name should be nomenclaturally superfluous, and hence be rejected as illegitimate (Art. 63). Assignment to a (form- or organ-) genus, and differences between artificial genera must be solely based on objective differences in morphology, not on subjective judgement regarding presumed botanical affinity.

In order to remove any ambiguity in the present phrasing of the Code, I want to make the following

Proposal 118. Art. 3, Note 1, to read:

Note 1. Since the names of species, and consequently of many higher taxa, of fossil plants are usually based on fragmentary specimens, and since the connection between these specimens can only rarely be proved, artificial genera are distinguished as taxa within which species may be recognised and given names according to this Code.

If such artificial genera can be or are assigned to a family, they are called organ-genera (organo-genus). As long as such genera cannot be assigned to a family but are assignable to a taxon of higher rank, they are called form-genera (forma-genus).

Reference: