Proposals to Permit the Designation of a Discriminating Element to Allow the Precise Interpretation of an Ambiguous Type

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Reviewed work(s):


Published by: International Association for Plant Taxonomy (IAPT)

Stable URL: http://www.jstor.org/stable/1222790

Accessed: 22/06/2012 00:04
PROPOSALS TO AMEND THE CODE

Edited by Dan H. Nicolson

(17-19) Proposals to permit the designation of a discriminating element to allow the precise interpretation of an ambiguous type

Inadequate type material is frequently encountered when working with older names. All too often the surviving original material consists of poorly preserved or poorly collected specimens, vague drawings or sketches lacking the characters crucial to precise identification. The Code (Greuter & al., 1988) requires that a name be typified by original material if it exists, but if the obligate element is ambiguous the resulting typification does little to promote nomenclatural stability.

We propose a new category of type, the protypus, to fix precisely the identity of the primary type — the holotype, lectotype or neotype — when the diagnostic characters necessary for an unambiguous identification are lacking. The term was first proposed by Troxell (1921: 476), a vertebrate paleontologist, who defined it as a specimen that would supplant an ambiguous holotype. However, the term was apparently never widely adopted. As we define it, a protype would not displace the primary type it is to interpret, but rather would establish in a precise manner the application of the typified name. It would have no standing independent of the primary type it supported, and would share the same fate. If, for example, a protypified lectotype were superseded, the protype would fall with it. As with a neotype, any specimen or illustration not in conflict with the protologue could be designated a protype. As with other kinds of types, the first designation of a protype would have priority.

The informal concept of "typotype" (see Stearn, 1957: 129), for material from which an illustration cited in an original description was prepared, but which was unseen by the validating author, has been found useful by many workers. For example, Dandy (1958) was able to interpret Sloanea emarginata L. from the Catesby plate cited by Linnaeus (Catesby, 1743: t. 87) on the basis of Catesby's specimen in the Sloane Herbarium (BM-SL 232: 15), and Grolle (1966) fixed the application of Jungermannia lanceolata L. by his interpretation of the illustration by Dillenius (1741: t. 70, fig. 10 A) cited in the original description, supported by material in the latter's herbarium in Oxford (herb. Dillenius, fol. 156, No. 10, OXF). The protype concept accommodates this practice while extending the application to allow the precise interpretation of ambiguous figures and inadequate specimens for which no supportive material exists. This would be particularly advantageous in groups covered by the Code where micromorphological and phytochemical characters are routinely utilized for identification (e.g., algae, bryophytes, fungi and lichens).

Examples of possible protypes other than typotypes include a specimen known to have been seen by the original author of a name that does not qualify as original material under the Code, or a modern specimen or illustration specially prepared for the sole purpose of authenticating a name.

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To accomplish these goals, the following additions to the Code are proposed, of which the first is basic and the two following are subsidiary.

(17) Add a new Art. 7.9bis, to provide for a new category of type termed "protype":

"A protype is a specimen or illustration selected to serve as an interpretative type when the holotype, lectotype or previously designated neotype, or all original material associated with a validly published name, is demonstrably ambiguous and cannot be critically identified for purposes of the precise application of the name of a taxon. When a protype is designated, the holotype, lectotype or neotype that the protype supports must be explicitly cited."

(18) Add a new Rec. 7D, to call attention to the need for adequate justification for establishing a protype:

"When designating a protype, the discussion should include a thorough analysis of the characters required to establish precise application of the name, including a comparison of at least two of the taxa to which the ambiguous holotype, lectotype or neotype might apply."

(19) Add a new Art. 8.5bis, to provide means to supersede a designated protype:

"The author who first designates a protype must be followed; the choice may be superseded by a different protype only if the original is lost or destroyed. A lectotype or neotype supported by a protype may be superseded in accordance with Art. 8.1 or, in the case of a neotype, Art. 8.5."

Acknowledgements

The idea of establishing a secondary type to support an ambiguous primary type was first suggested to us by Dan Nicolson, who also supplied the Troxell reference. The work of FRB and JLR is supported by National Science Foundation Grant BSR-8812816. This is Scientific Article A-6133, Contribution No. 8300, of the Maryland Agricultural Experiment Station and Cooperative Extension Service.

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