

The International Rules of Zoological Nomenclature are shown to disqualify "Hastigerina digitata Rhumbler, 1911".

On "Hastigerina digitata Rhumbler, 1911": Reply

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The recent taxonomic note concerning the validity of "*Hastigerina digitata* Rhumbler, 1911" (Charmatz, 1963) has evoked a response from a number of workers on pelagic foraminifera, including the comment by Loeblich and Tappan published in this number. The Loeblich and Tappan comment summarizes much of the available data on "*digitata*", as well as presenting the articles of the International Code of Zoological Nomenclature deemed applicable by those authors.

However, because of a false premise neither the summarized data nor the selected rules have any bearing on the subject at hand. In their section entitled "Availability of *Hastigerina digitata* Rhumbler", Loeblich and Tappan state that "Brady's name was not cited by Rhumbler, and the combination *Hastigerina digitata* had never been previously published...". As I have pointed out to Dr. Loeblich (personal communication, 12 July, 1963), "...this combination was published twice previously; the first such combination was by Rhumbler in 1895 (K. Ges. Wiss. Göttingen, Math.-Physik. Kl., Nachr., Heft 1, p. 94), as *Hastigerina digitata* (Brady), with *Globigerina digitata* Brady indicated in his synonymy. The second use of this combination was by Fornasini (1898, Pal. Italica, vol. 4, pp. 207, 215), who included both *Globigerina digitata* Brady and Rhumbler's 1895 identification in his synonymy. One cannot therefore state unequivocally that Rhumbler considered this a new binomen. Further, Cushman's citation of *digitata*, when viewed in light of the Rhumbler (1895) and Fornasini (1898) references, is therefore open to question, as, logically, is the matter of the concept of the genus *Hastigerinella*. Similarly, Galloway's 'new name' is a replacement name for a form which cannot be proved to have ever existed for nomenclatorial purposes."

Having thus disposed of the question of the availability of Rhumbler's "*digitata*", the remainder of the Loeblich and Tappan interpretation is also subject to re-examination. Again, the genus *Hastigerinella* has as designated type species "*Hastigerina digitata* Rhumbler", which is taxonomically nonexistent. *Hastigerinella eoanica* Nuttall, 1928, although not an originally included species (of the monotypic genus erected for a phantom species), was, nevertheless, the first species to be introduced into the genus *Hastigerinella*, and one

cannot escape from regarding it as the type of that genus, short of a suspension of Article 69 (a) (ii) (2) of the ICZN, which reads: "If only one nominal species was first subsequently referred to a genus, it is ipso facto the type species, by subsequent monotypy." *Hastigerinella rhumbleri* Galloway, being a replacement name for "*digitata* Rhumbler, 1911", remains in limbo, inasmuch as it was proposed to replace a cipher.

This subject was discussed at length in a series of letters exchanged with Drs. Banner and Blow in the summer of 1963, at which time it was agreed that in order to stabilize the nomenclature there would be a joint motion to apply for the inclusion of *Hastigerina digitata* on the official list of species recognized by the International Commission on Zoological Nomenclature. Dr. Loeblich is well aware of this. I have pointed out to him that "my personal fear is that Article 49 may be invoked in this instance, which would further complicate the matter by necessitating either the substitution of a new, as yet unpublished specific name; the validation of either *rhumbleri* Galloway or *digitifera* (Rhumbler's unpublished manuscript name for figure 9a-b); the inclusion of Cushman's 1927 *digitata*, coupled with a suspension of Article 49; or the selection as type of the first subsequently included valid species, Nuttall's Mexican form. These alternatives are so out of line with the Commission's intentions regarding stabilization that I have suggested to Dr. Banner (9 July, 1963, personal communication) that we couple a request for the inclusion of *digitata* Rhumbler, 1911, with a request for the suspension of Article 49 in this case."

One might normally assume that this analysis of the status of *digitata* Rhumbler and the assurance that steps are to be taken to stabilize the nomenclature would be sufficient to satisfy even the most uncompromising protector of nomenclatural stability. It had been hoped that the correspondence with Dr. Loeblich would obviate the necessity for continuing to beat this particular dead horse. However, since the conclusions reached by Loeblich and Tappan are based upon a disregard of both Rhumbler's intentions, which are morally but not legally binding, and of the previous citation by Rhumbler himself of the combination in question, it has been felt that some reply is necessary.