



***Laurentaeglyphea* Forest, 2006 (Crustacea, Decapoda, Glypheidae): a cautionary tale of *nomina nuda* and the unpredictability of publication schedules**

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Glypheid crustaceans have been the source of much recent discussion, particularly in a phylogenetic context (Schram & Ah Yong, 2002; Dixon et al., 2003; Ah Yong & O'Meally, 2004), an interest initiated by the discovery and report of a living example of this long-thought extinct group by Forest & de Saint Laurent (1975). Subsequent collections resulted in additional information about the biology, ecology, morphology, and biogeography of this “unique” living glypheid species, *Neoglyphea inopinata* Forest & de Saint Laurent, 1975 (Forest & de Saint Laurent, 1976; 1981; 1989; Bruce, 1988).

In October 2005, a second extant species of glypheid crustacean was collected by Bertrand Richer de Forges onboard the N.O. “Alis” in the New Caledonian area between the Coral Sea and the Tasman Sea (ca. 25°S 160°E). This specimen was described as the holotype of the new species *Neoglyphea neocaledonica* Richer de Forges, 2006. Soon after the description of *N. neocaledonica*, Jacques Forest submitted a series of 3 papers wherein he considered this species to belong to a new second Recent glypheid genus, which he named *Laurentaeglyphea*. A reading of the text of the 3 Forest papers, all published in 2006, clearly indicates that his intentions were to have the first paper be published in *Comptes Rendus Biologies*, where he indicates the genus as new in the title, with 2 expanded subsequent papers (essentially identical French and English versions of the same text) following in *Crustaceana*.

The first indication that there might be a potential problem with the order of publication came from examination of the dates as printed in the issues of the respective journals. The *Comptes Rendus Biologies* article listed an issue date for the Internet of 14 September 2006, but did not give any indication of the publication date for the printed copies of the issue. The *Crustaceana* articles were published in the July 2006 issue of that volume, but no indication was given of the precise date of issuance. This information initially suggested that the *Crustaceana* issue was published before the *Comptes Rendus Biologies* issue, which would be counter to the intent of Forest.

Further research determined that the date of issuance of the *Crustaceana* issue was 21 September 2006 (*vide* dates of publication as listed in *Crustaceana* 79(11) end matter), approximately 2 months after the cover date. No precise date of issue for the *Comptes Rendus Biologies* issue was given in the volume for 2006, but a request for information to the premier secrétaire de rédaction, as listed in the front matter for issues of the volume, yielded a publication date for the paper copy of the issue as 16 October 2006 (Jean-Michel Blengino, e-mail of 25 January 2008).

Clearly then, the articles published in *Crustaceana* (hereafter referred to as Forest, 2006a, b) were published in the sense of the International Code for Zoological Nomenclature [ICZN] (1999) Article 8 before the *Comptes Rendus* article (hereafter referred to as Forest, 2006c) that Forest intended to have published first. The date of distribution of Forest (2006c) on the Internet is irrelevant, as there is no statement of deposition in public libraries (as per ICZN Article 8.6) and, even so, those required paper copies were issued at a later date.

Because the date of publication for Forest (2006a, b) precedes that of Forest (2006c), it is necessary to examine each publication to determine which contains sufficient information to make the monotypic generic name *Laurentaeglyphea* available in the sense of the ICZN. A careful study of the wording in each paper indicates that the genus name is potentially made available from Forest, 2006a (Forest, 2006b, being merely an English translation of 2006a, is not relevant here). Both papers (Forest, 2006a, c) contain nearly the same content required to make the genus-group name available and satisfying the pertinent ICZN Articles (e.g., 8, 11, 13 and 15). In fact, the expanded discussion in Forest (2006a) actually contains a greater number of characters that purport to differentiate the taxon (*sensu* ICZN Article 13.1.1) than Forest (2006c). In terms of making the genus-group name available, the only possible difference between the content of the two publications is that which is relevant to ICZN Article 16.1: “Every new name published after 1999... must be

explicitly indicated as intentionally new.” This requirement is met in Forest (2006c), the intended first paper, where he clearly labels the genus as new both in the title as “un nouveau genre” and also as “*Laurentaeglyphea* gen. nov.” on p. 844. However, in Forest (2006a), he also uses the term “un nouveau genre” on p. 782, and an initial reading might suggest that this statement could be interpreted to satisfy the requirements of ICZN Article 16.1. But Forest (2006a) used the indication of a new genus in the past tense: “un nouveau genre *Laurentaeglyphea* gen. nov. a été proposé” (“a new genus, *Laurentaeglyphea*, has been proposed recently” from Forest, 2006b: 810). Usage of the past tense in Forest, 2006a, b, demonstrates that the genus-group name is not being used as intentionally new in either publication. Therefore, ICZN Article 16.1 is not satisfied in Forest (2006a, b) and the generic name *Laurentaeglyphea* is only made available in Forest (2006c). Although this conclusion preserves the intent of Forest in having the name be valid from Forest (2006c), it has the unfortunate consequence of making the genus-group name a *nomen nudum* as used in Forest, 2006a and 2006b.

There are two important lessons to be learned by taxonomists from this particular situation. First, great care must be taken in the use of certain terms in the context of taxon descriptions, especially of taxa above the species level (species descriptions have their own requirements, such as the explicit fixation of type specimens, that make it less likely to inadvertently introduce new species-level taxa). Terms such as “a new genus” or “a new family” should be avoided unless the taxon is intentionally being described as new, especially if the higher-level taxon is monotypic. Alternate terms such as “a second genus” or “a distinctive genus” should be employed in such situations to avoid accidentally complying with Articles of the Code. Secondly, no assumptions should be made regarding the order of publication of articles submitted to different journals in a short span of time. Each journal has its own speed of processing and publishing papers that is entirely independent of all other journals. Also, there has been a trend towards an ever increasing disconnect between the date of issuance as printed in certain journals and their actual dates of publication, both on-line and on paper. Both kind of disconnects are known in that, for example, nearly all issues of *Journal of Natural History* from 1996 onwards have hardcopies published in advance of their printed dates of issue (as documented by Evenhuis, 2003), whereas recent issues of *Crustaceana* have the hardcopies published subsequent to the printed dates of issue (these are well documented in the final issue of each volume). Therefore, even if an author knows the precise issue number in which his or her paper is scheduled to be published, the possibility of the cover date and publication dates not being identical means that use of any new taxon term in multiple submitted manuscripts must be looked at from the perspective of not making new names available in other than the intended paper. Even if such validating terms are not used, the citation of taxon names in publications issued prior to the formal description of such taxa, and the corresponding generation of *nomina nuda*, is best to avoid whenever possible.

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