To be named or not to be named—*Heteropodarke pleijeli* sp. n.  
(Annelida, Polychaeta)

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Abstract

*Heteropodarke pleijeli* n. sp. (Annelida, Polychaeta, Hesionidae) is described from Papua New Guinea. This taxon was characterized in a PhyloCode context by Pleijel in 1999 and again in 2000. The valid name for this annelid will be decided by the zoological community in the future, but the description provided here is regarded as the only available and thus valid one.

A deliberate attempt to challenge the validity of the rules of zoological nomenclature as adopted by the International Union of Biological Sciences appeared in a prominent zoological journal in 1999 (Pleijel, 1999). This action should be taken seriously as it was published in a journal, which one would not expect to violate the principles and rules of biological descriptions, i.e., Systematic Biology. The debate on the value of the rules of nomenclature is an essential question in biology and should be as open as possible. The opponents of the present rules appear to consist of a small, but very active group. The smallness of the group in itself in no way proves their point false (see Laurin et al., 2005). However, I believe this to be case on the basis of the evidence provided recently (Nixon et al., 2003; Flann, 2005; Pickett, 2005a,b). In order to force the biological community to deal with this question—at least once—I will here formally describe the new species-level taxon characterized in Pleijel (1999, 2000), but not described according to the Rules of Nomenclature. Whether Pleijel’s description is “valid” even under the early or later versions of the PhyloCode (for the latest edition of PhyloCode, see Cantino and de Queiroz, 2004) may be open to debate, but there is no doubt that the description is not valid according to the Zoological Code. The author expressly and intentionally violated the Article 11.4 of the Code (Anonymous, 2000) by not applying binominal nomenclature for a species-level name. Thus the names provided are not available as either species group or genus group names. They are unavailable as family group names as well, as they are not formed from existing available genus group names. Pleijel (1999, p. 761) noted that “… but in the absence of ranks they may equally well be viewed as suprafamiliar categories, which then fall outside the scope of the ICZN”. This can be seen as a play with words only, as it is clear that Pleijel does not intend these groups of populations to be regarded as categories more inclusive than families.

Interestingly, Pleijel did not follow the idea of ranklessness to its logical conclusion but rather continued to use terms like “Annelida”, “Polychaeta” and “Hesionidae”. Clearly, the core proponents of the PhyloCode had varied opinions on the question of ranklessness as early as in 2000. This seems to have led to the modification of this point in the PhyloCode, as pointed out by Pickett (2005b).

Pleijel published these names a second time as well (Pleijel, 2000). The names mentioned in that publication are unavailable according to the Rules of Zoological Nomenclature just as those published in Pleijel (1999).
Description

Heteropodarke pleijeli new species

Holotype

Papua New Guinea, Madang Lagoon, Tab Anchorage, W Tab Island, sandy slope with Halimeda residuals, SCUBA, coll. FP:SMNH 5190a (Swedish Museum of Natural History), depth 11 m, December 18, 1994.

As paratypes I designate three further specimens, all listed under the section “material examined” in Pleijel (2000, p. 768): SMNH 5190b, with three separate slides; SMNH 5190c; SMNH 5190d, with one separate slide.

Diagnosis

Heteropodarke pleijeli sp. nov. is characterized by enlarged dorsal and ventral cirri on segment 4, neuropodia appearing first from segment 5 and bidentate falcigers. The bidentate falcigers are a synapomorphous feature for the holo- and paratypes.

Description

A most detailed description is provided in Pleijel (2000, pp. 768–770), under the heading “Bidentata, new taxon”. I have studied the material Pleijel based his description on, except for specimen SMNH 5190e.

Discussion

Heteropodarke pleijeli sp. nov. is the sister species of Heteropodarke formalis Perkins, 1984. The sister group of this clade includes Heteropodarke heteromorpha heteromorpha Hartmann-Schröder, 1974, Heteropodarke heteromorpha africana Hartmann-Schröder, 1974, Heteropodarke xiamensis Ding, Hu & Westheide, 1997 and Heteropodarke lyonsi Perkins, 1984. Pleijel (1999) pointed out that specimens from Belize, which he referred to as a group called “Zmyrina” informal name, might represent the sister group of the remaining species. However, as the evidence for this was quite weak in his view, it appears best not to formalize the name of this group until new material and further evidence for their distinctness becomes available.

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References


