



## Validation of the family Bathyporeiidae (Crustacea, Amphipoda)

CEDRIC D'UDEKEM D'ACOZ

Royal Belgian Institute of Natural Sciences, Rue Vautier 29, B-1000 Brussels, Belgium. E-mail: cedric.dudekem@naturalsciences.be

### Abstract

The family Bathyporeiidae was introduced without description, and later on, when its first proper description appeared, was not considered as new. Therefore, it cannot be currently considered as a valid family. These procedural irregularities are corrected herein, and the family is described *de novo*, with *Bathyporeia* as its type genus.

**Key words:** Crustacea, Amphipoda, Bathyporeiidae, new family, *Bathyporeia*, *Amphiporeia*, taxonomy

### Introduction

Bousfield & Shih (1994) created a number of amphipod families, which are nomenclaturally invalid, as they were not accompanied by descriptions, as specifically required by Art. 13 of ICZN (1999). However, as in many cases the creation of these families was justified from a systematic point of view, some of them have been used in subsequent systematic literature with Bousfield & Shih (1994) as the authority. The present author became aware of this non-Code compliant situation, when he was carrying out a comparison of the family Liljeborgiidae with its possible relatives. Two of these 'ghost families', the Cheirocratidae and Hornelliidae were discussed in d'Udekem d'Acoz (2010), in which they were validated. The present paper focuses on the similar case of the family Bathyporeiidae, which is validated herein.

### Material and methods

In the descriptions, the most important diagnostic characters are indicated in **bold**. Standard abbreviations on the plates are: A1, antenna 1; Gn2, gnathopod 2; Mxp, maxilliped; P3–P7, pereopods 3–7. Nomenclature of the setae of the mandibular palp follows Lowry & Stoddart (1993). In the description, the traditional definition of the terms 'tooth', 'spine' and 'seta' (e.g. Barnard & Karaman, 1991) is applied. The term 'tooth' is used for non-articulated, pointed ectodermic structures, 'spine' for stout, inflexibly articulated structures, and the term 'seta' for slender, flexibly articulated structures. For a discussion of the validity of this terminology, see d'Udekem d'Acoz (2010).

### Bathyporeiidae fam. nov.

Bathyporeid [sic] Lincoln & Hurley, 1981: 106 (vernacular name)

Bathyporeiidae Bousfield & Shih, 1994: 92, 94, 114, 128 (invalid: no description). —d'Udekem d'Acoz, 2007: 63 (invalid: not considered as new)

**Diagnostic description.** Gammaromorphic facies. Appendages with more spines than setae, modified for endopammic life. *Head* with anterior lobe **rounded to bluntly angular** and posterior lobe **very weakly rounded**, the two lobes being separated by a **wide and very weak concavity**; rostrum **obsolete**; eye somewhat elongate, in normal or slightly lower position, with ommatidia usually very distinct. **Calceoli on flagellum of antenna 2** and usually of *antenna 1* **in mature males** (no more than one *calceolus* per article); no *calceoli* on peduncle of *antenna 1*