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## Description of a new genus and species of the family Melphidippidae Stebbing, 1899 (Crustacea: Amphipoda) from the deep waters of Brazil

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### Abstract

The species of the amphipod family Melphidippidae are distributed worldwide in marine habitats, but there is no record of this family from Brazil so far. A new genus and species of Melphidippidae are described from Brazilian waters. *Stebbingiella* **gen. nov.** is monotypic and is distinguished from the other genera of the family by the presence of: antenna 1 with accessory flagellum 7-articulate, lateral cephalic lobe subacute, with globular eyes extremely produced, reaching beyond the second article of peduncle of antenna 2; gnathopods stout and slightly subchelate; coxae 3 and 4 with strong anterior projection and coxae 5 and 7 with strong posterior projection; telson cleft, not fully movable, with two globular lobes, about 2X wider than long. *Stebbingiella globulosa* **sp. nov.** is the first species of Melphidippidae recorded from Brazilian waters.

**Key words:** taxonomy, Gammaridea, *Stebbingiella* **gen. nov.**, *Stebbingiella globulosa* **sp. nov.**, Southwest Atlantic, continental slope

### Introduction

According to Lowry & Springtorpe (2001), the amphipod crustaceans are extremely diverse, abundant and distributed worldwide. They are found in almost all marine and freshwater habitats. They are particularly important as herbivores, detritivores, and micropredator scavengers, and are often an important component of fauna surveys in marine and freshwater environments.

The amphipod crustaceans are successful, both in number of individuals and species, and part of this success may be attributed to the protection of offspring (Borowsky 1980). They belong to the superorder Peracarida, a group of crustaceans that have direct development and hatch the eggs in a thoracic ventral pouch formed by lamellae called oostegites (Myers & Lowry 2003). They are a group of wide bathymetric and geographic distribution, present in various ecosystems, from pelagic to benthic domain, from coastal waters to the deep sea, and in all oceans of the planet (Bousfield 1973).

The amphipods of the family Melphidippidae are benthic elongate Gammaridea, characterized by the elongate antenna 2 and the abdominal somites (pleonites) 1–3 with transverse dorsal serrulations (Sars 1895; Barnard 1962). The Melphidippidae include 18 species grouped into four genera: *Melphidippa* Boeck, 1871, *Melphidippella* Sars, 1894, *Melphisana* Barnard, 1962, and *Melphisubchela* Andres, 1981 (Appeltans *et al.* 2012).

The species of Melphidippidae are distributed in all oceans of the world, including Antarctica (Andres, 1981), but excluding Brazil so far, according to Wakabara & Serejo (1998). This demonstrates the long-standing scarcity of taxonomic studies on the Amphipoda, and the importance of identifying and recording the presence of these crustaceans in Brazilian waters, expanding the knowledge of Brazilian marine biodiversity, and increasing the number of known species in Brazil.