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# *Spelaeogammarus titan,* a new troglobitic amphipod from Brazil (Amphipoda: Bogidielloidea: Artesiidae)

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## Abstract

A new troglobitic species of the amphipod family Artesiidae Holsinger, 1980 is described from a cave in the municipality of Santa Maria da Vitória, in the Brazilian state of Bahia, northeastern Brazil. *Spelaeogammarus titan* **sp. nov.** differs from the others in the genus by its body length, rising up to 18.3 mm, the antenna 1 with accessory flagellum 6-articulate, propodus of the first gnathopod 1.8 X longer than basis, the largest in the genus, coxa 5 with posterior lobe slightly concave, inner ramus of pleopods with 10 to 13 setae, outer ramus of uropod 3 with 22 simple setae, and telson with 1 apical plus 3 subapical stout setae in each lobe. With this study, the knowledge of *Spelaeogammarus* is improved to 5 species, all of them exclusive to caves in the northeastern Brazilian state of Bahia. A comparative table with the diagnostic characters of the species of *Spelaeogammarus* is provided.

**Key words:** Taxonomy, Biodiversity, cave fauna, Urucuia formation, Santa Maria da Vitória, Bahia

## Introduction

Holsinger (1980) estabished the family Artesiidae in the superfamily Bogidielloidea Hertzog, 1936, positioning there the genus *Spelaeogammarus* Da Silva Brum, 1975. However, Botosaneanu & Stock (1989) did not accept Artesiidae and Bogidiellidae as distinct families and suggest that the name Artesiidae would be leaved and its genera included into Bogidiellidae, based in the description of *Aequigidiella* Botosaneanu & Stock, 1989, from two caves in Thailand. This genus bears some characters that seems to be a bridge between the two families (Holsinger 1992).

Koenemann & Holsinger (2000) accept *Spelaeogammarus* positionated in Bogidiellidae, stating that the taxon most closely related to *Spelaeogammarus*, described until now, could be *Bogidiella gammarijormis* Sket (1985), found in a cave from Ecuador.

Lowry & Myers (2013) stablish a new suborder Senticaudata, grouping 95 families anteriorly in Gammaridea. Six infraorders were recognized: Carangoliopsida Bousfield, 1977, Talitrida Rafinesque, 1815, Hadziida S. Karaman, 1932, Corophiida Leach, 1814, Bogidiellida Hertzog, 1936 and Gammarida Latreille, 1802. The infraorder Bogidiellida include just one Parvorder, Bogidiellidira, with a single superfamily, Bogidielloidea, which includes three families, Artesiidae Holsinger, 1980, Bogidiellidae Hertzog, 1936, and Salentinellidae Bousfield, 1977. According to the authors, the genera *Artesia* Holsinger, 1980 and *Spelaeogammarus* are grouped in Artesiidae.

Recent studies in caves from the Northeastern Brazil are bringing up a rich fauna, with descriptions of many new species, including Palpigradi (Souza & Ferreira 2011a, b), Opilioacarida (Bernardi *et al.* 2012), Schizomida

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