



The alpheid shrimp genus *Leslibetaeus* Anker, Poddoubtchenko & Wehrtmann, 2006 in the Western Atlantic, with description of a new species from Tobago (Crustacea, Decapoda)

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Abstract

A miniature alpheid shrimp, *Leslibetaeus caribbaeus* n. sp., is described on the basis of a single female specimen collected in Sandy Bay, Tobago, in 1992. The new species is closely related to *L. coibita* Anker, Poddoubtchenko & Wehrtmann, 2006 from the Pacific coast of Panama, the type species and the only other known species of *Leslibetaeus* Anker, Poddoubtchenko & Wehrtmann, 2006, differing from it in several morphological characters. With the discovery of *L. caribbaeus* n. sp., *Leslibetaeus* becomes a genus with transisthmian (= amphi-American) distribution. In addition, *L. coibita* is reported for the first time since original description and its range is extended by 400 km southwards. The generic diagnosis of *Leslibetaeus* is slightly emended.

Key words: Decapoda, Caridea, Alpheidae, shrimp, new species, *Leslibetaeus*. Caribbean, Atlantic Ocean

Introduction

The alpheid fauna of the Western Atlantic is currently comprised of 18 genera: 14 of them are found mainly in tropical and subtropical marine waters of the Gulf of Mexico, Florida, Caribbean Sea, and Brazil (e.g. Chace 1972; Holthuis, 1973; Felder & Manning 1986; Martínez-Iglesias & Carvacho 1991; Christoffersen 1998; Anker & Felder 2005; Felder & Anker 2007; Anker 2007), while the remaining four genera are confined to cool waters of the South-Western Atlantic (Boschi 1966), anchialine caves and cenotes (Kensley 1988; Anker & Iliffe 2000), or freshwater caves on the eastern (Atlantic-connected) slope of Sierra Madre de Oaxaca, Mexico (Hobbs 1983).

The genus *Leslibetaeus* Anker, Poddoubtchenko & Wehrtmann, 2006 was previously known only from the Eastern Pacific, more precisely from Coiba Archipelago on the Pacific coast of Panama, the type locality of *Leslibetaeus coibita* Anker, Poddoubtchenko & Wehrtmann, 2006, which until now was the only species in this genus (Anker *et al.* 2006). *Leslibetaeus* can be separated from all other American genera of the family Alpheidae by the unique combination of the rounded frontal margin of the carapace, completely concealing the eyes in dorsal view; the symmetrical, equal, robust chelipeds, with simple chelae, thick spiniform setae on the dorsal margin of the ischium and comb-like setal rows on the mesial face of the carpus; and the absence of an articulated flap on the sixth abdominal somite.

In April 1992, Dr. Richard Heard (Gulf Coast Research Laboratory) collected several alpheid shrimps in Sandy Bay, Tobago, Republic of Trinidad and Tobago. Among them was a single alpheid specimen, an ovigerous female of very small size (approximately 8 mm in total length) labelled “unknown”, expressing the collector’s doubts on its generic position. This specimen was deposited in the collections of the National Museum of Natural History, Smithsonian Institution, Washington DC, U.S.A. (USNM), where it was examined by the author in August 2009. Surprisingly, Dr. Heard’s specimen from Tobago represented a species of *Leslibetaeus*, a genus previously unknown from the Western Atlantic. A direct comparison between the specimen from Tobago and a specimen of *L. coibita* collected by the author on the Pacific coast of Panama in 2007, revealed them to be different species. Therefore, a new species of *Leslibetaeus* is described below based on the single specimen from Tobago. In addition, *L. coibita* is reported for the first time since its original description and its range is extended by 400 km southwards. The generic diagnosis of *Leslibetaeus* is slightly emended based on new materials.