



***Akanthoparapseudes alfaroae*, a new genus and species of apseudomorphan tanaidacean (Crustacea: Malacostraca: Peracarida) from Puerto Rican coastal waters**

RICHARD W. HEARD¹ & ANDRÉS G. MORALES-NÚÑEZ²

¹Department of Coastal Sciences, University of Southern Mississippi, Gulf Coast Research Laboratory Campus, Ocean Springs, Mississippi 39564. E-mail: richard.heard@usm.edu

²Department of Natural Sciences, University of Maryland Eastern Shore, Princess Anne, Maryland 21853. E-mail: amorales@umes.edu

Abstract

Akanthoparapseudes alfaroae, **n. gen., n. sp.**, is described from material collected at a depth of 28 m off Culebra Island on the eastern coast of Puerto Rico. The new genus, which is tentatively placed in the family Parapseudidae, is distinguished from other parapseudid genera by a combination of characters, including: (1) pereonites 2 to 6 subquadrate with posterolateral margins each armed with small, but distinct spiniform seta, (2) the first pleonite with anterodorsal margin lacking a distinct transverse row of small setulate setae, (3) maxilliped palp having distolateral margin of article 2 with a strongly developed spiniform seta, (4) pereopod 1 with a reduced coxal process and with anterior margin of basis armed with a strongly developed, acute, spiniform seta, (5) pereopod 2 with basis having well-developed acute spine on mid anterior margin (6) ischium of pereopods 2 to 6 having anterior margin armed with one, occasional two, well-developed narrow, acute spines, (7) pereopod 4 with dactylus, not greatly reduced, but having some adjacent setae of equal or slightly greater length. The new genus is further characterized by the presence of distinctive, blunt-tipped, crenulate, spiniform setae on the carpus and propodus of pereopods 4 to 6; similar to those reported for some species of the apseudid subgenus *Bunakenia* (*Extensibasella*). A key for the separation of the parapseudid genera within the Tribe Parapseudini that lack a distinct transverse row of setae on the first abdominal segment is presented. *Akanthoparapseudes* appears to share several synapomorphies with some species of the apseudid genus *Bunakenia*, suggesting the possibility that these two genera may represent transitional links between the families Apseudidae and Parapseudidae. Several other important overlapping characters that appear to erode the basic differences between the two families are discussed.

Key words: Tanaidacea, Parapseudidae, Apseudidae, new genus, new species, taxonomy, tropical West Atlantic, Puerto Rico

Introduction

A new genus and species of apseudomorphan tanaidacean, tentatively referred to the family Parapseudidae Guțu, 1981 *sensu lato*, occurred in benthic samples collected from a soft-bottom benthic community in the immediate vicinity of Culebra Island off the eastern coast of Puerto Rico (Fig. 1). The specimens were collected by divers at a depth of 28 m between October 2002 and October 2003 (Morales-Núñez and Kornicker 2007; Morales-Núñez *et al.* 2010). The description of this new genus and species, including comments on the family Parapseudidae, are the subjects of this paper.

Type material has been deposited in the collections of the National Museum of Natural History (USNM), Smithsonian Institution, and the USM Gulf Coast Research Laboratory Museum (GCRL), University of Southern Mississippi. All measurements are in millimeters (mm). Unless otherwise indicated, the terminology used here generally follows that of Larsen (2003). Total body length (TL) is measured from the tip of the rostrum to posterior tip of the telson. Total length of dactylus includes unguis. The anterior margin of pereopods refers to the “extensor margin” or frontal margin and the posterior margin refers to the “flexor margin” or ventral margin. The term “spin-