



<http://dx.doi.org/10.11646/zootaxa.3664.2.8>

<http://zoobank.org/urn:lsid:zoobank.org:pub:0B8DBC17-E307-4397-A3A2-301021D1AE6D>

## A new species of *Pseudoleptochelia* Lang, 1973 (Crustacea: Peracarida: Tanaidacea: Leptocheliidae) from the Northwest Atlantic with observations on the status of the genus

ANDRÉS G. MORALES-NÚÑEZ<sup>1,4</sup>, RICHARD W. HEARD<sup>2</sup> & MÓNICA ALFARO<sup>3</sup>

<sup>1</sup>Department of Natural Sciences, University of Maryland Eastern Shore, Princess Anne, MD 21853, USA.

E-mail: [agmorales@umes.edu](mailto:agmorales@umes.edu)

<sup>2</sup>Department of Coastal Sciences, University of Southern Mississippi, Gulf Coast Research Laboratory Campus, Ocean Springs, MS 39564, USA. E-mail: [richard.heard@usm.edu](mailto:richard.heard@usm.edu)

<sup>3</sup>Department of Biology University of Puerto Rico Mayagüez Campus, PR 00680, Puerto Rico. E-mail: [monica.alfaro@upr.edu](mailto:monica.alfaro@upr.edu)

<sup>4</sup>Corresponding author

### Abstract

*Pseudoleptochelia juliae* n. sp. is described from Puerto Rican waters in depths from 1 to 28 m. The new species and *P. fairgo* from western Australia are the only members of the genus as defined in this revision that have a distinct process on the posterior margin of the cheliped carpus. The male of *P. juliae* is distinguished from that of *P. fairgo* by this process being sub-acute and having a distinctly narrower propodus. Lang's generic diagnosis for the female of *Pseudoleptochelia* is incorrect, which has led to confusion. Based in examination of Mediterranean specimens attributed to the type species *P. anomala* (Sars), *Pseudoleptochelia* is rediagnosed to contain seven species; *P. anomala*; *P. fairgo*; *P. juliae*; *P. magna*; *P. mortensenii*; *P. occiporta*; and *P. straddi*., The genus is reviewed and discussed and the taxonomic status for the remaining nine species previously assigned to the genus is re-evaluated. *Pseudoleptochelia* shares similarities with the more recently described Pacific genera *Konarus* and *Parakonarus* and to a lesser extent to the highly derived genus *Makraleptochelia*.

**Key words:** Tanaidacea, Leptocheliidae, new generic diagnosis, *Pseudoleptochelia*, *P. anomala*, *P. juliae* n. sp., Caribbean, Puerto Rico

### Introduction

There have been earlier reports of an apparently undescribed species of *Pseudoleptochelia* Lang, 1973 from the southern waters of the Northwest Atlantic (Suárez-Morales *et al.* 2004; Heard *et al.* 2004; García-Madrigal *et al.* 2005; Heard *et al.* 2009) and during a study of the tanaidacean fauna of Puerto Rico by the first author, additional specimens of this species were collected. Based on this material, the description of this new species is presented here. Additionally, access to specimens of the type species, *P. anomala* (Sars, 1882), has allowed us to discuss its taxonomic status in relation to other nominal species presently assigned to *Pseudoleptochelia*.

This publication represents the fourth in a series (Morales-Núñez *et al.* 2010; Drumm & Morales-Núñez 2010; and Heard & Morales-Núñez 2011) on the tanaidacean fauna of Puerto Rico. Including these published records, eight nominal species have been previously reported from Puerto Rican and closely adjacent waters (see Morales-Núñez 2011). The only previous records for tanaidomorphans from the coastal waters of Puerto Rico were for the leptocheliids *Leptochelia forresti* (Stebbing, 1896) and *L. dubia* (Krøyer, 1842), as reported by Stoner (1986) from shallow-water grass bed habitats near Mayagüez.

The present study deals with a review of the leptocheliid genus *Pseudoleptochelia* with comments on its taxonomic status and the description of a new species from Puerto Rico coastal waters.