



***Pseudobranchiomysis arenae*, a new genus and species of Leptomysinae (Crustacea: Mysida) in Argentinian sandy beaches**

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Abstract

A new genus of Leptomysinae Hansen, 1910, constituting a new type species for science, is described: *Pseudobranchiomysis arenae*. This new mysid is characterized by a combination of the following characters: antennal scale lanceolate and setose all around with a pointed apex, telson with apical cleft armed with many fine spines on the convex margins, and well-developed pseudobranchial lobes in male pleopods. Individuals of this species were found in the surf zone of two sandy beaches in Argentina and constitute a stable population.

Key words: Leptomysinae, *Pseudobranchiomysis* n. gen., *P. arenae* n. sp., Argentina, South Atlantic.

Introduction

Nineteen species of the order Mysida have been reported as inhabiting an area from the Uruguayan coast to South Georgia Island, South West Atlantic Ocean (Murano 1999), four of these: *Arthromysis magellanica* (Cunningham, 1871), *Mysidopsis tortonesei* Bacescu, 1968, *Neomysis americana* (S.I. Smith, 1873) and *Mysidopsis rionegrensis* Hoffmeyer, 1993 are the most frequented species on the shelf and in coastal waters of Argentina from the Rio de la Plata River estuary in the north to the San Matías Gulf region in the south and first described in the Argentinian coastal waters by Tattersall (1955), Schiariti *et al.* (2004), González (1974) and Hoffmeyer (1993), respectively. The mysid described herein is the type species of a new genus to be placed within the subfamily Leptomysinae Hansen, 1910.

Materials and methods

Within the framework of a project involving the integrated study of sandy beaches in the south of Buenos Aires province (Argentina) (2009–2010), seasonal samplings were carried out in the surf zone of Monte Hermoso (38°59'S, 61°06'W) and Pehuen C6 (39°00'S, 61°37'W) sandy beaches. Macrobenthic fauna was sampled with a sledge equipped with a 1 mm-mesh net and samples were fixed with a solution of 4% formalin in seawater. At the laboratory, specimens were sorted and stored separately in 70% ethanol for later examination. Cephalic, thoracic and abdominal appendages were dissected under stereoscopic microscope (Nikon SMZ 1500) and temporarily mounted on slides. Illustrations were copied from photos taken with a microscope (Eclipse 80i) fitted with a digital camera (Nikon DXM1200F - software: Nikon ACT-1). The type specimens are deposited in the Natural Science Museum of La Plata city, Buenos Aires Prov., Argentina (DZI-MLP). Other specimens examined are deposited in the Benthos Lab, IADO, Bahía Blanca city, Buenos Aires Prov., Argentina (LB-CR). Mysida taxonomy follows WoRMS (Mees 2012) and Meland & Willassen (2007).