



New Mysida (Crustacea) in the genus *Pseudomma* from the Bellingshausen Sea (Southern Ocean)

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Abstract

Two new Erythropinae mysids, *Pseudomma bellingshausensis* and *P. melandi* are described from specimens sampled with a suprabenthic sled in the Bellingshausen Sea (Southern Ocean). *P. bellingshausensis* and *P. melandi* are distinguishable from its closest congeners, *P. antarcticum* Zimmer, 1914, *P. jasi* Meland & Brattegard, 1995 and *P. islandicum* Meland & Brattegard, 2007 by ocular plate sculpturing and telson armature. A key for the Antarctic and Subantarctic *Pseudomma* species is also included.

Key words: taxonomy, Erythropinae, *Pseudomma*, *bellinghausensis*, *melandi*, Antarctica

Introduction

Despite their high abundance in most of the marine benthic systems of the Southern Ocean, mysids are not frequently reported in studies on benthos assemblages due to inadequate sampling methodology. These swimming crustaceans often escape traditional benthos samplers because they concentrate near the bottom; therefore, a more representative sampling of mysid diversity is certainly obtained when samplings are carried out close to the sea floor. Samples collected with new types of epi- and suprabenthic sledges confirm the efficiency of such gear and their usefulness for better catching Antarctic mysid species (San Vicente 2010).

The genus *Pseudomma* Sars, 1870 is currently one of the most diverse genera of Mysida with 41 species distributed throughout the World Ocean (Anderson 2010). In general, the genus seems to live on or close to the sea-floor (suprabenthic), and most commonly at depths between 100 and 1000 meters. Recent studies on deep-sea assemblages using epibenthic or suprabenthic sledges samplers are discovering new species to science (Murano & Mauchline 1999; Meland 2004; Meland & Brattegard 1995, 2007).

Species identification of this genus has been discussed by Tattersall (1955), Murano (1974) and Meland & Brattegard (1995). Also, the taxonomic status and the molecular phylogeny and biogeography of *Pseudomma* has been reviewed by Meland (2004) and Meland & Willassen (2004).

Pseudomma is also one of the most diverse mysid genus in the Southern Ocean with nine known species (Brandt *et al.* 1998) and there is a high degree of endemism with six species living in Antarctic waters, latitudes higher than 60°S (Petryashev 2007, San Vicente 2010), four of them with a circumpolar distribution (*P. antarcticum* Zimmer, 1914; *P. armatum* Hansen, 1913; *P. belgicae* Holt & Tattersall, 1906; *P. sarsi* Sars, 1883) and two only known from the Antarctic Peninsula, Palmer Archipelago (*P. longicaudum* Tattersall, 1955 and *P. schollaertensis* Tattersall, 1955). The subantarctic *Pseudomma* includes six species, three of them also known from Antarctic waters: *P. antarcticum* and *P. armatum* known from South Georgia and *P. sarsi* known from Kerguelen Island, South Georgia and Patagonia. Three species are only known from subantarctic regions: *P. calmani* Tattersall, 1955 from South Chile, Patagonia and South Georgia, *P. magallanensis* Tattersall, 1955 from Patagonia and South Georgia and *P. minutum* Tattersall, 1955 from South Chile and Patagonia. A fourth subantarctic species known from South Chile, *P. omoi* Holmquist, 1957, is considered a synonym of *P. minutum* (Meland, 2004).

Within the Antarctic Mysida taxocene, *Pseudomma* spp. populations represent approximately 11% of the total abundance from South Shetland Islands and Bransfield Strait (San Vicente *et al.* 2006); all species contribute to the