



## Two new species of the genus *Pseudomesus* Hansen, 1916 (Isopoda, Asellota) from the Southern hemisphere: *Pseudomesus pitombo* sp. nov. and *Pseudomesus satanus* sp. nov.

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### Abstract

Two new species of the genus *Pseudomesus* Hansen, 1916 (Isopoda, Asellota) are described from the Southern hemisphere: *Pseudomesus pitombo* sp. nov. and *Pseudomesus satanus* sp. nov. Specimens of the new species were collected during DIVA-1 (DIVERSITY of the abyssal Atlantic Ocean) in the deep Angola Basin (*P. pitombo*) and a cruise to the Australian continental slope (*P. satanus*), respectively. They differ from the remaining species of this genus by the presence of a mandibular palp. *P. pitombo* can be distinguished from *P. satanus* by the shape of the anterior margin of the cephalothorax of the female, in the number of articles of the antenna, and the length of the maxilliped's exopodite.

**Key words:** Isopoda, Desmosomatidae, *Pseudomesus*, new species, DIVA, Angola Basin, Australian slope, deep sea

### Introduction

Since the description of the first *Pseudomesus* species, i.e. *Pseudomesus brevicornis* Hansen, 1916, the affiliation of the genus to the Desmosomatidae, the Nannoniscidae or even to an own family, the Pseudomesidae, has been discussed more than once by several authors (e.g. Hansen 1916; Gurjanova 1933; Svavarsson 1984; Wägele 1989). Svavarsson (1984) found the male of *Pseudomesus brevicornis* Hansen, 1916 to be most similar to the desmosomatid *Eugerdella ischnomesoides* Hessler, 1970. The only distinguishing character between the latter and *Pseudomesus* was the length of the uropods (Svavarsson 1984), while both species share obvious similarities in the habitus, the setation of the first pereopod and in the posterior pereopods. Consequently, Svavarsson (1984) assigned *Pseudomesus* to Desmosomatidae.

Wägele (1989) discussed the reduction of the ventral natatory setae of pereopods 5–7, and uropods inserting closely to each other as synapomorphies for the Nannoniscidae and, thus, assigned *Pseudomesus* to this family. However, due to the fact that desmosomatid species, such as *E. ischnomesoides* or *E. hessleri* Just 1980, have one or the other character, Wägele's (1989) argumentation appears weak. Hence, here *Pseudomesus* is kept within the Desmosomatidae, referring to Svavarsson (1984).

To date, three species of the genus have been described, all occurring in the Northern hemisphere (Table 1). Here, two new species, *Pseudomesus pitombo* sp. nov. and *Pseudomesus satanus* sp. nov., are described representing the first records of *Pseudomesus* from the southern part of the world's ocean, that is the South Atlantic and Pacific. The mere description of these species may not obtain a solution for the confusing position of the genus *Pseudomesus* but, at least, might initiate further discussions.