



## Two new species of the genus *Tanzanapseudes* Băcescu, 1975 (Tanaidacea: Apseudomorpha: Tanzanapseudidae) from mid-west Australia

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### Abstract

Two new species of the apseudomorphan tanaidacean genus *Tanzanapseudes* are described from coral reefs of Western Australia. This genus belongs to the monogeneric family Tanzanapseudidae, which is recorded here for the first time from Australia. *Tanzanapseudes nieli* n. sp. differs from the other members of the genus by a specific pattern of minute spines and setae on pereonites, and by a combination of two other characters: a pleotelson distal process with a smooth outer margin and a short and spinose first article in the antennule. *T. levis* n. sp. has the anterolateral processes on its carapace and distal processes on its pleotelson uniquely smooth. A key for identification of *Tanzanapseudes* species and an amended diagnosis are given.

**Key words:** Tanaidacea, Apseudomorpha, Tanzanapseudidae, *Tanzanapseudes*, Ningaloo, coral reef, CReefs

### Introduction

The family Tanzanapseudidae was established by Băcescu (1975) for two new species of apseudomorphs of his newly erected genus *Tanzanapseudes*. A year later Roman (1976) described the genus *Acanthapseudes*, which was synonymized with *Tanzanapseudes* by Kudinova-Pasternak (1979). Since then the genus has remained monogeneric.

*Tanzanapseudes* incorporates species associated with coral reefs of the Indo-Pacific. Their characteristic overall morphology is unusual among tanaidaceans. The body is dorsoventrally flattened and armed with lateral processes which makes them perfectly adapted for living on the flat surface of dead corals or sponges (Băcescu 1975; Müller 1992).

Băcescu (1975) recognised *Tanzanapseudes* as an ‘archaic’ taxon, although did not support his statement. In contrast to Băcescu, Kudinova-Pasternak (1979) considered *Tanzanapseudes* with their flattened and laterally-armed body (‘star-shaped’, ‘stellate disk shape’) as highly specialised forms of epibionts. The body is covered by numerous plumose setae to which mud particles adhere, perfectly covering the animal and augmenting their camouflage.

The genus previously included four species. Three of them were found on the coast of Tanzania (*T. longiseta* Băcescu, 1975; *T. langi* Băcescu, 1975; *T. elegans* (Roman, 1976)), and one at Bora Bora in French Polynesia (*T. polynesiensis* Müller, 1992). Two further species were collected by us on the coral reef off Ningaloo in mid-west Australia in July 2008 during the CReefs Programme (Census of Marine Life). Their descriptions are the subject of this paper.

### Material and methods

The material was collected during the CReefs (Australia) field-trip organised by AIMS (Australian Institute of Marine Science) to Ningaloo (mid-western Australia).