



The tanaidacean assemblage from the Central Pacific Manganese Nodule Province. II. The genera *Stenotanais* and *Typhlotanais* (Crustacea)

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Abstract

Three new species of Tanaidacea are described from the manganese nodule province between the Clarion and the Cliperton Fracture Zone of the equatorial North Pacific Ocean. The specimens were collected during the Nodinaut expedition on board the r/v *l'Atalante* in the summer of 2004. The new species belongs to the genera *Stenotanais* (*S. arenasi*) and *Typhlotanais* (*T. froufesae*, *T. pereosetulosa*). *Stenotanais arenasi* is believed to be the first male *Stenotanais* reported. A key to the genus *Stenotanais* is presented. The anterior pleopods of *T. pereosetulosa* were found to be dissimilar from the posterior.

Key words: Tanaidacea, Tanaidomorpha, *Stenotanais*, *Typhlotanais*, Manganese nodule province, Nodinaut Cruise

Introduction

This is the second paper in a series on the tanaidacean assemblage in the Central Pacific Manganese Nodule Province, collected during the French Nodinaut expeditions. As implied from the name of the province, it is recognized by the presence of Manganese deposits in the form of nodules lying on the ocean floor and this has attracted the interest of politicians due to the potential for exploitation. The still-ongoing Nodinaut expeditions are focused on collecting and recording deep-sea benthic invertebrates prior to exploitation. For an overview of previous papers of the tanaidacean fauna from this ocean basin see Larsen (2011a).

This paper deals with the genera *Stenotanais* Bird & Holdich, 1984 and *Typhlotanais* G.O. Sars, 1882 since other genera have already been (Larsen 1999, 2000, 2011a) or are currently being treated (Gurrero-Kommritz research in progress). This is the first Pacific record of *Stenotanais* while *Typhlotanais* has a cosmopolitan distribution. The genus *Stenotanais* is not a common genus, previously reported only from the Northeast Atlantic (Bird & Holdich 1984) and Gulf of Mexico (Larsen 2005) from bathyal to abyssal depths (1320–4829) meters. The genus consists currently only of four species including the one described in this paper. The genus *Typhlotanais* is a much more common genus, and is well represented in all the major oceans from less than 10 meters depth to abyssal depths exceeding 7000 meters (Sieg 1983). Despite recent systematic treatment (Błażewicz-Paszkowycz 2007) which resulted in the splitting of the genus into six genera, *Typhlotanais sensu lato* still includes 49 species (Anderson *et al* 2007 onwards), including the two described herein, and is likely to be overburdened.

Material and methods

Samples were taken during the Nodinaut expedition (17 May–28 June 2004) from aboard the research vessel *l'Atalante* using an USNEL Box corer and the submersible *Nautilie* with a spade corer (Carottier à lame). The material was passed through a 0.5 mm sieve and fixed in 4% buffered formalin and stored in 70% alcohol.

Dissections were made in glycerine using chemically-sharpened tungsten wire needles. Body length was measured from the tip of the cephalothorax to the apex of the pleotelson. The terminology in the descriptions is based on Larsen (2003). Types are deposited in the Muséum National d'Histoire Naturelle Paris (MNHN).