

# **Article**



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# Stachyops, a new nototanaid genus (Crustacea: Peracarida: Tanaidacea) from New Zealand, with remarks on nototanaid and tanaissuid phylogeny

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#### **Abstract**

A new genus and species, *Stachyops sebparri*, is described from the eulittoral of Cook Strait, New Zealand and is the first record of a nototanaid from one of the main islands. A very small species, it has several morphological characters that are shared with some species of the Tanaissuidae, such as a narrow mandibular molar and fewer pereopods 4–6 carpal spines, yet retains some apparent plesiomorphic features more typical of the Nototanaidae or other 'basal' paratanaoideans. A phylogenetic analysis does group it with the Nototanaidae *sensu* Bird & Larsen, but more phylogenetic studies of these two families are needed to clarify their composition, relationships, and validity.

Key words: Tanaidacea, Nototanaidae, Tanaissuidae, Stachyops, phylogenetics, taxonomy, Mana BioBlitz, New Zealand

### Introduction

Among the common and abundant paratanaoid tanaidaceans of the rocky shores of Cook Strait, New Zealand, such as *Parakonarus kopure* Bird, 2011, *Zeuxoides rimuwhero* Bird, 2008, and *Paratanais paraoa* Bird, 2011 are a few rare, or possibly overlooked, species. One of these is a very small nototanaid that was first collected in early 2011 during the period of the Mana BioBlitz, an event organised by the Royal Forest & Bird Protection Society of New Zealand (see Bird 2011). The family Nototanaidae Sieg, 1976 has not been recorded previously from the main islands of New Zealand although there is one published record of an unnamed species of *Nototanais* Richardson from the Auckland Islands (Stephensen 1927). Another, possibly conspecific, *Nototanais* species is present in the Campbell Islands (Bird ined.) and will be described elsewhere. In contrast, both *Nototanais antarcticus* (Hodgson) and *Nototanais dimorphus* (Beddard) are relatively common in shallow waters of New Zealand's Antarctic Ross Dependency (Bird ined; Sieg 1983).

This paper gives a description of the new taxon, which is a new genus and new species that also highlights some of the uncertainties surrounding the Nototanaidae and Tanaissuidae as defined by Bird & Larsen (2009).

## Material and methods

I have been collecting tanaidaceans from Cook Strait shores since 2007; those described here come from two samples collected in 2011. The relevant field stations are indicated by the prefix GJB-RW, for the author and Rick Webber of Te Papa (see below). Type material is deposited in the Museum of New Zealand—Te Papa Tongarewa, Wellington (Te Papa). Drawings were prepared with a WACOM Intuos.4 drawing tablet and Adobe Illustrator CS4. Terminology follows Larsen (2003) and Bird (2011); as in the latter, 'PSS' is an abbreviation for 'plumose sensory seta' (as found on antennules, antennae, and pereopod bases).

The preliminary and comparative phylogenetic analysis shown below used the same character suite, data matrix and settings in T.N.T. 1.1 (Goloboff *et al* 2000) as used by Bird & Larsen (2009: 138–149). The 'character-state' scoring was not modified or corrected with various minor changes revealed since then (aside from some more significant revisions to inferred homologies made by Bird (2012)). Note that two of the character descriptions