



## New species of *Tridentella* Richardson, 1905 (Isopoda: Cymothoidea: Tridentellidae), tropical marine isopod crustaceans from the Banda Sea, Indonesia

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### Abstract

*Tridentella memikat* **sp. nov.**, *Tridentella tanimbar* **sp. nov.** and *Tridentella brandtae* **sp. nov.** are described and figured. *T. memikat* **sp. nov.** is the largest species in the family and can be identified by the broadly rounded pleotelson posterior margin, complete lack of dorsal ornamentation and antennule peduncle articles 2 and 3 each with the posterodistal angle produced. *T. tanimbar* **sp. nov.** is a sister species to *T. recava* Bowman, 1986, both species characterised by a flattened body shape, lack of dorsal ornamentation and deep excision to the pleotelson apex; *T. tanimbar* **sp. nov.** is identified by free lateral margins to pleonite 5, antennal flagellum extending to pereonite 5 or 6, pleon wider than pereon, the propodus of pereopods 1–3 lacking long slender robust setae, uropod exopod shorter (0.8) than endopod and the uropods not extending beyond the pleotelson. *Tridentella brandtae* **sp. nov.** is characterised by the posterior margin of the pleotelson being subtruncate and weakly emarginate; posterior margins of pereonites 6 and 7, pleonites 3–5 and the dorsal surface of the pleotelson weakly nodulose; inferior margins of the propodus of pereopods 2 and 3 with a double row of robust setae; the shape and setation of the uropods; adult males are further characterised by the presence of a large bluntly rounded robust seta at the inferodistal angle of the carpus. These species constitute the first record of the family from the Indian Ocean.

**Key words:** Taxonomy, Isopoda, Tridentellidae, Banda Sea, Indonesia; Indian Ocean

### Introduction

The Tridentellidae is a small family with a world-wide distribution (see Bruce 2002; Brandt & Poore 2001 for recent discussions and species lists), but only three of the 17 species have been recorded from tropical latitudes. Examination of the isopod collections held at the Muséum national d'Histoire naturelle in Paris revealed, potentially, as many as 13 mostly undescribed species of *Tridentella* Richardson, 1905 from tropical localities in the southwestern Pacific as far east as Fiji, and in the eastern Indian Ocean in the vicinity of the Banda Sea. This contribution describes three of these new species, all from the Banda Sea, including the largest species recorded for the genus, and is the first record of the genus from the Indian Ocean.

The Tridentellidae are part of the paraphyletic 'Cymothoidea' of Brandt and Poore (2003), clearly similar to the micropredatory families Aegidae and Corallanidae. Tridentellids are characterised and differentiated from other related families by having an elongate maxilliped endite that extends beyond the third palp article, and simple single-lobed maxilla distally provided with numerous serrated scales, but without recurved spines or hooked robust setae.

The species descriptions were prepared in DELTA (Descriptive Language for Taxonomy, see Dallwitz *et al.* 1997) using a general Tridentellidae character set. Some *integer numeric* character states in the description