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A new genus of Stenetriidae Hansen, 1905 (Asellota: Isopoda: Crustacea) from the Great Barrier Reef, Australia and the southwestern Pacific

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Abstract

Onychatrium **gen. nov.** is described, with five included species: *Onychatrium forceps* **sp. nov.**, the type species and *Onychatrium torosus* **sp. nov.**, both from the Great Barrier Reef; *Onychatrium entale* (Nordenstam, 1946) **comb. nov.**, from Tapateuen (= Tabiteue Island), Gilbert Islands; *Onychatrium thomasi* (Bolstad & Kensley, 1999) **comb. nov.**, from Madang, Papua New Guinea; and *Onychatrium echiurum* (Nobili, 1906) **comb. nov.**, and *species inquirenda* from the Tumaotu Islands, Eastern French Polynesia. The primary distinguishing characters for *Onychatrium* **gen. nov.** are a trapezoid pseudosrostrum, the male pereopod 1 with elongate dactylus (4.7–7.3 as long as proximal width), propodus with strongly produced and acute lobe, carpus with a distally acute, flat, ventrally directed process (except *O. torosus* **sp. nov.**, which has a short and truncate process) and the merus with a distally directed inferodistal lobe. The genus is known only from the southern Pacific, from the Tuamotus (eastern French Polynesia) to the Great Barrier Reef and northern Papua New Guinea.

Key words: Asellota, Isopoda, Crustacea

Introduction

The isopod fauna of coral reefs can be considered moderately well known, albeit with significant taxon and regional gaps in knowledge (see Poore & Bruce 2012). In the Australian context the primary regional gaps in documentation are the western and northern coral reefs, and the major taxonomic gap was and remains the Asellota, which in 2010 was represented by merely three species: *Joeropsis sandybrucei* Bruce, 2009; *Ascionana magnetica* Just & Wilson, 2004; and *Prethura hutchingsae* Kensley, 1982. Recent publications (Bruce & Buxton 2013; Bruce 2015; Shimomura & Bruce 2012) have started to redress this imbalance. A focus of attention has been the family Stenetriidae Hansen, 1905, which is both diverse and abundant on coral reefs (see Kensley 1984; Kensley & Schotte 2002; Müller 1990, 1991a, b; Martin *et al.* 2003), being represented in Australia by at least eight genera (Bruce & Buxton 2013). The present work continues documenting the tropical Stenetriidae of Australia.

Bruce & Buxton (2013) reviewed *Hansenium* Serov & Wilson, 1995, redefining the genus on the basis of the type species and excluding all but two species from the genus. In the same work, the genus *Machatrium* Bruce & Buxton, 2013 was established with nine species, the remaining species of *Hansenium* all being regarded as *incertae sedis* or *species inquirenda*. Some of the species excluded from *Machatrium* and *Hansenium* (*sensu strictu*) formed definable groups, one such group being a small number of species similar to *Stenetrium entale* Nordenstam, 1946, characterized by the male pereopod 1 having a greatly elongate dactylus and the propodus inferior margin with a strongly produced process, among other characters. This group of species is here formally recognized as *Onychatrium* **gen. nov.**, with five species, all from shallow-water coral reef environments in the southwestern Pacific. The erection of *Onychatrium* **gen. nov.** does not necessitate any change to the diagnosis for *Hansenium* given by Bruce & Buxton (2013), with only two included species, all other species in the genus at that time being transferred to *Machatrium* or placed into the category of *incertae sedis*, as such not conforming the genus *Hansenium* Bruce & Buxton, 2013 *sensu strictu*.

Nordenstam's type material. Collections of *Onychatrium thomasi* at Madang, Papua New Guinea, were carried out at the Christensen Research Institute, and were made possible by a Christensen Research Fellowship, for which NLB thanks the Christensen Fund; NLB also thanks Matthew Jebb, John Mizeu and Rosella Ueba for their considerable field assistance.

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