



Chevaliidae*

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Abstract

A new species of chevaliid is reported from the Great Barrier Reef. It is compared with *Chevalia pacifica* Myers from Papua New Guinea, with *C. aviculae* Walker from Sri Lanka and with material attributed to *C. aviculae* from Fiji.

Key words: Crustacea, Amphipoda, Chevaliidae, Great Barrier Reef, Australia, taxonomy, new species, *Chevalia tenuis*

Introduction

The Chevaliidae is a monotypic family of tropical amphipods with five previously described species and several further species currently without formal names. They are rather fragile amphipods that are easily recognised in samples, due to their characteristic body shape. Their way of life is, however, unknown.

Material and methods

The descriptions were generated from a DELTA database (Dallwitz 2005) to chevaliid species. Material was hand collected on scuba and is lodged in the Australian Museum, Sydney (AM). A set of colour plates, a list of standard abbreviations and detailed station data is available in Lowry & Myers (2009). A CD (*Benthic Amphipoda (Crustacea: Peracarida) of the Great Barrier Reef: Interactive Keys*) is available with the book, or the keys can be accessed at the crustacea.net website.

Chevaliidae Myers & Lowry, 2003

Chevalia Walker, 1904

Chevalia tenuis sp. nov.

(Figs 1, 2)

Type material. Holotype, male, 2.5 mm, AM P71428, Yonge Reef, Half Mile Opening (14°34.556'S 145°36.726'E), *Halimeda* sp. (green coralline alga), 16 m, P.B. Berents, 4 March 2005 (QLD 1808). Paratype: 1 female, AM P77549, same data as holotype.

Additional material examined. 3 males, 3 females, AM P77551 (JDT/LIZ 3); 1 male, 1 female, AM

P77550 (JDT/LIZ 7); 1 female, AM P70613 (QLD 1621); 1 male, AM P71510 (QLD 1823); 1 female, AM P77552 (SEL/LZI 4-2).

Type locality. Yonge Reef, Lizard Island, Queensland, Australia (14°34.556'S 145°36.726'E).

Etymology. From the latin '*tenuis*' meaning slender, referring to the attenuated appearance of this species.

Description. Based on holotype, male, 2.5 mm, AM P71428.

Head. *Head* eyes small (distinctly less than 1/4 head length), partially within the lateral lobe of the head; lateral cephalic lobes rounded. *Mandible* palp article 3 subequal in length with article 2. *Antenna 1* peduncular article 1 distinctly shorter than article 3; accessory flagellum 2-articulate. *Antenna 2* half body length, peduncular articles 4–5 with 4 or more rows of setae per article; flagellum distinctly longer than peduncular article 5.

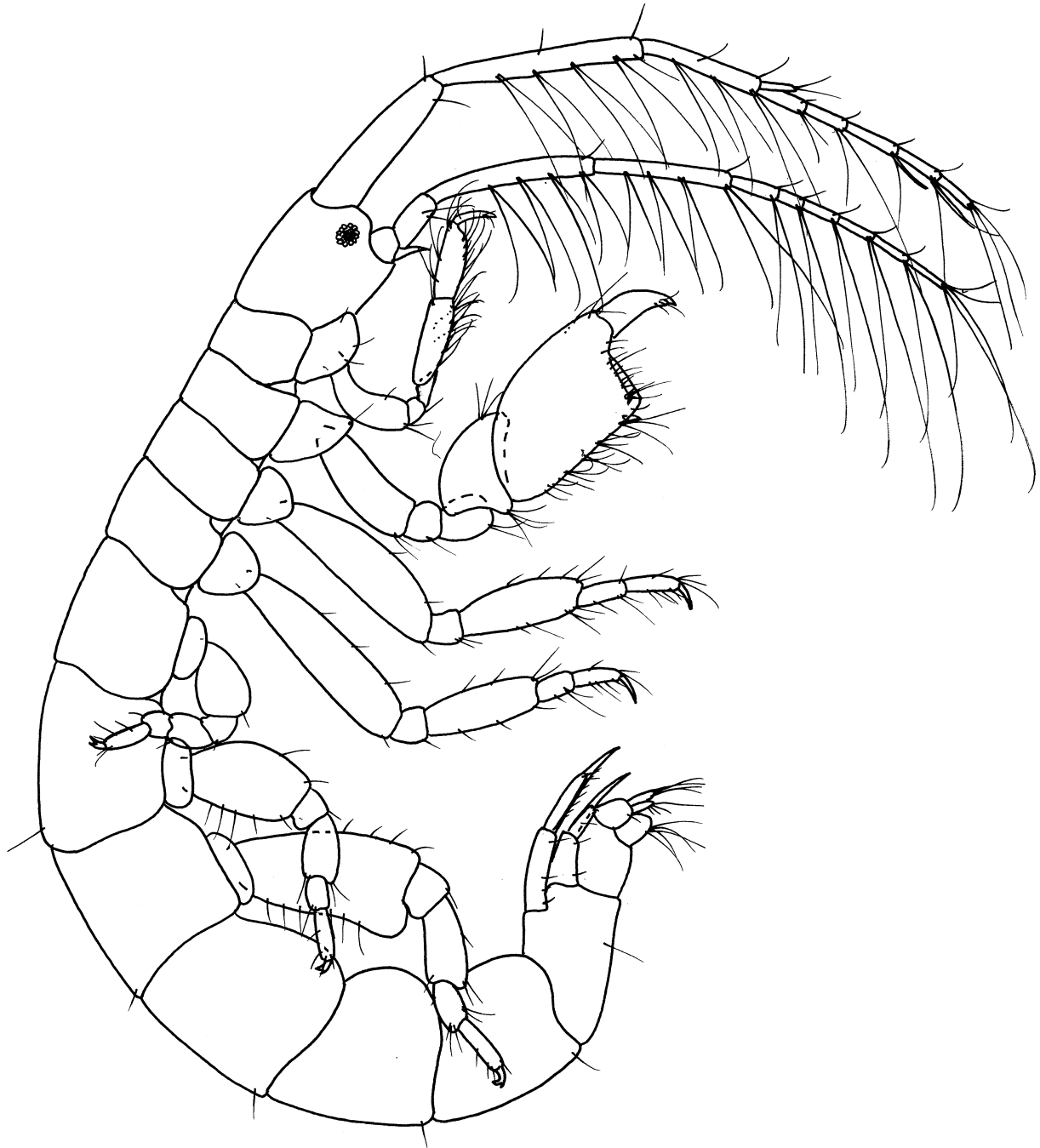


FIGURE 1. *Chevalia tenuis* sp. nov., holotype, male, 2.5 mm, AM P71428, Yonge Reef, Lizard Island, Great Barrier Reef.

Pereon. *Gnathopod 1–2 & Pereopods 3–4* coxae of similar size. *Gnathopod 1* smaller than gnathopod 2; carpus subequal in length to propodus; propodus narrow. *Gnathopod 2* propodus subrectangular, twice length of carpus, posterodistal corner with triangular tooth, palm weakly sinuous; dactylus short (distinctly half or less than half length of propodus). *Pereopods 3–4* merus elongate, weakly expanded and scarcely overlapping carpus. *Pereopods 5–7* basis posterior margin with numerous setae. *Pereopods 5–6* dactylus with accessory spine. *Pereopod 5* basis distally expanded.

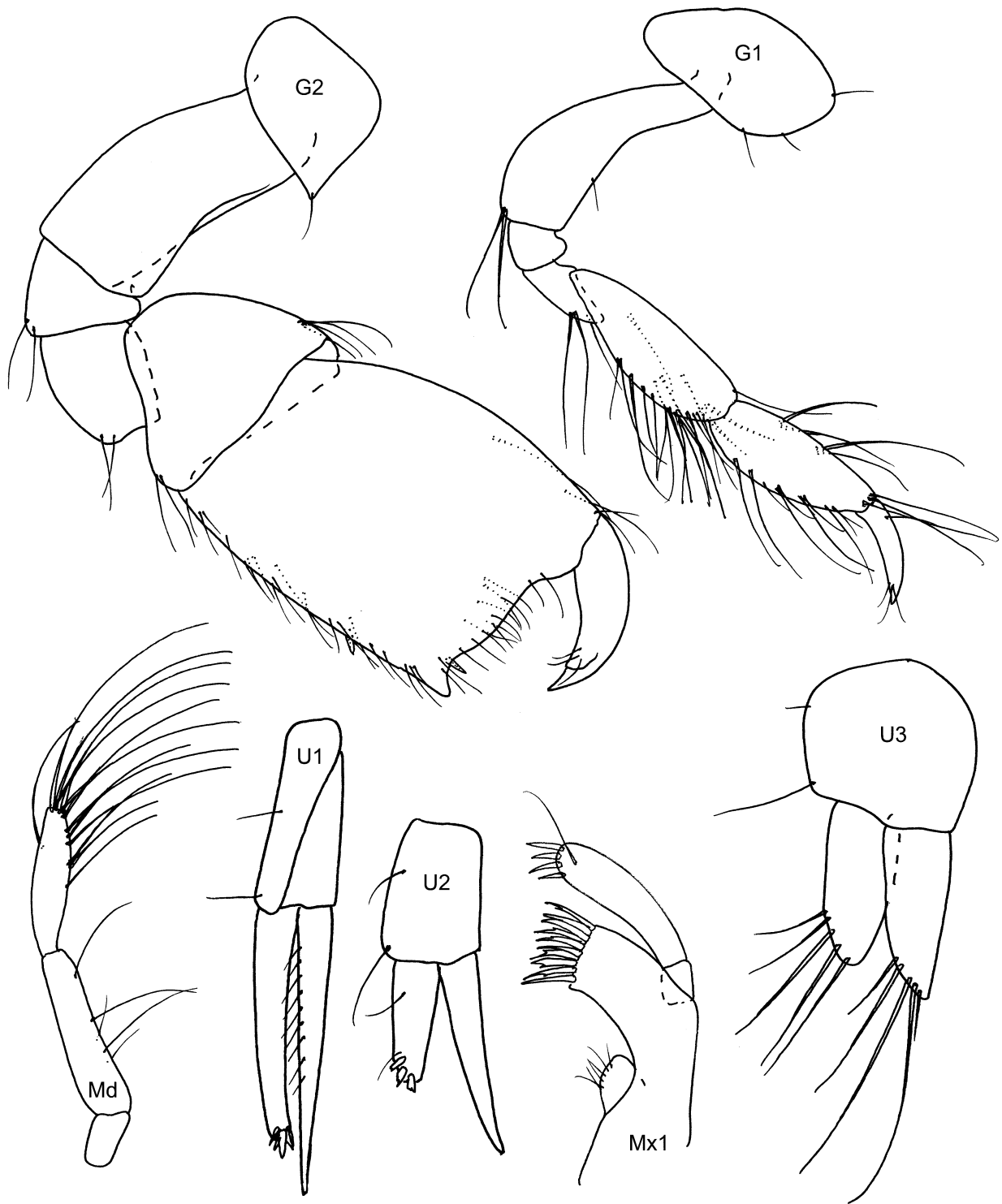


FIGURE 2. *Chevalia tenuis* sp. nov., holotype, male, 2.5 mm, AM P71428, Yonge Reef, Lizard Island, Great Barrier Reef.

Pleon. *Urosomites* 1–2 without dorsolateral spines. *Uropod 1 peduncle* without distoventral spine; rami subequal in length. *Uropod 2 peduncle* without distoventral spine; rami distinctly unequal in length. *Uropod 3* biramous; peduncle subequal in length to the inner ramus; both rami well developed; outer ramus with terminal fine setae.

Female (sexually dimorphic characters). Not sexually dimorphic.

Habitat. Among coral rubble and coralline algae.

Remarks. This species resembles *C. aviculae* Walker, 1904 from Sri Lanka and a species described from Fiji by Myers (1985), under the name *C. aviculae* Walker. It differs from these two species in its more slender build: elongate antennae, long slender pereopods 3–4 but much shorter, stouter uropod 3 rami. The male gnathopod 2 propodus differs from both species in its more pronounced, acute, posterodistal spine and less sinuous palm. It also resembles *C. pacificus* Myers, 1995 from Papua New Guinea from which it differs in the subquadrate posterodistal corner of pereopod 7 as well as in its short, stout, uropod 3 rami.

Distribution. *Australia.* Queensland: Lizard Island (current study).

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