

A new species of *Ancylomenes* Okuno & Bruce, 2009 (Crustacea: Decapoda: Pontoniinae) from the Kimberley region, Western Australia

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The pontoniine shrimp genus *Ancylomenes* Okuno & Bruce, 2009 now includes 17 Indo-West Pacific species (Okuno & Bruce 2009). With a few exceptions, such as *A. aesopus* (Bate, 1863) and *A. longicarpus* (Bruce & Svoboda, 1983), these present a highly consistent morphology, differing at species level principally in details of the rostrum, third abdominal somite, ophthalmic process, dentition of the second pereiopod chelae, and ambulatory propods and dactyls. This consistency renders detailed descriptions repetitive and largely redundant.

Some specimens of *Ancylomenes* collected in the northern Kimberley region of Western Australia during the Western Australian Museum 2010 Kimberley Survey, were found to belong to an undescribed species, which is now described and illustrated. Specimens are deposited in the collections of the Western Australian Museum, Perth (WAM) and the Queensland Museum, Brisbane (QM). Other abbreviations used in the text: CL, post-orbital carapace length; NHM, Natural History Museum, London; RMNH, Nationaal Natuurhistorisch Museum (Naturalis), Leiden; OUMNH, Oxford University Museum of Natural History, Oxford.

Systematic account

Family Palaemonidae Rafinesque, 1815

Subfamily Pontoniinae Kingsley, 1879

Genus *Ancylomenes* Okuno & Bruce, 2009

Ancylomenes batei sp. nov.

(Fig. 1)

Material examined. Ovig. female, holotype (WAM C46160), male allotype (WAM C46161), 1 ♂, 2 ov. ♀ paratypes (WAM 46576), Western Australia, Long Reef, 13°54.108'S 125°47.465'E, stn. 49/K10-Adhoc, 22 October 2010, coll. A. Hosie, L. Betteridge, scuba, 5 m; 1 male, 1 ovig. female, paratypes (QM W29053), same collection data; 1 ovig. female, paratype (OUMNH.ZC. 2011.02.0066), same collection data; 1 ovig. female, paratype (RMNH D 24753), same collection data. **Diagnosis.** Rostrum arched, dental formula 8–9/1; carapace with 1 postorbital tooth; third abdominal somite sharply produced posteriorly, not carinate; distolateral margin of proximal segment of antennular peduncle rounded; ophthalmic somite with straight, slender, tapering interocular process; fingers of second pereiopod about 0.75 of palm length, with conspicuous diastema proximally flanked by well-developed anterior and posterior teeth, cutting edges distally entire; carpus of second pereiopod shorter than palm; dactyli of ambulatory pereiopods biunguiculate; propods of ambulatory pereiopods with several long ventral spines, 2–2–1–1–1.

Measurements (in mm). Holotype female, CL, 3.4; carapace and rostrum, 6.5; total body length, 19.5; major second pereiopod chela, 7.1, minor second pereiopod chela, 2.0; length of ova, ~0.5. Allotype male, CL, 2.8; carapace and rostrum, 4.8; total body length, 17.5; major second pereiopod chela, 3.6, minor second pereiopod chela, 2.4.

Systematic position. Most closely resembling *Ancylomenes holthuisi* (Bruce 1969) (see Bruce 1969, 1982), from which *A. batei* sp. nov. may be readily distinguished by the morphological details of the fingers of the second pereiopod chelae. Okuno (2004) re-examined the holotype female of this species (NHM 1982 45b) and noted that “the cutting

edges in *P. holthuisi* show distinct proximal concavities, thus, the closed fingers appear to gape proximally". So far, *A. holthuisi* is the only species of this genus reported to have these proximal concavities. Okuno's figures show that the concavities are provided with a single small acute tooth anteriorly, obsolescent on the dactylus, without any tooth posteriorly (Okuno 2004, fig. 6CD). In *A. batei* sp. nov., a similar proximal concavity is present and the dentition is more strongly developed. The anterior teeth are larger and blunt, that on the fixed finger slightly recurved. On each finger, the posterior margin of the concavity is marked by a well-developed, small, blunt tooth. In *A. holthuisi*, the minute dactylar teeth oppose each other almost exactly, but in *A. batei* sp. nov., the fixed finger tooth is more distally positioned than the dactylar tooth (Bruce 1982, fig. 7; Okuno 2004, fig. 6CD). The ambulatory dactyls in *A. batei* sp. nov. and *A. holthuisi* are similar but the propodal spines are longer in *A. batei* sp. nov., where they distinctly exceed the width of the distal propod, contrasting with *A. holthuisi*, in which they are only about 0.8 of the distal propod width.

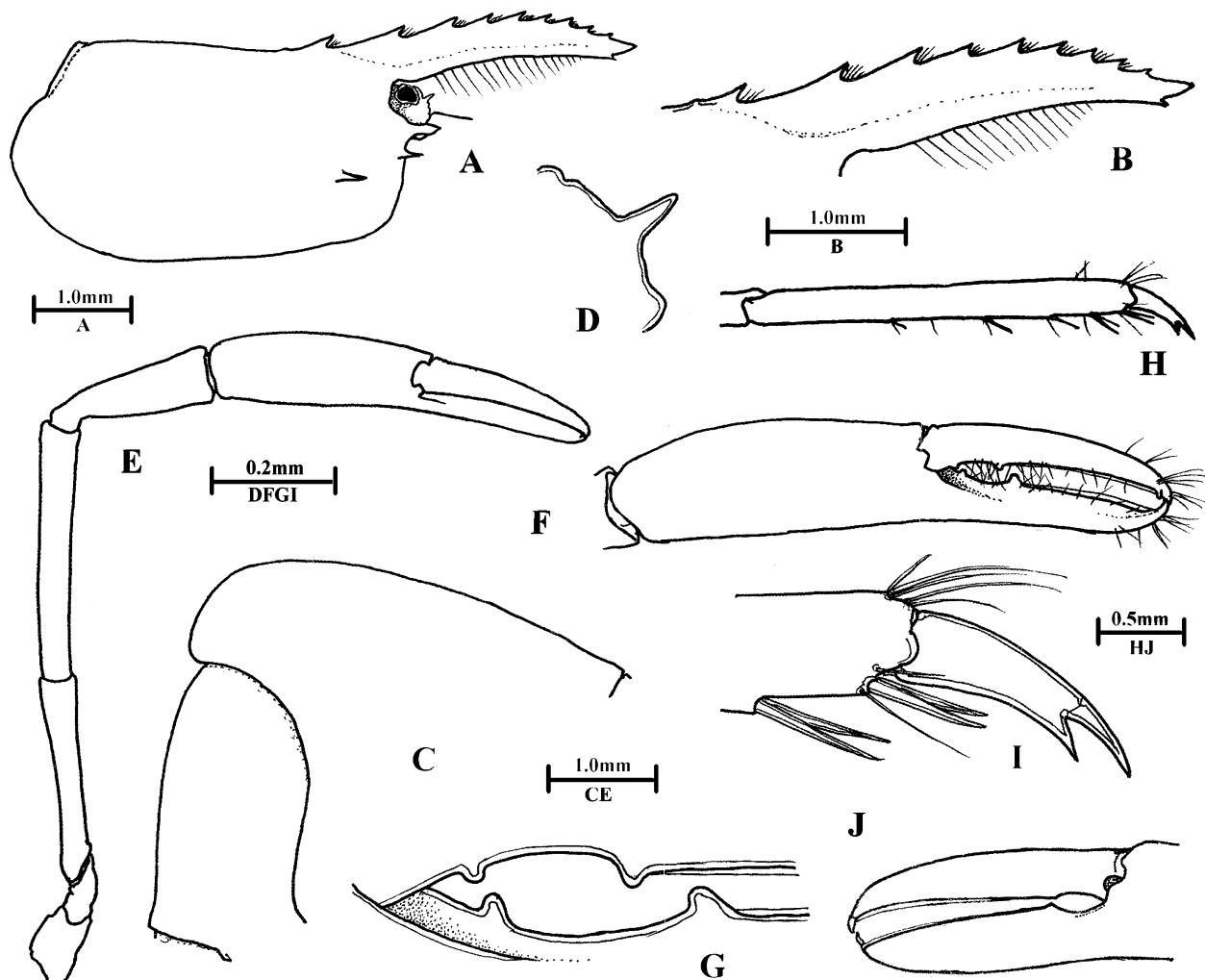


FIGURE 1. *Aencylomenes batei* sp. nov., ovigerous female holotype, Long Reef, WAM 46576. A, carapace and rostrum. B, rostrum. C, third abdominal somite, profile. D, ophthalmic somite. E, second pereiopod. F, same, chela. G, same, proximal cutting edges of fingers, setae omitted. H, third pereiopod, propod and dactyl. I, same, dactyl. *Aencylomenes holthuisi* (Bruce, 1969), holotype, NHM 1982 45b. J, second pereiopod chela, fingers (redrawn from Okuno 2004).

Host. No data.

Colouration. No data.

Etymology. Named in honour of Charles Spence Bate (1819–1889, a British dentist who, in addition to describing the Caridea of the Challenger Expedition (1872–76), also described, as *Anchistia aesopia*, the first species of the genus *Aencylomenes* from Gulf Saint Vincent, South Australia (Bate 1863).

Remarks. The addition of *A. batei* sp. nov. increases to 18 the number of *Aencylomenes* species known from the Indo-West Pacific region. Of these 12 are now known from Australian waters: *A. adularans* (Bruce, 2003), *A. aesopius*

(Bate, 1863), *A. holthuisi* (Bruce, 1969), *A. grandidens* (Bruce, 2005), *A. kuboi* Bruce 2010, *A. magnificus* (Bruce, 1979), *A. okunoi* Bruce, 2010, *A. speciosus* (Okuno, 2004), *A. tenuirostris* (Bruce, 1991), *A. tosaensis* (Kubo, 1951), *A. venustus* (Bruce, 1990), and *A. batei* sp. nov.

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