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***Periclimenaeus colemani* sp. nov. (Crustacea; Palaemonidae; Pontoniinae) from Heron island, Queensland**

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**Abstract**

A further new species of *Periclimenaeus* (Crustacea: Pontoniinae) from Heron Island, Queensland, Australia, is described and illustrated. *Periclimenaeus colemani* sp. nov., an ascidian associate, was collected from coral reef spur and groove zone and increases to 30 the numbers of *Periclimenaeus* known from Australia and to 17 the number of species known from Heron Island.

**Key words:** *Periclimenaeus colemani*, new species, Crustacea, Decapoda, Pontoniinae, Heron Island, Great Barrier Reef, Australia, ascidian host

**Introduction**

The *Periclimenaeus* species of Heron Island, in the Capricorn Islands of the southern Great Barrier Reef have been reported to include 16 species of the genus *Periclimenaeus* Borradaile, 1915, out of a total of 62 reported from the Indo-West Pacific region and 77 world wide. The present specimen raises this to 17 Heron Island species. Thirty species are now known from Australian waters.

A single specimen of an undescribed species was collected in 1979 out of many specimens of this genus. No further specimens were collected. It was found in association with a colonial ascidian host. The specimen is now described and illustrated. The single specimen is deposited in the collections of the Queensland Museum, Brisbane.

Abbreviations used: CL, postorbital carapace length; QM, Queensland Museum, Brisbane.

**SYSTEMATICS**

**Palaemonidae Rafinesque, 1815**

**Pontoniinae Kingsley, 1879**

**Genus *Periclimenaeus* Borradaile, 1915**

***Periclimenaeus colemani* sp. nov.**

(Figs 1–4)

**Material examined.** 1 ♀, holotype, Wistari Reef, Heron Island, Queensland, coll. Leigh Owens & Lester J. Thompson, 15 June 1979, NE spur and groove zone, AJB#2956, QM W29203.

**Diagnosis.** —Rostral dentition 3/0, slender, up-curved, carapace without supraorbital spines, tubercles or postorbital carina, first abdominal tergite without anterior dorsal lobe, scaphocerite with distolateral tooth well exceeded by lamella, incisor process of mandible bidentate, first pereopod fingers spatulate, edges entire, second pereopod chelae smooth, major dactyl with well developed molar process, cutting edge distally finely denticulate, about 25 denticles, merus and ischium ventrally unarmed, minor second pereopod dactyl with cutting edge

11. Third pereopod dactyl with unguis well developed, 0.5 of dorsal corpus length, dorsal telson spines at about 0.3 and 0.6 of telson length, minor second pereopod with cutting edge of dactyl near straight with 40 uniform small teeth, fixed finger cutting edge entire, rostral dentition 5/0 . . . . . *P. zarenkovi* Āuriš, 1990
- Third pereopod, dactyl with unguis small, 0.02 of dorsal corpus length, dorsal telson spines at about 0.4 and 0.85 of telson length, minor second pereopod with cutting edge of dactyl sinuous with about 20 small teeth of decreasing size proximally, fixed finger cutting edge denticulate, rostral dentition 3/0 . . . . . *P. colemani* sp. nov.

**Remarks.** *Periclimenaeus calmani* is notable particularly for the very small unguis on the ambulatory pereopods and the small details of the fingers of the second pereopods which will distinguish it from all other species of this genus.

### Acknowledgements

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