



Additions to the genus *Phycomenes* Bruce, 2008 (Crustacea: Decapoda: Pontoniinae)*

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The genus *Phycomenes* was recently described by Bruce (2008) for a small sea-grass inhabiting shrimp, *Phycomenes zostericola* Bruce, 2008, from south-east Queensland, Australia. The close similarity of this species to *Periclimenes indicus* (Kemp 1915) was noted. Subsequently specimens of Kemp's species from the type locality, Chilka Lake, Orissa, India, were examined and the most characteristic features of the genus *Phycomenes* were found to be present, i.e., a transverse triangular median process on the fourth thoracic sternite and the greatly reduced size of the second pereopods in comparison with other *Periclimenes* species, with a very well developed ocular ocellus. *Periclimenes indicus* is therefore transferred to the genus *Phycomenes* Bruce. *Periclimenes cobourgi* Bruce & Coombes, 1995 has also been noted as closely similar to *Periclimenes indicus*, showing the same major features and should also be considered as congeneric with *Phycomenes zostericola*. Similarly, examination of specimens of *Periclimenes sulcatus* Ďuriš, Horká, & Marin, 2008, and *P. siankaanensis* Martínez-Mayén, & Román-Contreras, 2006, kindly donated by Dr Zdenek Ďuriš and Dr Mario Martinez-Mayén to the Queensland Museum, Brisbane, show the same features and should be similarly placed in the genus *Phycomenes*. Martínez-Mayén and Román-Contreras (2006) considered *P. siankaanensis* to be a member of the “*iridescens*” species complex, including also *P. iridescens* Lebour, 1949, *P. platalea* Holthuis, 1951, *P. antipathophilus* Holthuis & Eibl-Eibesfeldt, 1964, *P. patae* Heard & Spotte, 1991, and *P. mcllelandi* Heard & Spotte, 1997. *Periclimenes platalea* has recently been removed from this complex and placed in the genus *Rapipontonia* Marin by Marin (2007). No examples of these species have been examined but it seems likely that some may possibly be better placed in *Phycomenes*. Some of these taxa have been reported as associates of coelenterate hosts rather than from sea-grass habitat, but such a coelenterate association has also been reported in the case of the holotype specimen of *P. cobourgi* found on a gorgonian host. The specimens of *P. indicus* were kindly donated by the Zoological Survey of India, Calcutta (ZSI). The specimens examined are deposited in the collections of the Northern Territory Museum, Darwin (NTM) and Queensland Museum, Brisbane (QM).

Material examined

Phycomenes indicus (Kemp, 1915) **comb. nov.**

1 ♂, 3 ♀♀ (2 ovig.), Chilka Lake, Orissa, India, (ex ZSI, reg. n°.9000/10), QM W28910.

Phycomenes cobourgi (Bruce & Coombes, 1995) **comb. nov.**

1 ovig. ♀, holotype, stn CP/37, Table Head, Port Essington, Cobourg Peninsula, Northern Territory, Australia, 3m, 3 May 1982, coll. H. Larson, NTM Cr000307.

Phycomenes siankaanensis (Martínez-Mayén, & Román-Contreras, 2006) **comb. nov.**

7 ♂♂, 5 ♀♀, Cayao Culebras, Bahía de la Ascensión, Quintana Roo, México, 20 November 2001, coll. R. Román-Contreras, QM W28911.

Phycomenes sulcatus (Đuriš, Horká & Marin, 2008) comb. nov.

12 spms paratypes, (4 ♂♂, 4 ♀♀, 4 ovig. ♀♀), S of Nhatrang Bay, Vietnam, 12°09' 42.0" N; 109° 12' 13.1" E, tidal pools with seagrass, 0.1–0.2 m, hand net, 4 Sep. 2006, coll.: I. Marin, I. Horká, Z. Đuriš, QM W28388. 5 spms, paratypes (juvs), *idem*, QM W28389.

Key to the Species of *Phycomenes* Bruce, 2008

1. Third maxilliped with ischiomerus laterally non-spinose..... 4
- Third maxilliped with ischiomerus laterally strongly spinose..... 2
2. Telson with 2 pairs of dorsal spines, abdominal tergites non-sulcate..... *P. indicus* (Kemp)
- Telson with 4–7 pairs of dorsal spines, first to third abdominal tergites transversely sulcate.....
..... *P. sulcatus* (Đuriš, Horká & Marin)
3. Rostrum without ventral teeth, eyestalk with distodorsal tubercle, R 1+7/0..... *P. cobourgi* (Bruce & Coombes)
- Rostrum with ventral teeth, eyestalk without distodorsal tubercle..... 4
4. Rostrum generally exceeding antennular peduncle, fourth thoracic sternite with subacute median process, R 1+5–7/
1–2(3)..... *P. zostericola* Bruce
- Rostrum not exceeding antennular peduncle, dorsal carina more strongly elevated, fourth thoracic sternite with blunt
median process, R 1+4–8/1–2..... *P. siankaanensis* (Martines-Mayén & Román-Contreras)

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