



***Periclimenes sulcatus* sp. nov., a new pontoniine shrimp (Crustacea: Decapoda: Palaemonidae) from Vietnam**

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Abstract

We describe and illustrate a new species of pontoniine shrimp, *Periclimenes sulcatus*. This new species is unique among the shallow water *Periclimenes* species in having multiple dorsal telson spines, from four to six pairs. A relatively large and swollen faceted accessory pigment spot on the eyestalk, a subtriangular process on the fourth thoracic sternite, and a feebly developed second pair of chelipeds, only slightly larger than the first pair, are among other remarkable characteristics of this new species. The new species was collected in southeastern Vietnam, the South China Sea, in shallows at low tide. It densely inhabits seagrass meadows, but also occurs on other substrata down to 4 m.

Key words: Crustacea, Decapoda, Caridea, Pontoniinae, *Periclimenes sulcatus*, new species, Vietnam, South China Sea, taxonomy

Introduction

Caridean and dendrobranchiate shrimps are common inhabitants of seagrass beds, and contain both predatory and herbivorous species (Bauer 1985). Seagrass dwelling shrimps constitute an important link between primary production and higher trophic levels (De Grave et al. 2006). The systematic composition of these shrimp has been studied in different tropical regions, including the Indo-West Pacific (for references see: De Grave 1999).

During the collection of seagrass-associated fauna in Nhatrang Bay, Vietnam, numerous specimens of an unknown *Periclimenes* species with multiple dorsal telson spines were obtained. Most of the known palaemonid shrimps, including pontoniines, have two pairs of dorsal telson spines. There are rare exceptions, including some deep-water species of the genus *Periclimenes* of “*alcocki*” group which possess 3–7 pairs of these spines (Bruce 1991, 2006; Chace & Bruce 1993; Li & Bruce, 2006) that seem to be an apomorphic character of the group. Multiple dorsal spines are unknown in other species groups of the genus *Periclimenes*. The species presented here is closely related to *P. indicus* (Kemp 1915) and *P. cobourgi* Bruce and Coombes 1995.

Abbreviations used: CL (postorbital carapace length), RL (rostrum length) and TL (total body length) are used as standard lengths. CMNH, Natural History Museum and Institute, Chiba, Japan. MNHN, Muséum National d’Histoire Naturelle, Paris, France. NHMW, Naturhistorisches Museum, Vienna, Austria. ION, Institute of Oceanography, Vietnamese Academy of Sciences and Technology, Nhatrang, Vietnam. QM Queensland Museum, Brisbane, Australia. RMNH, Nationaal Natuurhistorisch Museum – Naturalis (previously Rijksmuseum van Natuurlijke Historie), Leiden, the Netherlands. OU - University of Ostrava, Czech Republic. ZMMSU, Zoological Museum of Moscow State University, Moscow, Russia.