



Two crested and colourful new species of *Lebbeus* (Crustacea: Caridea: Hippolytidae) from the continental margin of Western Australia*

ANNA W. McCALLUM^{1,2} & GARY C. B. POORE¹

¹ Museum Victoria, GPO Box 666, Melbourne, Vic. 3001, Australia

² Department of Zoology, University of Melbourne, Parkville, Vic. 3010, Australia. E-mail: amccallum@museum.vic.gov.au

* In: De Grave, S. & Fransen, C.H.J.M. (2010) Contributions to shrimp taxonomy. *Zootaxa*, 2372, 1–414.

Abstract

Two new species of hippolytid shrimp are described from the continental margin of Western Australia, *Lebbeus clarehannah* sp. nov. from one female specimen collected off Bald Island, WA, at depths of 408–431 m and *Lebbeus cristagalli* sp. nov. from ten specimens collected off north-western Australia at depths of 397–458 m. Both species belong to the group of *Lebbeus* species possessing epipods on only the first two pairs of pereopods. Within this group, they are similar to *L. yaldwyni* Kensley, Tranter & Griffin, 1987 from NSW, Australia, and *L. compressus* Holthuis, 1947 from Japan in possessing a high crest on the carapace. These crested species of *Lebbeus* are reviewed. They can be distinguished from one another by the shape of the carapace crest, the number of spines on maxilliped 3 and by colour pattern. A key to all crested species and colour photos of the Australian species are provided.

Key words: Crustacea, Decapoda, Caridea, Hippolytidae, *Lebbeus*, new species, Western Australia, continental margin

Introduction

Recent surveys of the continental margin of Western Australia reveal a diverse and relatively undiscovered decapod crustacean fauna (Poore *et al.*, 2008). Of more than 500 species identified from a survey in the south-west, one-third are suspected to be new species, including a distinctively coloured species of the genus *Lebbeus* White, 1847. In the subsequent survey of north-western Australia another distinctive species of *Lebbeus* was collected. Although 45 species of *Lebbeus* exist world-wide (Jensen 2006; Komai & Takeda 2004), only one species, *Lebbeus yaldwyni* Kensley, Tranter & Griffin, 1987, has so far been described from Australia. Here we describe two new species, and provide a key to distinguish them from similar species within the genus, all of which possess a high dorsal crest and epipods on the first and second pereopods. The specimens used in this study are lodged in the Western Australian Museum, Perth (WAM), Museum and Art Gallery of the Northern Territory, Darwin (NTM) and Museum Victoria, Melbourne (NMV). Comparative material was borrowed from the Australian Museum, Sydney (AM). Further abbreviations are: pocl, postorbital carapace length; ov. ovigerous; CSIRO, Commonwealth Scientific and Industrial Research Organisation.

Lebbeus White, 1847

Lebbeus White, 1847: 76. — Holthuis 1993: 219, 237 (key, explanation of conservation of name). — Hayashi 1992: 116–118 (diagnosis, synonymy).