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SHANE T. AHYONG & GARY C. B. POORE



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Abstract

The deep-water squat lobsters, Chirostylidae, of southern Australia are reported, comprising 31 species in three genera, increasing the known Australian fauna from 8 to 34. Two species of *Eumunida* Smith are reported, one of which, *E. capillata* de Saint Laurent & Macpherson, is a new record for Australia. Four species of *Gastroptychus* Caullery are reported, of which *G. spinirostris* is described as new, and *G. hendersoni* Alcock and *G. sternoornatus* Van Dam are new Australian records. A key to the Indo-West Pacific species of *Gastroptychus* is given. The known Australian fauna of *Uroptychus* Henderson is markedly increased from 4 to 26. Twenty-five species of *Uroptychus* are reported from the southern Australia. Twenty species of *Uroptychus* are described as new and two are reported for the first time from Australian waters. A key to the 26 known Australian species of *Uroptychus* is given. *Uroptychus latirostris* Yokoya from Japan, is removed from synonymy of *U. cavirostris* Alcock, from the Andaman Sea. The results of the present study indicate that the southern Australian chirostylid fauna is considerably more diverse than indicated by previous studies.

Key words: Crustacea, Decapoda, Anomura, Chirostylidae, *Gastroptychus*, *Uroptychus*, new species, taxonomy, Australia

Introduction

The deep-water squat lobsters of the family Chirostylidae Ortmann, 1893 typically occupy outer shelf and slope habitats. Although their biology is poorly known, species of *Uroptychus* Henderson, 1888 are frequently found living on deepwater corals such as antipatharians and gorgonians. The Australian chirostylid fauna is known from few studies: Henderson (1885, 1888), Baba (1986, 2000), de Saint Laurent & Macpherson (1990a, b), and de Saint Laurent & Poupin (1990). Davie (2002) listed eight species in four genera of Chirostylidae from Australia. The present study reports on deepwater collections from