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Deepwater crabs from seamounts and chemosynthetic habitats off eastern New Zealand (Crustacea: Decapoda: Brachyura)

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SHANE T. AHYONG

Marine Biodiversity & Biosecurity, National Institute of Water and Atmosphere, Private Bag 14901, Kilbirnie, Wellington, New Zealand. E-mail: s.ahyong@niwa.co.nz

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Abstract

Deepwater crabs from seamounts and chemosynthetic habitats off eastern New Zealand are reported. Of the 30 species reported, eight are new to science: *Cyonomus clarki* **sp. nov.** (Cyonomidae), *Dicranodromia delli* **sp. nov.** (Homolodromiidae), *Ethusina castro* **sp. nov.** and *E. rowdeni* **sp. nov.** (Dorippidae), *Trichopeltarion janetae* **sp. nov.** (Atelecyclidae), *Mathildella mclayi* (Mathildellidae), *Neopilumnoplax nieli* **sp. nov.** (Mathildellidae), and *Garthambrus tani* **sp. nov.** (Parthenopidae). The dorippids, parthenopids and mathidellids reported here are the first members of these families to be described from New Zealand. Three previously described species are recorded for the first time from New Zealand waters: *Dicranodromia spinulata* Guinot, 1995 (Homolodromiidae), *Intesius richeri* Crosnier & Ng, 2004 (Mathildellidae) and *Miersiograpsus australiensis* Türkay, 1978 (Plagusiidae). The majority of brachyurans from New Zealand seamounts and chemosynthetic habitats are 'typical' deepwater forms of which thirteen species are presently unique to New Zealand. At species level, 43% of the seamount and cold-seep brachyurans are apparent New Zealand endemics, with strongest affinities with the eastern Australian fauna (37%). At the generic level, however, congeners of most species reported herein occur widely in the Indo-West Pacific (including eastern Australia and New Caledonia), suggesting that the New Zealand seamount and cold-seep brachyuran fauna is an extension of the tropical Indo-West Pacific fauna. Thirty-three percent (10 of 30 species) of the known New Zealand seamount and cold-seep brachyurans have only been recently discovered indicating that species richness is probably strongly underestimated. A key to the Brachyura known from New Zealand seamounts and chemosynthetic habitats is given.

Key words: Decapoda, Crustacea, Brachyura, New Zealand, new species, seamounts, cold seeps, *Cyonomus*, *Dicranodromia*, *Ethusina*, *Garthambrus*, *Intesius*, *Mathildella*, *Miersiograpsus*, *Neopilumnoplax*, *Trichopeltarion*