



A new genus and new species of deep-water trapeziid crab (Crustacea: Decapoda: Brachyura: Trapezioidea) from the Ryukyu Islands, Japan

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Abstract

A new genus and new species of trapeziid crab, *Hexagonaloides bathyalis*, is described from Okinawa, Ryukyu Islands (Okinawa Prefecture), Japan, on the basis of two male specimens collected at a depth of 247 m. The new genus is unique among the Trapeziidae in having a combination of the hexagonal carapace bearing a single lateral spine and a smooth frontal margin and the unarmed anterior margin of the cheliped meri. The symbiotic association of the new taxon remains unknown.

Key words: Crustacea, Decapoda, Brachyura, Trapeziidae, new genus, new species, Ryukyu Islands

Introduction

The eubrachyuran family Trapeziidae Miers, 1886, consists almost exclusively of coral symbionts, occurring in the Indo-West Pacific and Tropical Eastern Pacific regions. A recent revision (Castro *et al.* 2004) listed all the recognized genera and species and stabilized the nomenclature. Six genera, *Trapezia* Latreille, 1828 (type genus), *Quadrella* Dana, 1851, *Hexagonalia* Galil, 1986, *Calocarcinus* Calman, 1909, *Philippicarcinus* Garth & Kim, 1983 and *Sphenomerides* Rathbun, 1897, are assigned to Trapeziidae.

The Okinawa Churaumi Aquarium sampled deep-water fauna around Okinawa, Ryukyu Islands, using various methods, including gill nets on steep slopes below 200 m. Among the decapod crustaceans collected in the latter method were two specimens of an undescribed trapeziid. While superficially resembling species of *Hexagonalia* and *Quadrella*, some similarities to *Calocarcinus* and *Philippicarcinus* were observed as well. Consequently, a new monotypic genus, *Hexagonaloides*, is established to accommodate the new species, *H. bathyalis*. The specimens were found on a rock entangled in the gill net, so its possible host remains unknown.

The specimens examined in this study are deposited in the collection of the Natural History Museum and Institute, Chiba (CBM). The measurements provided, in millimeters, are of the carapace length and width (including lateral teeth) respectively.

Systematics

Superfamily Trapezioidea Miers, 1886

Family Trapeziidae Miers, 1886

Subfamily Quadrellinae Števcíć, 2005