

## A New Species of the Hermit Crab Genus *Catapaguroides* (Crustacea: Decapoda: Anomura: Paguridae) from Shallow Water in the Ryukyu Islands, Japan

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A new species of the pagurid hermit crab genus *Catapaguroides*, *C. umbra*, is described and illustrated based on four specimens from shallow water in the Yaeyama Islands, southern Ryukyus, and two specimens from Okinawa Island. It is morphologically similar to *C. fragilis* (Melin, 1939), *C. iejimensis* Osawa and Takeda, 2004, *C. karubar* McLaughlin, 1997, *C. olfaciens* Alcock, 1905, and *C. setosus* (Edmondson, 1951), but can be distinguished from them by a number of morphological characters. *Catapaguroides umbra* sp. nov. represents the fifth species of the genus known from Japanese waters and is one of the smallest hermit crab species in the world.

**Key Words:** Crustacea, Decapoda, Anomura, Paguridae, *Catapaguroides*, new species, Ryukyu Islands, Japan.

### Introduction

The pagurid hermit crab genus *Catapaguroides* A. Milne-Edwards and Bouvier, 1892 is currently represented by 19 species around the world, including two Atlantic, 16 Indo-Pacific, and one possibly cosmopolitan species (McLaughlin 2002; McLaughlin and Pittman 2002; Osawa and Takeda 2004; McLaughlin *et al.* 2007). It is one of only a few pagurid genera characterized by the absence of a pleurobranch above the fourth pereopod. McLaughlin (2002) summarized the taxonomic history of the genus. Most species are very small and represented by only a few specimens, and identification of specimens is sometimes difficult.

During a field trip to the Yaeyama Islands conducted by the author in 2008, four specimens of a very small hermit crab were collected from a shallow coral-sand substrate south of Taketomi Island. Two additional specimens of the same species were collected from Okinawa Island. Detailed examination has shown that these specimens represent an undescribed species of *Catapaguroides*, here described as *C. umbra* sp. nov. This new species is compared with *C. fragilis* (Melin, 1939), *C. iejimensis* Osawa and Takeda, 2004, *C. karubar* McLaughlin, 1997, *C. olfaciens* Alcock, 1905, and *C. setosus* (Edmondson, 1951).

The specimens examined in this study are deposited in the Natural History Museum and Institute, Chiba (CBM). The shield length, abbreviated as sl, is measured from the midpoint of the rostral lobe to the midpoint of the posterior margin of the shield. For detailed observation of the surface structure of the integument,