



A new hermit crab species of the genus *Catapaguroides* A. Milne-Edwards & Bouvier (Crustacea: Decapoda: Anomura: Paguridae) from the Ryukyu Islands, Japan, and additional record of *C. foresti* McLaughlin

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Abstract

Two species of the pagurid genus *Catapaguroides* A. Milne-Edwards & Bouvier, 1892, *C. longior* n. sp. and *C. foresti* McLaughlin, 2002, are reported herein. The new species is described on the basis of a single male specimen collected from a submarine cave at Onna Village, Okinawa Island, Ryukyu Islands, at a depth of 30 m. In general morphology, it is most similar to *C. inermis* de Saint Laurent, 1968, but is readily distinguished from that species by the elongate antennal acicle and the broad carpus of the right cheliped. Examination of newly collected specimens from Japan led us to conclude that *C. kasei* Osawa & Takeda, 2004 is a junior subjective synonym of *C. foresti* McLaughlin, 2002. An emended key to the presently recognized species of the genus is provided.

Key words: Crustacea, Decapoda, Anomura, Paguridae, *Catapaguroides*, new species, synonym, submarine cave, Ryukyu Islands

Introduction

The pagurid hermit crab genus *Catapaguroides* A. Milne-Edwards and Bouvier, 1892, is currently represented by 20 species (Komai 2009), including two Atlantic, 17 Indo-Pacific, and one cosmopolitan species. It is characterized by the absence of a pleurobranch above fourth pereopod, the crista dentata of the third maxilliped consisting of more than four teeth, the semichelate fourth pereopods, the presence of paired sexual tubes in males, of which the left is medium to long in the length, the presence of three unpaired pleopods in males, and the lack of paired first pleopods in female. Discovery of new species is continuing; eight new species have been described from the Indo-Pacific region in the last 15 years (McLaughlin 1997; McLaughlin 2002; McLaughlin & Pittman 2002; Osawa & Takeda 2004; Komai 2009). Some species are very small even at maturity (not exceeding 1.0 mm in the shield length) (McLaughlin & Pittman 2002; Komai 2009), and it is not easy to collect samples. Actually, most species have been described on the basis of one or only a few specimens. There is no doubt that more species await discovery.

While diving at Apo-gama Cave, a submarine cave at Onna Village, west coast of Okinawa Island, Ryukyu Islands, during January to February 2010, the second and third authors made collections of decapod crustaceans; amongst them were two species of *Catapaguroides*. Careful examination has shown that one represents an undescribed species, here described under the name *C. longior* n. sp. The new species is morphologically most similar to *C. inermis* de Saint Laurent, 1968, described from deep-water in Indonesia (de Saint Laurent 1968). Differentiating characters between the two species are discussed. The second species was identifiable with *C. foresti* McLaughlin, 2002 or *C. kasei* Osawa & Takeda, 2004, and because of the close similarity between the two taxa we tried to assess the status of *C. kasei*. We concluded that *C. kasei* is conspecific with *C. foresti*.