



Hippolytidae and Barbouriidae (Decapoda: Caridea) collected during the Ryukyu “KUMEJIMA 2009” expedition*

SAMMY. DE GRAVE¹, TIN-YAM CHAN², Y. FUJITA^{3,4} & JUNJI OKUNO⁵

¹Oxford University Museum of Natural History, Parks Road, Oxford OX1 3PW, U.K; sammy.degrave@oum.ox.ac.uk.

²Institute of Marine Biology and Center of Excellence for Marine Bioenvironment and Biotechnology, National Taiwan Ocean University, Keelung 20224, Taiwan, R.O.C.

³University Education Center, University of the Ryukyus, 1 Senbaru, Nishihara-cho, Okinawa 903-0213, Japan.

⁴Marine Learning Center, 2-95-101 Miyagi, Chatan-cho, Okinawa 904-0113, Japan.

⁵Coastal Branch of Natural History Museum and Institute, Chiba, 123 Yoshio, Katsuura, Chiba 299–5242, Japan.

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Abstract

The present report deals with caridean shrimps from the families Hippolytidae (7 species) and Barbouriidae (1 species) collected during the KUMEJIMA 2009 expedition in the Ryukyu Islands. The deep-water hippolytid *Gelastreutes crosnieri* Bruce, 1990 is recorded from Kumejima based on a single female specimen, representing a considerable range extension of this species from New Caledonia to Japan. The opportunity is also taken to record and illustrate the first known male specimen of *G. crosnieri*, collected during the SANTO 2006 expedition off West Mavéa Island, Vanuatu. The colour pattern of *G. crosnieri* is shown for the first time. The Kumejima and Vanuatu specimens present noticeable differences in both morphology and colouration, but appear to be conspecific based on comparison of the barcoding gene COI sequences. The recently described *Lysmata lipkei* Okuno & Fielder, 2010 is recorded for the second time, however, not representing a significant range extension of this species. The other species reported are *Saron marmoratus* (Olivier, 1811), *Saron neglectus* De Man, 1902, *Thinora maldivensis* (Borradaile, 1915), *Thor amboinensis* (De Man, 1888), *Tozeuma armatum* Paul'son, 1875 (Hippolytidae), and *Parhippolyte misticia* (Clark, 1989) (Barbouriidae).

Key words: Caridea, Hippolytidae, Barbouriidae, new records, *Gelastreutes*, Kumejima, Japan

Introduction

Between the 9th and the 20th of November 2009, an international team of crustacean workers extensively sampled the marine environment of Kumejima (Kume Island) in the Ryukyu Archipelago. In total, 42 dives and 17 intertidal collections were made, supplemented with 87 samples obtained by dredging and trawling, to a depth of 192 m.

The present report deals with the Barbouriidae and Hippolytidae (s. lat.) collected during the expedition, which although not numerically dominant nor species rich, do contain some interesting records, including *Gelastreutes crosnieri* Bruce, 1990, so far only known from one specimen from New Caledonia. Kawamoto & Okuno (2001) had previously documented the decapod fauna of Kume Island, listing and illustrating eight species of Hippolytidae, viz. *Lysmata amboinensis* (De Man, 1888), *Lysmata ternatensis* De Man, 1902; *Hippolyte commensalis* Kemp, 1925; *Hippolyte* sp.; *Phycocaris simulans* Kemp, 1916; *Saron marmoratus* (Olivier, 1811); *Saron neglectus* De Man, 1902 and *Thor amboinensis* (De Man, 1888). In addition, they recorded one species of Barbouriidae, *Parhippolyte misticia* (Clark, 1989). Recently, Marin *et al.* (2011) when erecting the genus *Alcyonohippolyte* Marin, Okuno & Chan, 2011, transferred *H. commensalis* to their new genus, with reference to the specimen illustrated in Kawamoto & Okuno (2001). Further, these authors also described *Alcyonohippolyte maculata* Marin, Okuno & Chan, 2011 and considered the photo of *Hippolyte* sp. (as well as associated specimens) in Kawamoto & Okuno (2001) as belonging to that species.