



## Reef lobsters of the genus *Enoplometopus* A. Milne-Edwards, 1862 (Crustacea: Decapoda: Nephropidea) from the KUMEJIMA 2009 Expedition in Okinawa, with the second record of the rare species *E. chacei* Kensley & Child, 1986\*

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### Abstract

Two reef lobsters of the genus *Enoplometopus* A. Milne-Edwards, 1862, were collected during the KUMEJIMA 2009 Expedition. The first is the very rare species *Enoplometopus chacei* Kensley & Child, 1986, which was previously known only from the male holotype collected in the Philippines. It is found that *E. chacei* has two colour forms: one form with the body covered with red dots while the other form completely lacking red dots on the body. The second species collected is *E. voigtmanni* Türkay, 1989, and represents the first recorded male of this species. Colour photographs are provided for the two species. The characters distinguishing *E. chacei* and *E. voigtmanni* from their closest congeners are discussed.

**Key words:** Crustacea, Decapoda, reef lobsters, *Enoplometopus chacei*, *Enoplometopus voigtmanni*, Kume Islands, Okinawa

### Introduction

Although the reef lobsters genus *Enoplometopus* A. Milne-Edwards, 1862, occurs mainly in warm waters and many of them have a wide distribution in the western Pacific (see Chan & Ng 2008), only two species have been reported from the Ryukyu Islands. They are *E. occidentalis* (Randall, 1840) and *E. voigtmanni* Türkay, 1989 (e.g. Hirayama 1997; Minemizu 2000; Kawamoto & Okuno 2003). Some years ago, two specimens of *Enoplometopus* collected from the Kume Island in Okinawa were sent to the first author for identification. These two specimens are morphologically similar to *E. occidentalis* and also with an orange-red colouration. However, their colours are much “duller” than that of *E. occidentalis* in lacking distinct white ocelli on the body and with pereopods not banded. A close examination of the specimens shows that they are likely represent the very rare species *E. chacei* Kensley & Child, 1986, which has so far been known by only the holotype male from the Philippines. However, the two specimens from Kume Island, though morphologically very similar and of the same size and sex (i.e. males), differ considerably in the presence or absence of many red dots on the carapace and abdomen. During the “KUMEJIMA 2009” expedition and in subsequent collection in the Kume Island, three more “dotted” specimens (2 males and 1 female) and two more “non-dotted” specimens (2 females) were collected. The availability of these additional specimens proved that the “dotted” and “non-dotted” forms belong to the same species and can be identified with *E. chacei*. The more specimens obtained for *E. chacei* allows a better understanding of the characteristics and colour pattern of this rare species as compared to its two closely related species *E. debelius* Holthuis, 1983, and *E. daumi* Holthuis, 1983. A comparison of partial COI sequence (or the barcoding gene, Stoeckle & Hebert 2008) also confirms that the “dotted” and “non-dotted” forms of *E. chacei* belong to the same