



Hermit crabs (Crustacea: Decapoda: Diogenidae) from the KUMEJIMA 2009 Expedition, Japan*

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* In: Naruse, T., Chan, T.-Y., Tan, H.H., Ahyong, S.T. & Reimer, J.D. (2012) Scientific Results of the Marine Biodiversity Expedition — KUMEJIMA 2009. *Zootaxa*, 3367, 1–280.

Abstract

Hermit crabs fauna of the family Diogenidae in the Kume Island, south Japan, were found to consist of 49 species, of which 47 species were collected during the KUMEJIMA 2009 Expedition. Of the 49 species collected, 20 species, *Calcinus seurati* Forest, 1951; *Ciliopagurus krempfi* (Forest, 1952), *Clibanarius corallinus* H. Milne Edwards, 1848; *Clibanarius englaucus* Ball & Haig, 1972; *Clibanarius rhabdodactylus* Forest, 1953; *Clibanarius striolatus* Dana, 1852; *Dardanus brachyops* Forest, 1962; *Dardanus robustus* Asakura, 2006; *Dardanus scutellatus* (H. Milne Edwards, 1848); *Dardanus woodmasoni* Alcock, 1905; *Diogenes holthuisi* Asakura & Tachikawa, 2010; *Diogenes leptocerus* Forest, 1956; *Diogenes pallescens* Whitelegge, 1897; *Paguristes macrops* Rahayu & Forest, 2009; *Paguristes ocellus* Komai, 2010; *Pseudopaguristes bicolor* Asakura & Kosuge, 2004; *Pseudopaguristes bollandi* Asakura & McLaughlin, 2003; *Pseudopaguristes janetkae* McLaughlin, 2002; *Pseudopaguristes laurentae* (Morgan & Forest, 1991); and *Pseudopaguristes monoporus* (Morgan, 1987), are recorded for the first time from Kume Island. Six species, *Dardanus brachyops*, *Diogenes holthuisi*, *Diogenes leptocerus*, *Diogenes pallescens*, *Paguristes macrops*, and *Pseudopaguristes laurentae*, are discussed in detail.

Key words: Crustacea, Decapoda, Anomura, Diogenidae, Kume Island, Japan

Introduction.

In the last 20 years, hermit crabs of the southern Japanese waters are well studied, about 100 species of the families Diogenidae and Paguridae have been reported (e.g. Asakura 1991, 1992, 1999, 2000, 2001, 2002a, b, 2004, 2005; Asakura & Hirayama 2002; Asakura & Kosuge 2004; Asakura & McLaughlin 2003; Asakura & Nomura 2001; Asakura & Paulay 2003; Asakura & Tachikawa 2003, 2004, 2010; Asakura *et al.* 2002, 2003; Kawamoto & Okuno 2003, 2006; Komai 1999, 2004, 2006, 2009a, b, 2010a, b; Komai & Asakura 1995; Komai & McLaughlin 2005; Komai & Myorin 2005; Komai & Okuno 2001; Komai & Osawa 2001, 2004, 2005, 2006, 2007, 2009; Komai & Takada 2006; Komai & Nishi 1996; Komai *et al.* 2010; Kosuge & Miyake, 1992; Minemizu 2000, 2002; Osawa & Komai 2007; Osawa & Fujita 2006, 2008; Osawa & Okuno 2003; 2007; Osawa & Takeda 2004; Osawa *et al.* 2006). This paper deals with the family Diogenidae from Kume Island in the central Ryukyu Islands.

During the KUMEJIMA 2009 Expedition in November 2009 in Kume Island, 47 hermit crab species of Diogenidae were collected (Table 1). While most of the species have been recorded previously from Kume and other islands in the southern Japanese water, 20 species were collected for the first time from Kume Island. One species, hitherto identified as *Calcinus anani* by Japanese authors (Asakura & Tachikawa 2000; Kawamoto & Okuno 2003; Asakura 2002a; Okuno & Arima 2004), is considered as new to science and is being described by Malay *et al.* (2012). Five species of *Pseudopaguristes* McLaughlin, 2002a, *Pseudopaguristes bicolor*, *Pseudopaguristes bollandi*, *Pseudopaguristes janetkae*, *Pseudopaguristes shidarai*, and one undescribed species, are now being revised by the second author. In this paper, only the taxonomy of species with specific interest are treated in detail. Measurement provided in the text is shield length (in millimeter), measured from the tip of the