



***Calappa exanthematos* Alcock & Anderson, 1894, as a valid species of box crab from the Indian Ocean (Crustacea: Decapoda: Calappidae)**

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Abstract

The box crab *Calappa exanthematos* Alcock & Anderson, 1894, originally described from the Bay of Bengal, has been synonymised under *C. japonica* Ortmann, 1892 (type locality Japan), since 1937. Comparisons of specimens from the Gulf of Oman and India reveal consistent differences in the live colour of material from the rest of the Indo-West Pacific region, carapace (general form, shape of lateral teeth, position of longitudinal gastro-cardiac grooves, structures of posterior region), pterygostomian lobe, chela, male abdominal somite 6, male telson and G1. *Calappa exanthematos* is here recognised as a distinct species, redescribed, and illustrated.

Key words: *Calappa exanthematos*, new status, Indian Ocean, Crustacea, Calappidae

Introduction

The large box crab *Calappa japonica* Ortmann, 1892, is one of the most distinctive members of the genus, with its large size, highly convex carapace and unique colour pattern. Described from Japan on the basis of two males and one female from Tokyo Bay (Ortmann 1892; Komai 1999), it has since been reported from China, Taiwan, Philippines, Australia, New Caledonia and Vanuatu, as well as the Indian coast of the Bay of Bengal, Pakistan, Gulf of Oman, Red Sea and Gulf of Aden (Galil 1997; Ng *et al.* 2001; Ng 2003; Spiridonov & Apel 2007; Galil & Ng 2010). Records of this species from South Africa and Kenya identified as “*C. japonica*” by Barnard (1947, 1950) and Galil (1997) were referred to a new species, *C. africana*, by Lai & Ng (2006).

Calappa exanthematos Alcock & Anderson, 1894, was described from two males and three females from the Bay of Bengal (Alcock & Anderson 1894: 177; see also Alcock 1896: 146). Sakai (1937) synonymised it with *C. japonica*, and the synonymy has remained in effect ever since (see Galil 1997; Spiridonov & Apel 2007).

We recently had the opportunity to examine fresh specimens of “*Calappa japonica*” from the Gulf of Oman. While they superficially resembled this species, there are a number of consistent differences that indicate these are two distinct species. We here remove *C. exanthematos* from the synonymy of *C. japonica*, and reinstate it as a distinct species.

Specimens examined are deposited in the Zoological Reference Collection (ZRC) of the Raffles Museum of Biodiversity Research, National University of Singapore; Zoological Museum of the University of Copenhagen (ZMUC), Denmark; Naturalis, Nationaal Natuurhistorisch Museum (Rijksmuseum van Natuurlijke Historie, RMNH), Leiden, The Netherlands; U.S. National Museum of Natural History (USNM), Smithsonian Institution, Washington D.C; Natural History Museum (NHM), London, U.K.; Zoology Museum of the University of Tehran (ZUTC), Khozestan, Iran; and Zoological Museum of Shahid Beheshti University (ZMSB), Tehran, Iran. Measurements provided, in millimetres, are of the carapace width and length, respectively. The abbreviations G1 and G2 are used for the male first and second gonopods, respectively.