



Shallow-water squat lobsters (Crustacea, Decapoda, Galatheidae) from Mayotte (Comoros Island), La Réunion and Madagascar, with the description of a new genus and two new species

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Abstract

Shallow water species of galatheid crustaceans collected in Mayotte (Comoros Island), La Réunion and Madagascar have been studied. The collection contains one species of *Sadayoshia* and seven species of the genus *Galathea*, including a new species (*G. denticulata*) closely related to *G. amamiensis* known from the Indian Ocean and western Pacific waters, a new genus (*Macrothea*) and species (*M. bouchardi*). The new genus is closely related to the genus *Fennerogalatea* and it is easily distinguished by the following combination of characters: (1) rostrum with 4 strong lateral teeth on each side, (2) spines present on epigastric and hepatic regions only, (3) telson completely subdivided, (4) pereopods 2–4 dactyli sharply biunguiculate. The new genus is also close to *Lauriea* Baba, 1971, from which it can be differentiated, among other characters, by the shape of the endopod of uropods and the number of male gonopods.

Key words: Crustacea, Decapoda, Anomura, Galatheidae, new genus, new species, Mayotte, Madagascar, Indian Ocean

Introduction

The squat lobster fauna in the South-West Indian Ocean has received much taxonomic attention in the last decades and numerous new species have been described as result of increased sampling effort (Baba *et al.* 2008). The different studies have covered different genera of both Chirostylidae and Galatheidae, e.g. *Uroptychus* Henderson, 1888, *Eumunida* Smith, 1883, *Galathea* Fabricius, 1793, *Munida* Leach, 1820, *Munidopsis* Whiteaves, 1784 (see Baba 1990, 2005), *Munida* (see Macpherson 1991, 1999; Macpherson & de Saint Laurent 2002), *Munidopsis* (see Macpherson 2007). These studies follow other papers from the western Indian Ocean, e.g., Alcock & Anderson (1894), Balss (1913), Doflein & Balss (1913), Laurie (1926), Barnard (1950), Lewinsohn (1969, 1981), Tirmizi (1964, 1966, 1980), Baba (1974), Tirmizi & Javed (1976, 1980, 1992, 1993), Baba & Tirmizi (1979), Tirmizi & Khan (1979) and Baba (2005). These works have shown the presence of a rich galatheid fauna with reports so far, mostly concentrated along the deeper continental shelf and slope and bathyal areas. Reports on squat lobsters in shallow waters (< 100 m) are still moderately scarce and a more intense sampling effort in this area has been recommended (Baba *et al.* 2008). The best represented genus in the shallow waters of Madagascar is *Galathea* with ten species known in the area, although other less diverse genera of Galatheidae are also present, e.g., *Allogalathea* Baba, 1969, *Coralligalathea* Baba & Javed, 1974, *Lauriea* Baba, 1971, *Phylladiorhynchus* Baba, 1969, *Sadayoshia* Baba, 1969 (Tirmizi & Javed 1980; Baba 1990; Cabezas *et al.* in press; Macpherson & Baba in press).

Numerous samples of the genus *Galathea* Fabricius, 1793 were recently collected from different expeditions in Madagascar carried out by the Florida Museum of Natural History, Gainesville (May 2008), and in Mayotte, thanks to the Direction of Forest and Agriculture of Mayotte, with the aim to create an inventory of the decapod fauna of the lagoon of the island (Bouchard *et al.* 2009). Most samples were taken in