



A new atyid genus and species from Madagascar (Crustacea: Decapoda: Caridea)

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Abstract

The caridean family Atyidae is currently known by 29 species in Madagascar, which are found throughout riverine habitats, caves and swamps. The present study describes a new genus and species from a mountain stream in the Ranomafana National Park, South East Madagascar. The new genus is characterised by possessing a short unarmed rostrum, absence of teeth on the carapace, the carpus of the second pereopod being elongated with an anterior excavation, all pereopods with exopods (fifth vestigial or reduced), the presence of a single uropodal diaeresis spine, a long appendix masculina armed with numerous spiniform setae on the second male pleopod and in carrying 11–14 eggs of 1.4–1.5 × 1.00–1.1mm in size.

Key words: Crustacea, Caridea, Atyidae, new genus, new species, taxonomy, Madagascar

Introduction

The atyid shrimp fauna of Madagascar is tolerably well known compared to many other parts of the globe. Early works by Coutière (1899), Bouvier (1904, 1905, 1919, 1925) and Roux (1929, 1934), and others were reviewed and augmented upon by Holthuis (1965). Since then, three new species of *Caridina* and a species of *Parisia* were reported from a cave in the Ankara Massif, northern province of Diego Suarez by Gurney (1984). A further species of cave dwelling *Caridina* was recorded by Cai (2005) from the Lakata Zafera cave in western Madagascar. Most recently, Richard and Clark (2010) described an epigean species of *Caridina* from the Betsiboka River basin in eastern Madagascar. As a result of these studies a total of 29 species attributed to five genera are now known from Madagascar, which compares quite favourable with other Afrotropical areas. Nevertheless, given the large land-mass of Madagascar and the relatively unexplored nature of much of its hinterland, it is predictable that the atyid fauna is however far from completely elucidated and many more taxa are predicted to occur.

Recently the taxonomy and ecology of tadpole communities in Madagascar was studied (Strauß *et al.*, 2010). This expedition collected many amphipods (Daneliya, 2011) during 2007 and 2008 from numerous catchments around the study area, as well as some freshwater shrimps from a small number of geographically close streams. These specimens were initially thought to be a stout bodied species of *Caridina*. However, a more detailed examination of the Madagascan specimens revealed several distinct features at generic level, including the morphology of the pereopods, the presence of a single uropod diaeresis spine and most significantly the presence of exopods on the ambulatory pereopods. The combination of these characters indicated that this material instead belonged to an undescribed new genus and species, herein described. The following abbreviations were used: ovig., ovigerous; coll., collected. Material is deposited in the Natural History Museum, London (NHM) and the Oxford University Museum of Natural History (OUMNH.ZC). Adults were measured from the anterior tip of the rostrum to the posterior margin of the telson (total length-TL, in mm), and the carapace from the post-orbital margin to the posterior margin (carapace length-CL, in mm). Measurements of the palm of the first and second pereopods were taken along the dorsal margin of the propodus. The measurement of the dactylus did not include the terminal claw.