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A new species of *Munidopsis* from a seamount of the Southwest Indian Ocean Ridge (Decapoda: Munidopsidae)

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Abstract

Wood and whale bone colonisation experiments were undertaken on the Southwest Indian Ocean Ridge, 18 November 2009. Later, 14 December 2011, squat lobsters were recovered from the submerged wood and assigned to *Munidopsis* sp. Further study indicated that the specimens belonged to the group of species having a rostrum without lateral spines, presence of two strong epigastric spines, unarmed abdominal segments, one dorsal eye-spine, and with the second pereopod not reaching the end of the first. They were similar to *M. hemingi* Alcock & Anderson, 1899 but differed in that the epigastric spines are well developed (vs. tubercles in *M. hemingi*), the lateral margins of the carapace are straight (vs. more convex in *M. hemingi*), the eye has a tubercular process mediodorsally (vs. a papilliform spinule at mesial angle) and the epipods on the fourth pereopod were absent (vs. present in *M. hemingi*). Consequently the *Munidopsis* specimens from the Southwest Indian Ocean Ridge were considered to be an undescribed species.

Key words: Wood and whale bone, colonisation experiments, Southwest Indian Ocean Ridge, *Munidopsis* sp. nov.

Introduction

The family Munidopsidae contains a large number of species, mostly included in the genus *Munidopsis* Whiteaves, 1784 (Ahyong *et al.* 2010). The Indian Ocean harbours a large number of species of this genus (Baba *et al.* 2008), most of them collected during different deep-sea expeditions along the western and central basins (e.g. Macpherson 2007; Cubelio *et al.* 2008) and eastern basin (e.g. Poore *et al.* 2008; Taylor *et al.* 2010), although a large number of species still remains undescribed (Appeltans *et al.* 2012). Wood and whale bone colonisation experiments were deployed by RV *Dr. Fridtjof Nansen* on the Atlantis Bank (32°42.71S, 57°16.31E), a seamount of the Southwest Indian Ocean Ridge at a depth of ca. 750 m, 18 November 2009. These were recovered on 14 December 2011, using the ROV Kiel 6000 deployed from the RRS *James Cook*. A number of squat lobsters was collected from the wood experiment only and initially attributed to the genus *Munidopsis*. This material was later re-examined and considered to be an undescribed species. Some munidopsids are mainly thought to be opportunistic scavengers that attend wood falls and whale falls (Turner 1977; Bennett *et al.* 1994; Goffredi *et al.* 2004; Samadi *et al.* 2010; Hoyoux *et al.* 2012) but it was recently shown that at least one species, *Munidopsis andamanica*, is actually adapted to feeding on wood (Hoyoux *et al.* 2009). The aim of the present study is to describe this new *Munidopsis* species collected from these interesting habitats.

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