



Miroblatta baai, a new very large cockroach species from caves of Borneo (Blattaria: Blaberidae)

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Abstract

A new species of the genus *Miroblatta* Shelford, 1906 is described from caves of Borneo in East Kalimantan, Indonesia. This new species, *M. baai* **sp. nov.**, is similar to the epigeal species *M. petrophila* Shelford, 1906 also found in Borneo. It differs by a larger adult size, longer legs, shorter wings, longer pronotum showing a remarkable central bulbous structure, lighter colouration and genital morphology (especially sclerite L1 shape). The genital morphology as well as morphological evidence for ovoviviparity confirm that the genus belongs to the family Blaberidae, subfamily Epilamprinae. Contrary to its epigeal relative *M. petrophila*, this new species has been found exclusively in karstic caves of the same underground river system and these occurrences as well as the elongated legs and reduced eyes allow one to assume that this is a truly troglobitic species, so far the first one recorded in the family Blaberidae.

Key words: Blattaria, Blaberidae, Epilamprinae, *Miroblatta*, new species, Borneo, troglobiont

Introduction

The genus *Miroblatta* was described by R. Shelford (1906) to include one species, *M. petrophila* Shelford, 1906, described in the same paper from Borneo (forest of Mount Santubong, 760 m). The remarkable morphology of this species has puzzled taxonomists for decades. Because this species showed a unusual combination of characters, namely unarmed posterior femora, hind wings not folded fan-like and a female subgenital plate without valvulae, the genus was placed successively in the family Blattidae (Shelford 1906) and then in the family Polyphagidae (Hanitsch 1923; Hebard 1929; Bruijning 1948). Chopard (1919) described another species in the genus, later transferred to the genus *Ergaula* Walker, 1868 (Princis 1963). In the course of a revision of the family Polyphagidae (Grandcolas 1994, 1996), the author re-examined the morphology of *M. petrophila*, including the male and female genital parts, and found that the genus *Miroblatta* actually belongs to the family Blaberidae (Grandcolas 1993). *M. petrophila* was assessed to fit the definition of the family Blaberidae, also with respect to morphological evidence for ovoviviparity (Roth 1970).

Recently, several specimens resembling *M. petrophila* were captured in caves of the Baai underground river system in East Kalimantan, Borneo. These specimens proved to have distinctive characters, and deserve the description of a new species. The morphology as well as the distribution and habitat of this additional species are discussed in view of the previous results obtained with *M. petrophila*.

Miroblatta baai Grandcolas, new species

(Figs. 1–9)

Diagnosis. *Miroblatta baai* is similar to *Miroblatta petrophila* Shelford, 1906 but can be distinguished by