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## A new genus and species of myrmecophilous brentid beetle (Coleoptera: Brentidae) inhabiting the myrmecophytic epiphytes in the Bornean rainforest canopy

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### Abstract

*Pycnotarsobrentus inuiiae* Maruyama & Bartolozzi, **gen. nov.** and **sp. nov.** (Brentinae: Eremoxenini) is described from the Lambir Hills National Park, Borneo (Sarawak, Malaysia) based on specimens collected from *Crematogaster difformis* F. Smith, 1857 ant nests in the myrmecophytic epiphytic ferns *Platyserium crustacea* Copel. and *Lecanopteris ridleyi* H. Christ. A second species of *Pycnotarsobrentus* is known from Malaysia but is represented by only one female and consequently not yet described pending discovery of a male. *Pycnotarsobrentus* belongs to the tribe Eremoxenini and shares some character states with the African genus *Pericordus* Kolbe, 1883. No species of Eremoxenini with similar morphological modifications are known from the Oriental region.

**Key words:** Myrmecophily, *Crematogaster difformis*, Eremoxenini, Malaysia

### Introduction

Dipterocarp trees are the main components of tall tree flora in the Bornean lowland rainforest, and in their canopies *Crematogaster difformis* F. Smith, 1857 ants are common and dominate the arboreal ant community (Inui *et al.* 2009; Tanaka *et al.* 2009). This ant species nests mainly under the bark of trees and in the myrmecophytic epiphytic ferns *Platyserium crustacea* Copel and *Lecanopteris ridleyi* H. Christ. Current investigations of these ferns in Lambir National Park, Sarawak, revealed the presence of some obligate myrmecophilous insects. Roth (1995) described a myrmecophilous cockroach, *Pseudoanaplectinia yumotoi*, based on material collected by Dr. Takakazu Yumoto. Maruyama (2010) described a myrmecophilous scarab beetle, *Pterobius itiokai*, which was collected by Dr. Takao Itioka. Both taxa are unique to the nests of *C. difformis*. In September 2011, we (Japanese authors) intensively investigated the ferns inhabited by *C. difformis* in Lambir Hills National Park. This resulted in the discovery of additional myrmecophiles. One of them, a brentid beetle of the tribe Eremoxenini, was the most outstanding discovery, because no species of that tribe with similar morphological modifications were known from the Oriental region. Although it is similar to the African genus *Pericordus* Kolbe, 1883, it shows some unique character states. This paper describes it as a new genus and species.

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