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## Four new species of *Cephennomicrus* Reitter (Coleoptera, Staphylinidae, Scydmaeninae) from Malaysia

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### Abstract

Four new species of *Cephennomicrus* are described from Malaysia: *C. curvidens* sp. n., *C. gentingensis* sp. n. (both from the Genting Highlands, West Malaysia), *C. santubongensis* sp. n. and *C. muluensis* sp. n. (both from Sarawak, East Malaysia). Male genitalia of all new taxa are illustrated and diagnostic characters are discussed.

**Key words:** Coleoptera, Staphylinidae, Scydmaeninae, Cephenniini, *Cephennomicrus*, new species, Oriental, Malaysia

### Introduction

*Cephennomicrus* Reitter, 1907 is a relatively large genus of Cephenniini currently comprising 71 nominal species broadly distributed in the Afrotropical (South Africa, Congo, Tanzania, Madagascar, Mauritius, Seychelles, Reunion Island and Grand Comore Island) and Oriental regions (Sri Lanka, Thailand, Taiwan, subtropical China and Japan, West Malaysia and Sumatra), extending through the Philippines and Papua New Guinea to Australia (including Lord Howe Island), New Caledonia, Fiji and Samoa (Jałoszyński 2011a). Many undescribed species were seen by the author from various parts of East and South Asia, especially from the Sunda Islands and several from the Himalayas; in Australia, *Cephennomicrus* is also more speciose than so far recorded (Jałoszyński, unpublished obs.). A possibly broader distribution in other parts of Africa, Melanesia, Micronesia and Polynesia was suggested (Jałoszyński 2011a).

Because their bodies rarely exceed 1 mm, species of *Cephennomicrus* are challenging to study, and a preliminary phylogenetic analysis of morphology suggested that this genus may not be monophyletic; at least two distinct groups (the *Cephennomicrus nomurai* group and *Cephennomicrus pinguis* group) may deserve placement in separate genera (Jałoszyński 2011a). The previously described diversity of structures, broad distribution and still inadequately known morphology of many species require comprehensive study before a phylogeny-based reclassification can be proposed. Some species described from only females contribute to this unsatisfactory state of knowledge, because the extremely diverse male genital characters and modifications of the head in some males may be important for reconstructing the evolution of this group of taxa.

The *Cephennomicrus* of the Malay subregion are, surprisingly, poorly studied, and only two species are known from this area: *C. simplex* Jałoszyński & Nomura, 2008 (from West Malaysia) and *C. fesumatranus* Jałoszyński, 2010a (from Sumatra). *Cephennomicrus raffrayi* (Schaufuss, 1889) from Singapore and *C. sumatranus* (Franz, 1984) from Sumatra were recently transferred to *Lathomicrus* Jałoszyński and *Cephennula* Jałoszyński, respectively (Jałoszyński 2010a, 2011b). In the present paper four new species are described, two from the Malay Peninsula and two from Borneo.

### Material and methods

Dry-mounted specimens were relaxed in warm water and dissected; aedeagi were dehydrated in isopropanol, transferred to xylene and mounted in Canada balsam. Habitus images were taken by a Nikon Coolpix 4500 camera

mm; median lobe with subtriangular apical part; dorsal wall in subapical area with short and dense setae; internal armature symmetrical, lightly sclerotized, without long projections; parameres slender and exceeding apex of median lobe, recurved, each with one apical and one subapical seta.

Female. Unknown.

**Distribution.** East Malaysia, Sarawak.

**Etymology.** Locotypical, after Mount Mulu.

**Remarks.** This remarkable species resembles members of the enigmatic *Cephenomicrus pinguis* group from Southeast Asia that may be placed in a separate genus in the future. The aedeagus of *C. muluensis* has a group of dense setae present in a subapical dorsal area, a character rarely occurring in the genus. A similar setal patch, located closer to the basal aedeagal orifice, can be found in *C. gumnos* Jałoszyński, a species known from Papua New Guinea (Jałoszyński 2010c). Despite clear similarities in genital structures, the external morphology of these two species is strikingly different: *C. gumnos* is a large species (BL 1.18–1.19 mm) with a very stout body that is strongly constricted between the pronotum and elytra, a nearly impunctate posterior third of the pronotum and elytra, a pronotum without the transverse antebasal pronotal groove and with five thin and curved lateral macrosetae on each elytron.

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