

A New *Horaeomorphus* (Coleoptera, Scydmaenidae)
from the Malay Peninsula

Paweł JAŁOSZYŃSKI

Os. Wichrowe Wzgórze 13/22, 61–678 Poznań, Poland,
E-mail: japawel@man.poznan.pl

Shûhei NOMURA

Department of Zoology, National Science Museum (Nat. Hist.),
3–23–1 Hyakunin-cho, Shinjuku, Tokyo, 169–0073 Japan
E-mail: nomura@kahaku.go.jp

and

IDRIS Abd Ghani

Centre for Insect Systematics, Universiti Kebangsaan Malaysia,
43600 Bangi Selangor, Malaysia
E-mail: idrisgh@ukm.my

Abstract *Horaeomorphus endauensis* JAŁOSZYŃSKI et NOMURA sp. nov. is described from the Malay Peninsula. The type material has been collected in the Endau-Rompin Nature Reserve, W. Malaysia, and the species is the eighth member of the genus known from Pahang. The habitus, aedeagus, female genital segment and spermatheca are illustrated.

Key words: Coleoptera, Scydmaenidae, *Horaeomorphus* SCHAUFUSS, new species, W. Malaysia, taxonomy.

Introduction

All the species of the cyrtoscydmine genus *Horaeomorphus* known to inhabit the Malay Peninsula and the Sunda Islands have been recently revised (JAŁOSZYŃSKI, 2006). So far, seventeen species have been found in this area, but they very likely represent only a part of expected diversity of *Horaeomorphus*, which is still mostly unstudied. In this paper we describe a new species, collected in the second largest protected area of West Malaysia, the Endau-Rompin Nature Reserve. The type material is deposited in the Centre for Insect Systematics, Universiti Kebangsaan Malaysia

(UKM), in the National Science Museum, Tokyo, Japan (NSMT) and in the private collection of the first author (PCPJ); the measurements follow the convention used in JAŁOSZYŃSKI (2006).

Taxonomy

Horaeomorphus endauensis JAŁOSZYŃSKI et NOMURA, sp. nov.

(Figs. 1 A-E, 2 A-C)

Diagnosis. This species can be distinguished from allied congeners by the following combination of characters: body of moderate size; pronotum oval with very distinct, deep and narrow basal groove separating short posterior collar and bearing three small and relatively indistinct pits; elytra oval, broadest slightly anterior to middle, with extremely shallow subhumeral impressions and devoid of humeral calli; metatrochanters in males strongly modified, each projecting along basal part of femur and forming long, rod-like process without any expansion on its ventral margin; aedeagus with uniquely shaped internal armature, in dorso-ventral view with a pair of elongate longitudinal structures separated by deep median emargination; spermatheca very small, ovoid, with large accessory gland and entangled ductus spermathecae broadened in distal part to form elongate but relatively narrow bursa copulatrix.

Description. Body slender, strongly convex, dark brown, covered with light brown vestiture.

Male (Fig. 1 A). Body length 2.56 mm. Head widest at moderately large eyes, length 0.47 mm, width 0.50 mm; vertex convex, with shallow but distinct median impression and a pair of very distinct, deep pits each adjacent to postero-interior margin of supra-antennal tubercle; tempora long, strongly and nearly regularly rounded; frontoclypeal area strongly convex and relatively narrow; supra-antennal tubercles moderately large but strongly raised and distinctly delimited from frons, whereas their external margins are very indistinctly delimited from vertex. Punctuation on vertex and frons distinct but composed of small and sparse punctures; setation moderately long, sparse and suberect. Antennae short, slender, gradually thickened toward apices, length 1.02 mm.

Pronotum distinctly longer than wide, widest near anterior fourth, length 0.77 mm, maximum width 0.71 mm, width at base 0.45 mm. Anterior and lateral margins rounded together; very narrow basal collar delimited from disc by narrow and sharply marked transverse groove with three small and relatively indistinct pits; posterior margin nearly straight. Punctuation distinct, composed of small but sharply marked punctures, in central part of disc separated by spaces $1.5-2\times$ as long as puncture diameters; setation dense, moderately long, suberect.

Elytra oval, widest slightly anterior to middle, length 1.32 mm, width 0.95 mm, elytral index (EI; length/width) 1.39. Humeral calli very indistinct; subhumeral

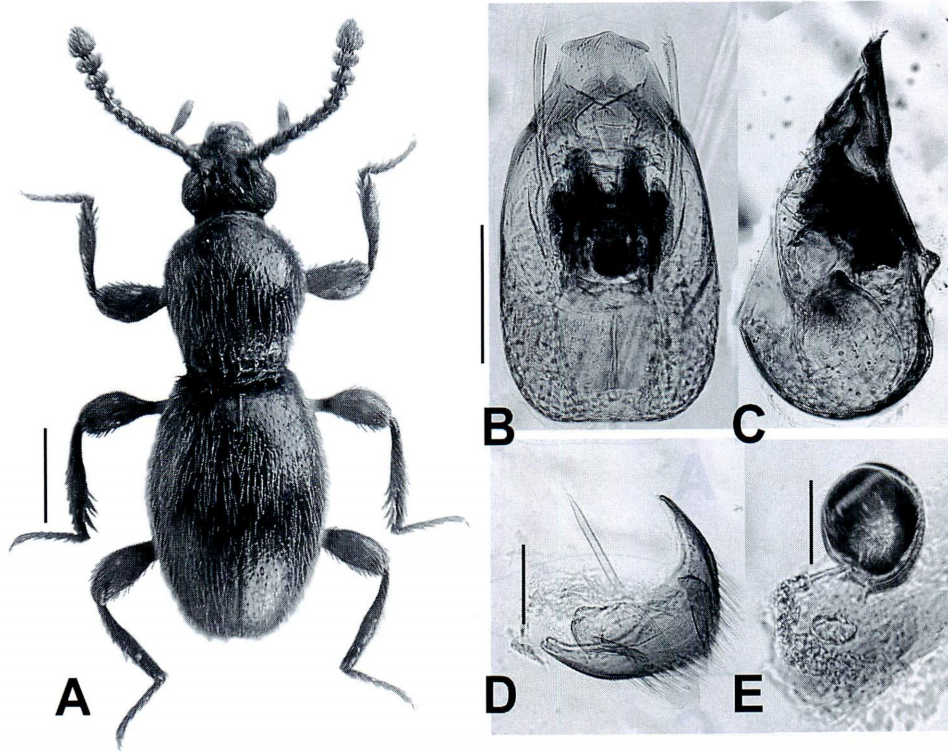


Fig. 1. *Horaeomorphus endauensis* sp. nov., habitus of holotype male (A), aedeagus in dorsal (B) and lateral (C) views, terminal abdominal segment of female and bursa copulatrix (D), and spermatheca (E). Scale: A – 0.5 mm, B–D – 0.2 mm, E – 0.05 mm.

impressions extremely shallow and very short; apices of elytra separately rounded together. Punctuation similar to that on pronotum, but composed of slightly smaller and slightly denser punctures; setation dense, slightly longer than that on pronotum and slightly more erect. Hind wings well developed.

Legs robust, moderately long. Metatrochanters strongly modified, as in Fig. 2 C.

Aedeagus (Figs. 1 B, C; 2 A, B) 0.55 mm in length, relatively stout, with subtrapezoidal apical part distinctly curved ventrad; parameres very slender, each with four apical and two subapical setae; internal armature relatively complicated, symmetrical, composed of very darkly sclerotized central complex, in dorso-ventral view with a pair of elongate longitudinal structures separated by deep median emargination.

F e m a l e. Externally very similar to males, but with non-modified metatrochanters and slightly smaller. Body length 2.37–2.42 mm (mean 2.40 mm), length of head 0.45 mm, width of head 0.47 mm, length of antenna 0.82–0.95 mm (mean 0.90 mm), length of pronotum 0.72–0.75 mm (mean 0.74 mm), maximum width of pronotum 0.60–0.62 mm (mean 0.61 mm), width of pronotum at base 0.42–0.45 mm (mean 0.44 mm), length of elytra 1.20–1.22 mm (mean 1.21 mm), width of elytra 0.77–0.80 mm (mean

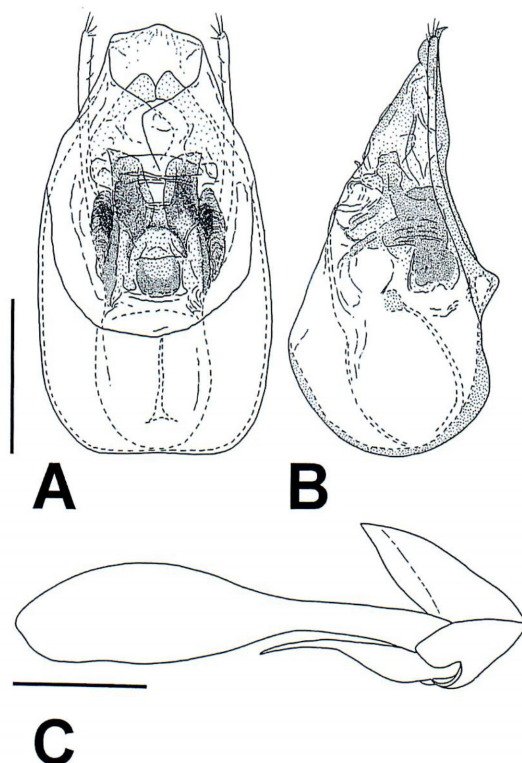


Fig. 2. *Horaemorphus endauensis* sp. nov., details of aedeagus in dorsal (A) and lateral (B) views, right hind leg of male in ventral view (C). Scale: 0.2 mm.

0.78 mm), EI 1.52–1.56.

Spermatheca (Fig. 2 E) very small, longest diameter 0.075 mm, ovoid in shape, with large accessory gland and long, entangled ductus spermathecae, which in its distal part is distinctly broadened and forms elongate bursa copulatrix (Fig. 2 D).

Distribution. Malaysia, Pahang.

Holotype male, white printed label “Nr. Gate (150–200 m), (sifting leaf litter), Endau-Rompin Nat. Res., (Pahang, MALAYSIA), 23. vii. 2004, S. Nomura leg.” and red printed label “*HORAEOMORPHUS endauensis* JAŁOSZYŃSKI & Nomura, det. P. JAŁOSZYŃSKI, 2006, HOLOTYPUS” (UKM). Paratypes: 2 females, same data as for holotype; 1 female, same data except for “Base camp (150 m)” and collected on 22. vii. 2004; all paratypes with standard yellow printed labels indicating their paratype status (NSMT and PCPJ).

Etymology. The name is locotypical, after the Endau River flowing through the Endau-Rompin National Park.

Remarks. Previously known species of *Horaemorphus* from the Malay Peninsula and the Sunda Islands have pronota either very finely punctate or with very distinct,

usually large and dense punctures (at least on the central part of the disc), sometimes bearing tiny central granule. The new species described in the present paper has somewhat intermediate punctures on its pronotum, which may cause confusion when the identification key from JALOSZYŃSKI (2006) is used. If the thesis 8 is chosen (i.e., distinct and dense punctation), then the final outcome is the thesis and antithesis 13 (i.e., *H. jeraianus* and *H. tiomanensis*), whereas the antithesis 8 (i.e., very fine and sparse punctation) leads to *H. sabahensis* and *H. pseudosabahensis* (i.e., thesis and antithesis 17). The new species is more similar to the latter pair in terms of its general appearance. It differs clearly from *H. jeraianus* and *H. tiomanensis* in the shape of the modified metatrochanter, which bears no ventral expansion, which is the case in the two previously described species. *Horaeomorphus sabahensis* and *H. pseudosabahensis*, in turn, have non-modified trochanters. The aedeagus of *H. endauensis* is most similar to that of *H. tiomanensis*, *H. punctifrons*, and *H. jaechi*, but it clearly differs in fine structures of the internal armature.

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要 約

P. JALOSZYŃSKI・野村周平・IDRIS A. G.: マレー半島産トゲアシオオコケムシ属の1新種。—— マレーシア、エンダウ・ロンピン自然保護区（パハン州）から採集された標本に基づき、トゲアシオオコケムシ属の1新種、*Horaeomorphus endauensis* JALOSZYŃSKI et NOMURA, sp. nov. を記載した。本種はパハン州から知られる、本属の第8番目の種となる。

Reference

- JALOSZYŃSKI, P., 2006. Revision of *Horaeomorphus* SCHAUFUSS (Coleoptera, Scydmaenidae) of East Malaysia, Singapore and Sunda Islands. *Genus, Wrocław*, 17: 19–66.