

## A New Species of the Termitophilous Tenebrionid Genus *Mimoxenotermes* PIC (Coleoptera, Tenebrionidae, Rhysopausini) Occurred in the Malay Peninsula

Kiyoshi ANDO

Entomological Laboratory, Faculty of Agriculture, Ehime University, Tarumi 3–5–7, Matsuyama, 790–8566 Japan

**Abstract** A new termitophilous tenebrionid species, *Mimoxenotermes hatayamai* sp. nov., is described from the Malay Peninsula.

### Introduction

The genus *Mimoxenotermes* PIC, 1931 belonging to the tribe Rhysopausini was established for *Mimoxenotermes duporti* PIC, 1931 from North Vietnam. The genus is characterised by the conformation of antennae, constrictions of head and elytral intervals (BREMER, 2013, 2014; BREMER & LILLIG, 2014). Since PIC (1931), no species had been added from any other areas of the world. Recently, the author received some unidentified specimens of the genus through the courtesy of Mr. Takeichiro HATAYAMA, Osaka, which were collected by flight interception trap in the forest of Mt. Jerai in altitude ca. 300 to 500 m. After close examination, the author concluded them as a new to science since clear differences from *M. duporti* PIC in the constrictions of head and pronotum were recognised. Description and details are mentioned in the following lines. The methods and terminology are followed ANDO (2019), the external morphologic structure of head is borrowed from BREMER (2013), and the holotype designated in this study will be housed in the Kyushu University Museum, Fukuoka, Japan (KUMF).

Before going into further details, the author expresses his cordial thanks to Messrs. Takeichiro HATAYAMA and Norio OKUDA for providing important material for this study, Emeritus professor Hans J. BREMER for his providing important references for this study, Mr. Yasuhiko HAYASHI for his constant assistance on this study, and to Dr. Junsuke YAMASAKO for his critically reading an early draft of this manuscript.

### *Mimoxenotermes hatayamai* sp. nov.

(Figs. 1 a, b & 2 a–c)

*Type series.* Holotype: ♂, Mt. Jerai (alt. 300–500 m), Kedah, Malaysia, V.2012, Native collector leg. (KUMF). Paratypes: 2 ♂♂, same locality and date as for the holotype.

*Description.* Male (n = 3). Body length: 7.3–7.7 mm (holotype: 7.7 mm). TD/IE 6.00–7.75 (holotype: 7.50); PW/PL 1.18–1.20 (holotype: 1.20); EL/EW 2.16–2.44 (holotype: 2.30). Elongate, more or less fusiform, shiny. Colour reddish brown, darkened in part.

Head rounded in dorsal view, vertically bent downward in frontal half in lateral view, well convex; labrum large and quadrate, weakly convex, with sparse long setae along apical portion; clypeus entirely vertical, short and transverse, weakly convex, shallowly emarginate at apex, with very sparse setiferous punctures; space behind clypeus steeply convergent; frontoclypeal suture indistinctly engraved; anterior part of frons triangular, subvertical, strongly convex, with several piligerous punc-

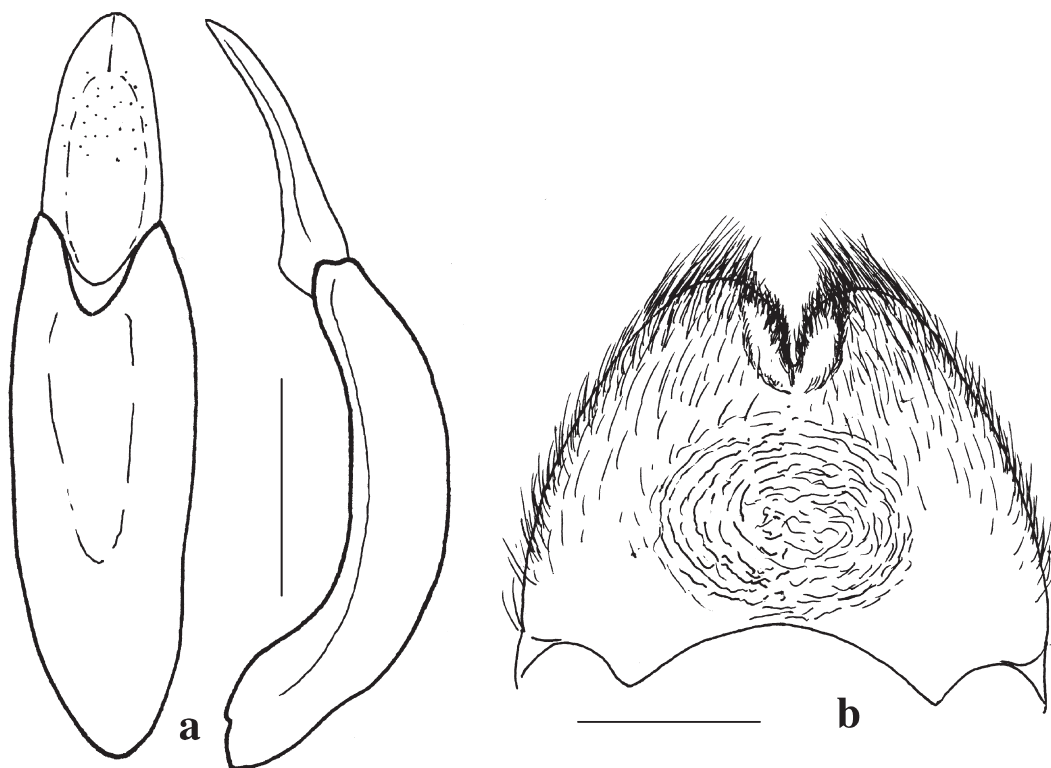


Fig. 1 a–b. *Mimoxenotermes hatayamai* sp. nov., holotype — a, Aedeagus (right: lateral; left: dorsal); b, sternite 8 in ventral view. Scales: 0.5 mm for a, 0.3 mm for b.

tures; posterior part of frons short and extremely narrow between eyes, distinctly ascendant anteriorly; genae oblong and extremely convex dorsally, thence vertical to anteriorly and ypsiloid in frontal view (Fig. 2c), with several long fine hairs, evenly depressed and smooth in area before eyes; eyes weakly convex and markedly transverse, strongly invaded by genae, without ocular sulci; vertex triangular, strongly tumid. Ultimate maxillary palpomere lunate, truncate at apex, with sparse setae. Mentum large, obtapezoidal, slightly convex, narrowly depressed along lateral margin, submentum linguiform, weakly constricted in middle. Antennae surpassing base of elytra (Fig. 2 b); antennomere 1 strongly tumid; antennomere 2 discoid, produced outwards; each antennomere of 3–9 helical and twisted, asymmetrical, inner lobes shorter than outer lobes; 5 and 6 widest, nearly equal in width; 10 very narrow obtapezoidal, with apex truncate, covered with dense setiferous sensory pores.

Pronotum wider than long (PW/PL 1.18–1.20), widest at base, with anterior corners acutely produced laterad and posterior corners acutely pointed, strongly produced posteriorly; disc moderately convex, with a pair of parallel longitudinal elevations in middle, and a pair of oval humps on each side of the elevations, the paired humps linked with each other, U-shaped elevation situated along base, of which terminals are prolonged anteriorly between the longitudinal elevations and the humps; interspace among elevations and humps asperate, and with very obsolete coarse punctures in part; anterior margin almost straight, faintly produced in median two-thirds, thickly beaded; lateral margins unevenly flat, roundly produced in middle, distinctly sinuate before base and behind apex, not beaded; basal margin weakly rounded, strongly emarginate in each lateral sixth, not beaded. Scutellum transversely elliptical, strongly convex, with a few obsolete punctures.

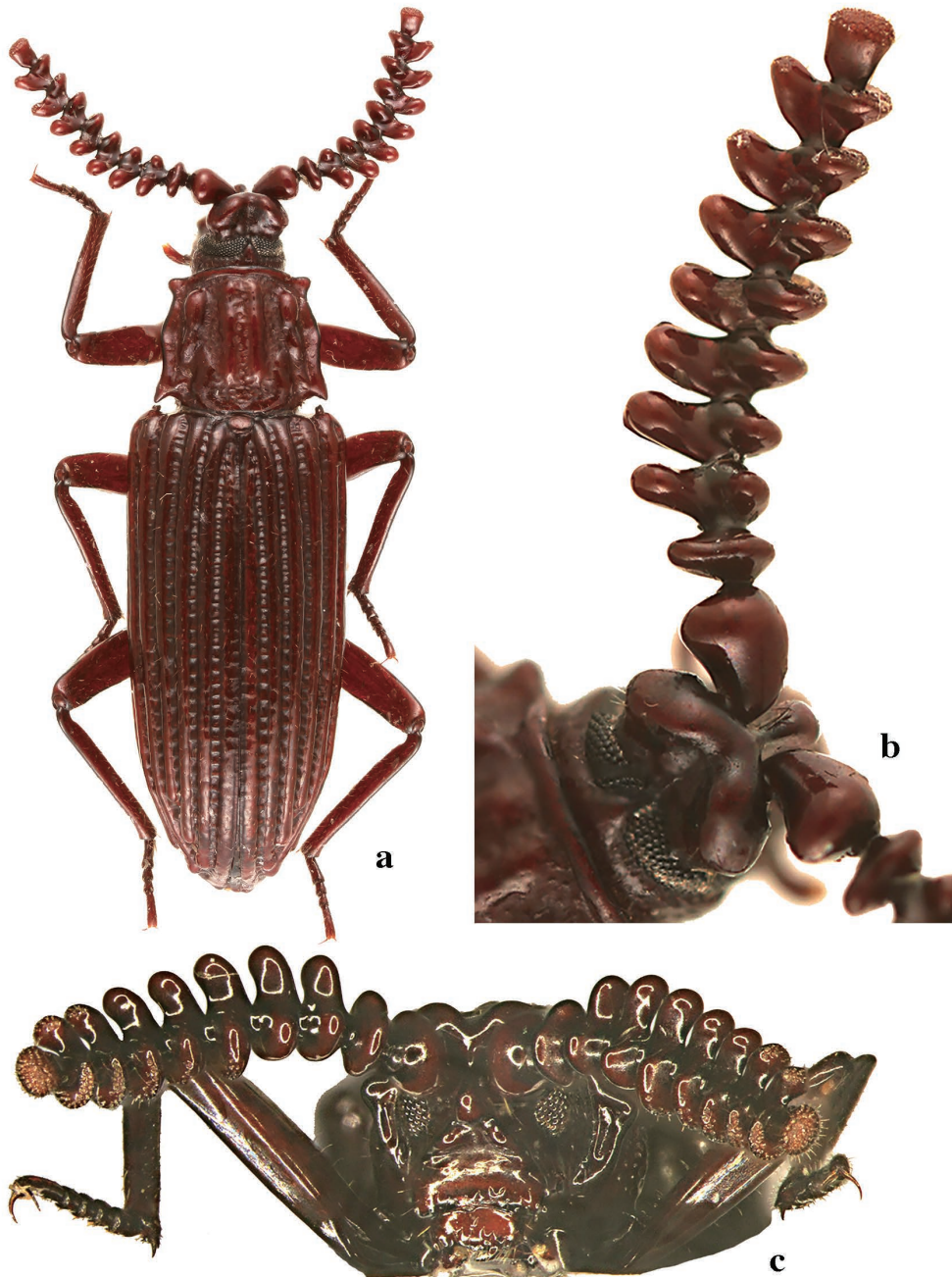


Fig. 2 a–c. *Mimoxenotermes hatayamai* sp. nov., holotype — a, Habitus; b, left antenna; c, head in frontal view.

Elytra elongate, moderately convex, and widest behind humeri (holotype and a paratype) or at middle (a paratype), strongly depressed behind scutellum, EL/EW 2.16–2.44; surface broadly striate, the striae distinctly depressed, with large, close and subquadrate cells; intervals lustrous, distinctly

costate, with fine piligerous punctures; lateral margins distinctly costate, invisible from above; costate lateral margin and 5th to 7th intervals uniting at anterior terminal, thence protruding forwards as a small tubercle, costate lateral margin and intervals more or less tumid in their apical portions; humeral calli scarcely humped; epipleura narrow and depressed, reaching before middle of abdominal ventrite 5, densely covered with microsculpture.

Prothoracic hypomera weakly excavate anteriorly, convex medially and depressed posteriorly, uneven, with coarse, shallow and obsolete punctures medially. Prosternum oblique forwards, bounded laterally by strongly elevated edges, distinctly beaded at apex; prosternal process bent inwards behind coxae, roundly broadened between coxae and truncate at apex. Mesoventrite unevenly and slightly convex, nearly smooth, with posterior ridge weakly elevated in Y-shape, sparsely piligerous, without anterior edges. Metaventrite distinctly convex, coarsely and irregularly punctate anteriorly, with posterior margin strongly and acutely produced posteriad besides median line which is quite deepened in posterior third. Abdomen weakly convex, coarsely and irregularly densely punctate on ventrites 1 and 2, sparsely so on 3; ventrites 4 and 5 with very sparse and fine piligerous punctures; ventrite 5 long, longer than the preceding ventrites, with lateral margins broadened in basal fourth; sternite 8 subtriangular (Fig. 1 b), elliptically and unevenly depressed in middle, with apical margin moderately notched at middle.

Aedeagus placed inverse storage in abdomen such as *M. duporti* PIC, 1931 mentioned in BREMER (2013), short and robust (Fig. 1 a); basale distinctly curved ventrad, weakly twisted basally; apicale gently tapering apicad, rounded at apex, broadly flattened dorsally, with fine microscopic punctures.

Legs thin. Femora scarcely clavate, with very fine hairs; anterior margin of profemora and posterior margins of meso- and metafemora weakly ancipital. Tibiae more or less lamellate, with fine erect hairs, without appendages. Tarsi compactly articulate, sparsely and evenly setiferous, but not pubescent on their soles; claws very tenuous.

**F e m a l e.** Unknown.

**Distribution.** Malay Peninsula.

**Etymology.** The specific epithet is cordially dedicated to Mr. Takeichiro HATAYAMA, Osaka, who kindly offered the type series to the author.

**Differential diagnosis.** The new species is very similar to *Mimoxenotermes duporti* PIC, 1931 from North Vietnam, but is readily separable by the following key:

- Frontoclypeal suture depressed, indistinct; space behind clypeus steeply convergent; posterior frons present; mentum large, obtrapezoidal, slightly convex, narrowly depressed along lateral margin; pronotum between elevations and humps asperate and with very obsolete coarse punctures in part, with anterior corners acutely produced laterad; elytron with costate 5th to 7th intervals and lateral margin uniting at anterior terminal; elytral epipleura reaching before middle of 5th abdominal ventrite; prosternal process truncate at apex; ventrites 4 and 5 with very sparse piligerous punctures; aedeagus with apicale depressed dorsally; body length 7.3–7.7 mm. .... *M. hatayamai* sp. nov.
- Frontoclypeal suture deeply incised; space behind clypeus moderately divergent; posterior frons absent; mentum small, apically widened, with bent lateral margin and a rounded transition between lateral margins and base; pronotum between elevations and humps with large and dense punctures, with anterior corners nearly rectangular, not produced; elytron with costate 5th to 6th intervals and lateral margin uniting at anterior terminal; elytral epipleura reaching elytral apices; prosternal process roundly pointed at apex; ventrites 4 and 5 impunctate; aedeagus with apicale not depressed dorsally; body length 6.3 mm. (the characters were quoted from the redescription of BREMER, 2013) ..... *M. duporti* PIC, 1931

## 要 約

安藤清志：マレー半島産好白蟻性属 *Mimoxenotermes* の 1 新種 (鞘翅目ゴミムシダマシ科)。——好白蟻性ゴミムシダマシの仲間である *Mimoxenotermes* 属は、螺旋状の触角節を保有する特殊な属であり、これまでベトナムとタイに分布する *M. duporti* PIC, 1931 のみが知られていた。今回、畑山武一郎、奥田則雄両氏のご厚意でマレー半島産の個体を検討することができた。検討の結果、既知種とは極めて近縁であるが相違する形質も確認できたため、新種と認め、*Mimoxenotermes hatayamai* sp. nov. と命名し記載した。

## References

- ANDO, K., 2019. Noteworthy species of the genus *Pseudonautes* FAIRMAIRE (Coleoptera, Tenebrionidae) deposited in the Senckenberg Deutsches Entomologisches Institut, with descriptions of six new species. *Elytra, Tokyo*, (n. ser.), **9**: 99–115.
- BREMER, H. J., 2013. Annotations on the tribe Rhysopaussini and on some genera assigned to this tribe (Coleoptera: Tenebrionidae; Rhysopaussini: Amarygmini). *Mitteilungen der Münchner Entomologischen Gesellschaft*, **103**: 71–79.
- BREMER, H. J., 2014. Revision of *Azarelius* FAIRMAIRE, *Ziaelas* FAIRMAIRE and related Oriental termitophilous genera, with descriptions of two new genera and remarks on tribal placement (Coleoptera: Tenebrionidae: Amarygmini). *Stuttgarter Beiträge zur Naturkunde A*, (n. ser.), **7**: 163–182.
- BREMER, H. J., & M. LILLIG, 2014. World catalogue of Amarygmini, Rhysopaussini and Falsocossyphini (Coleoptera: Tenebrionidae). *Mitteilungen der Münchner Entomologischen Gesellschaft*, **104**, Supplement: 3–176.
- PIC, M., 1931. Nouveau coléoptères. *Bulletin du Muséum national d'Histoire naturelle, Paris*, **3**: 106–109.

Manuscript received 27 July 2019;  
revised and accepted 14 October 2019.