

## A New *Stenhomalus* (Coleoptera, Cerambycidae) from Hainan, Southwest China

Tatsuya NIISATO

Bioindicator Co., Ltd., Nikko-Kagurazaka Building, Iwato-chô 18,  
Shinjuku, Tokyo, 162–0832 Japan

**Abstract** *Stenhomalus* (*Stenhomalus*) *liui* sp. nov. is described from Hainan, Southwest China. The new species is somewhat related to *S. kubani* HOLZSCHUH and *S. nanellus* HOLZSCHUH from eastern Indochina, but easily distinguished from them by the markedly long antennae in male.

### Introduction

Up to the present, a total of seventy taxa including subspecies of the obriine genus *Stenhomalus* WHITE was recorded mainly from Asia and a few from Africa (TAVAKILIAN & CHEVILLOTTE, 2015), of which 15 taxa were recorded from China including Taiwan (HUA, 2002; LÖBL & SMETANA, 2010). However, only the single species, *S. cephalotes* PIC has so far been known from Hainan (PIC, 1928).

In recent years, Bin LIU had several opportunities to survey the beetle fauna of Hainan and found many interesting materials including new taxa and new distributions of longicorn beetles. A new species of the genus *Stenhomalus* described herein is an example of his such discoveries. *Stenhomalus* (*Stenhomalus*) *liui* sp. nov. is similar in general appearance such as the unicolored brownish body to *S. kubani* HOLZSCHUH from North Vietnam and *S. nanellus* HOLZSCHUH from Laos, but easily distinguished from their relatives by the markedly long male antennae which are almost twice the length of the body.

### Material and Methods

The material examined was obtained during a recent collecting trip by Bin LIU, and is preserved in the Institute of Zoology, Chinese Academy of Sciences, Beijing, China.

The abbreviations used for the ratio of the measurement in the description see NIISATO (2015, p. 485) in the present issue.

### Taxonomy

*Stenhomalus* (*Stenhomalus*) *liui* sp. nov.

(Figs. 1–10)

Body length: 3.6 mm (from apical margin of clypeus to abdominal apex).

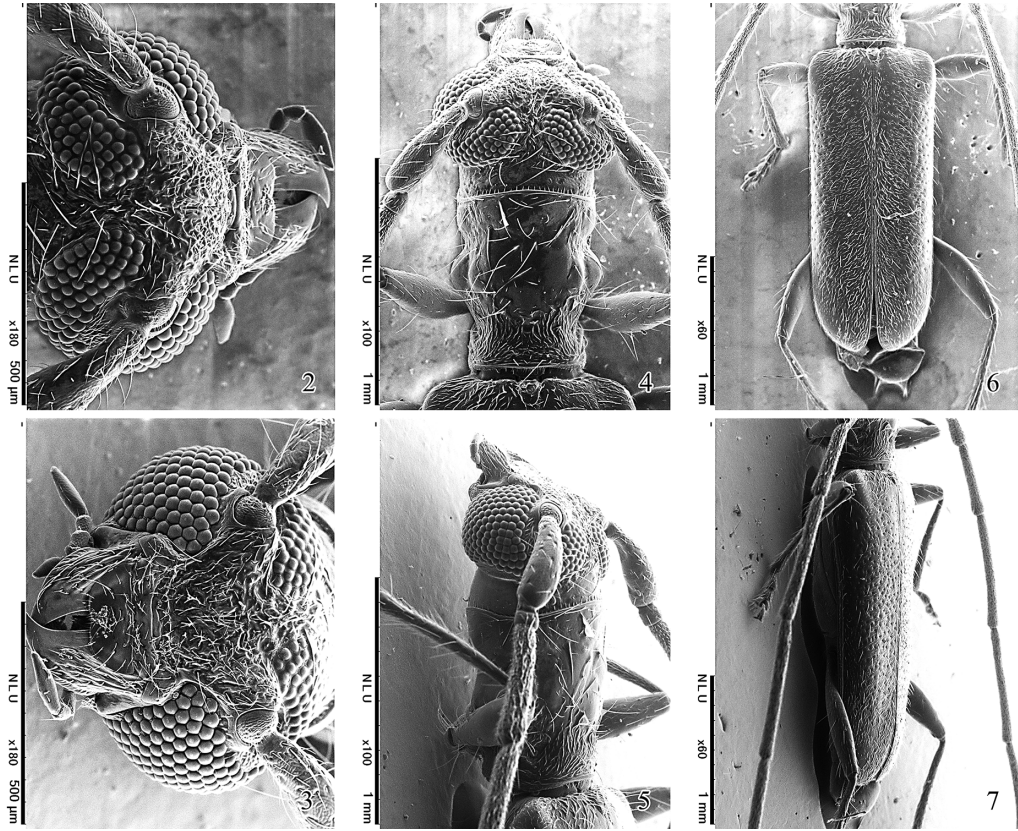
Small and slender species of unicolored yellowish brown body, with markedly long antennae. Colour yellowish brown, moderately shiny, paler in palpi, antennae and legs, black in eyes and along inner margin of mandible, blackish brown in abdomen except for yellowish anal sternite. Body sparsely clothed with light brown hairs, partly with recumbent pale yellow pubescence.



Fig. 1. *Stenhomalus (Stenhomalus) liui* sp. nov., holotype ♂, from Hainan, Southwest China.

Head globose including large eyes, rugose on surface, HW/PW 1.20, HW/PA 1.35; frons strongly convergent apicad, coarsely reticulate, with a fine median furrow, FL/FB 0.55, FA/FB 0.55; mandibles stout, simply arcuate; eyes separated from one another by 3/10 the width of each lobe. Antennae thin and markedly long, nearly twice the length of body, surpassed the elytral apices at basal third of segment 7, provided with very sparse rows of brownish hairs along inner sides of basal four segments; scape clavate, segment 3 weakly thickened at apex and a little shorter than segment 4, segments 5–7 gradually increase in length, segment 7 the longest, terminal segment gently arcuate.

Pronotum slightly longer than wide, moderately divergent apicad, PL/PW 1.17, PL/PA 1.30, PB/PA 0.83; sides strongly constricted before and behind the lateral tubercles which are located between apical and basal third, slightly dilated apicad in apical third; disc hardly convex in lateral view, with



Figs. 2–7. *Stenhomalus (Stenhomalus) liui* sp. nov., holotype ♂, from Hainan, Southwest China (SEM images). — 2–3, Head; 4–5, head and pronotum; 6–7, elytra. — 2, Frontal view; 3, 4, 6, dorsal view; 5, 7, dorso-lateral view.

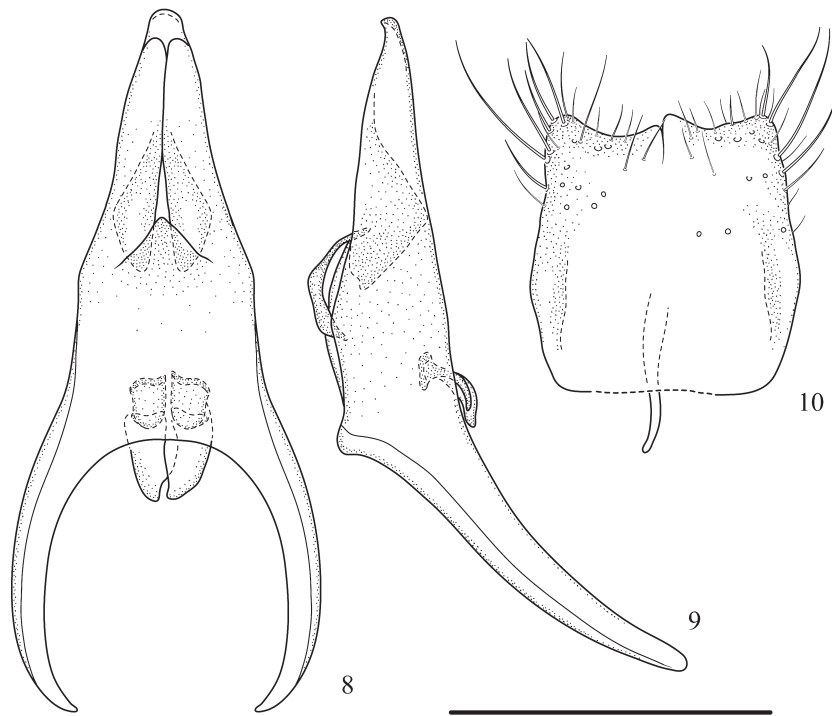
vague swellings at sides of apical third and at centre just behind middle, weakly produced at sides near middle above the lateral tubercles; surface largely smooth, scattered with a few large punctures, clothed with long pale yellow hairs, though coarsely shagreened and pale yellow pubescent in basal third. Scutellum trapezi-form, smooth on surface.

Elytra short and not so broad; EL/EW 2.38, EW/PW 1.40; sides with humeri roundly quadrate, gradually narrowed in weak sinuate line to apices which are almost completely rounded; disc flattened above, slightly impressed near suture behind scutellum, rather densely provided with large punctures, though almost smooth near bases and apices, clothed with long pale yellow hairs and dense same colored pubescence.

Ventral surface sparsely clothed with pale yellow hairs, scattered with a few small punctures; prosternal process flattened between coxae and triangularly dilated apicad; mesosternal process almost parallel at sides, concave at apical margin; abdomen short, nearly half the length of elytra, with anal sternite elongate semicircular and concave in middle of apical margin.

Legs short, not so stout; hind femora not reaching elytral apices, moderately compressed; hind tarsus with 1st segment equal in length to the following two segments combined.

Median lobe spindle-shaped, strongly attenuate apicad, 3/10 the length of elytra; apical lobe with sides slightly swollen near basal 2/5 then strongly narrowed to bluntly pointed apex, lateral walls nar-



Figs. 8–10. Male genitalia of *Stenhomalus (Stenhomalus) liui* sp. nov., holotype, from Hainan, Southwest China. — 8–9, Median lobe; 10, 8th abdominal segment. — 8, 10, Dorsal view; 9, lateral view. Scale: 0.20 mm.

rowly opened dorsad in basal 2/5; median orifice strongly dilated posteriad. Tegmen absent. Eighth tergite longer than wide, with weak projections at sides of apical margin.

*Type specimen.* Holotype: ♂, Mingfeng Valley, 938 m in alt., 18°44′37.9″/108°50′41.7″, Mt. Ji-anfengling, Ledong, Hainan, SW. China, 3.V.2014, B. LIU leg. The holotype is deposited in the Institute of Zoology, Chinese Academy of Sciences, Beijing, China.

*Etymology.* The new specific name is dedicated to Mr. Bin LIU who collected the holotype specimen.

*Notes.* *Stenhomalus liui* sp. nov. may be related to *S. kubani* HOLZSCHUH from North Vietnam (HOLZSCHUH, 1989) and *S. nanellus* HOLZSCHUH from Laos (HOLZSCHUH, 2010) in the unicolor body, the structures of head and pronotum, and the short elytra, but is easily distinguished from them by the markedly long antenna which are about twice the length of the body in male. This new species is also similar in general appearances to *S. longicornis* (BATES) from Nagasaki (type locality) (BATES, 1873) and *S. unicolor* NIISATO et HUA from East China (NIISATO & HUA, 1998), however, the latter two are larger in the body size and have the broad pronotum and elytra unlike to those of the new species.

The male genitalia of *S. liui* sp. nov. shows a simple conformation, and its median lobe is formed in a narrow spindle shape without any accompaniment. The eighth abdominal tergite is also the simple bilobed plate. However, the tegmen is completely absent, and disappeared even in the vestigial

ring part. It is scarcely known that several members of the genus possess a highly specialized male genitalia, of which the median lobe shows the polymorphism and the tegmen is completely disappeared (NIISATO, 2013). The simple male genitalia including the absence of tegmen in *S. liui* sp. nov. seems to be an example of such high specialization.

The ecological information of *S. liui* sp. nov. is almost unknown. The holotype male came in flight to a light trap setting in Mingfeng Valley of Mt. Jianfengling, Hainan, Southwest China.

### Acknowledgement

I would like to thank Mr. Bin LIU (Beijing) for his offer of the invaluable material used in this study.

### 要 約

新里達也：海南産メダカカミキリ属(鞘翅目カミキリムシ科)の1新種。——— 中国海南から、メダカカミキリ属の新種 *Stenhomalus (Stenhomalus) liui* sp. nov. を命名記載した。本新種は、北ベトナムの *S. kubani* HOLZSCHUH やラオスの *S. nanellus* HOLZSCHUH に、単一で褐色の色彩や頭部と前胸背板の構造、短い上翅などが似ているが、体長の2倍に及ぶ著しく長い雄の触角から容易に区別できる。本新種の雄交尾器は概して単純な構造を持つが、その側片は完全に消失する。メダカカミキリ属の一部には、高度に特殊化した雄交尾器をそなえる種が知られるが、本新種もその一つの例である。

### References

- BATES, H. W., 1873. On the longicorn Coleoptera of Japan. *The Annals and Magazine of Natural History*, (4), **12**: 1–39.
- HOLZSCHUH, C., 1989. Beschreibung neuer Bockkäfer aus Europa und Asien (Cerambycidae, Col.). *Koleopterologische Rundschau*, **59**: 153–183.
- HOLZSCHUH, C., 2010. Beschreibung von 66 neuen Bockkäfern und zwei neuen Gattungen aus der orientalischen Region, vorwiegend aus Borneo, Chian, Laos und Thailand (Coleoptera, Cerambycidae). *Entomologica Basiliensia et Collectionis Frey*, **32**: 137–225.
- HUA, L.-Z., 2002. XXIII. Order Coleoptera, Family Cerambycidae. Pp. 189–237. *List of Chinese Insects*, **2**. 612 pp. Zhongshan University Press, Guangzhou.
- LÖBL, I., & A. SMETANA (eds.), 2010. Catalogue of Palaearctic Coleoptera, **6** (Chrysomeloidea). 924 pp. Apollo Books, Stenstrup.
- NIISATO, T., 2013. *Stenhomalus tomiichii* sp. nov. (Coleoptera, Cerambycidae), with a highly specialized male genitalia. *Elytra, Tokyo*, (n. ser.), **3**: 295–300.
- NIISATO, T., 2015. A new genus and species of the tribe Molorchini (Coleoptera, Cerambycidae) from central Thailand. *Elytra, Tokyo*, (n. ser.), **5**: 485–494.
- NIISATO, T., & L.-Z. HUA, 1998. Three additional species of the tribe O브리ini (Coleoptera, Cerambycidae) from China. *Elytra, Tokyo*, **26**: 451–460.
- PIC, M., 1928. Notes et descriptions. *Mélanges Exotico-Entomologiques*, **51**: 1–36.
- TAVAKILIAN, J., & H. CHEVILLOTTE, 2015. Titan database about Longhorns or Timber-Beetles Cerambycidae. [http://lully.snv.jussieu.fr/titan/accueil\_uk.html.]. Accessed on 31 August 2015.

Manuscript received 31 August 2015;  
revised and accepted 30 October 2015.