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**DESCRIPTION OF A NEW SPECIES OF THE GENUS *MORIMOSPASMA*
GANGLBAUER, 1889 (COLEOPTERA: CERAMBYCIDAE, LAMIINAE)
FROM HUBEI, CENTRAL CHINA**

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Summary. *Morimospasma (Parvopama) shennongjiaensis* **sp. n.** from Shennongjia Forestry District, Hubei, China is described and illustrated. New species is similar to *M. (P.) granulatum* Chiang, 1981 but differs from latter by color of body, slightly narrower elytra, and straight metafemora. The holotype of new species is deposited in the Entomological Museum, Yangtze University, Jingzhou, Hubei, China.

Key words: longhorn beetle, Lamiini, taxonomy, new species, Asia.

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Резюме. Из лесного района Шэньнунцзя в провинции Хубей (Китай) описан новый для науки *Morimospasma (Parvopama) shennongjiaensis* **sp. n.** Новый вид близок к *M. (P.) granulatum* Chiang, 1981, но отличается от него окраской тела, более узкими надкрыльями и прямыми средними бедрами. Голотип нового вида хранится в Энтомологическом музее университета Янцзы (Цзинчжоу, Китай).

INTRODUCTION

Wang *et al.* (2022) tentatively identified a specimen as *Morimospasma (Parvopama) granulatum* Chiang on the basis of the similar external morphological characters when they are study on the genus *Morimospasma* Ganglbauer, 1889 from Hubei, China. The present study shows that the male of *Morimospasma (Parvopama) granulatum* Chiang, 1981 is in fact a species new to science. Herein, we describe and illustrate this new species.

MATERIAL AND METHODS

All habitus photographs were taken with a Canon 7D Mark II digital camera equipped with a Canon EF 100mm f/2.8L IS USM and genitalia images were taken with a Leica DFC450

digital camera mounted on a Leica M205A microscope. Images of genitalia were taken by keeping them in glycerin. All images were edited using Adobe Photoshop 2020. The genitalia were prepared by first soaking the whole beetle in boiling water for several minutes, then opening the abdomen from the abdominal apex along the dorsopleural margin. The genitalia were then removed with fine forceps and ophthalmic scissors, and later cleared in 10% KOH at 80–100°C for several minutes.

DESCRIPTION OF NEW SPECIES

Morimospasma (Parvopama) shennongjiaensis Zhang, Wang, Xie et Wang, sp. n.

<https://zoobank.org/NomenclaturalActs/DC4C579D-6E54-40F8-8A6D-09C8D114AA52>

Figs 1, 2, 5–10

TYPE MATERIAL. Holotype – male, **China**: Hubei, Shennongjia Forestry District, Hongping town, Yemahe, 31°36'54" N, 110°25'06" E, h = 1227 m, 2.VI 2018, coll. Lei Li and Ping Wang. The holotype is deposited in the Entomological Museum of Yangtze University.

DESCRIPTION. Male: body length 10.45 mm (measured from vertex to elytral apices), humeral width 2.30 mm (measured across humeri).

Body dark brown. Head, prothorax and elytra mostly clothed with brown appressed pubescence, with sparse grey-white and yellow appressed setae. Pronotum clothed with brown appressed pubescence mixed with yellow and grey-white appressed pubescence on the middle of disc, fringed with dense short yellow hairs at anterior and posterior margin. Antenna clothed with brown appressed pubescence. Scutellum densely clothed with grayish-yellow pubescence. Each elytron with a semicircle black macula of short setae at apical 1/5, with a narrow grayish-yellow annular marking around black macula. Ventral surface sparsely covered with short brown and grey-white appressed setae. Legs clothed with sparse grey-white and yellow appressed setae, more densely on apical half of tibiae.

Head with frons short, transverse, with a well marked longitudinal median sulcus; frons slightly convex, with sparsely and coarsely punctation; vertex slightly concave. Eyes coarsely faceted and deeply emarginate; gena distinctly longer than lower eye lobe. Antennae longer than body, about 1.19 times as long as body; antennomere IX surpassing elytral apex, antennal tubercles elevated, widely separated from each other; scape cylindrical, coarsely punctate, with an inconspicuous apical cicatrix; scape nearly equal in length of antennomere III, antennomere III slightly longer than IV, about 1.19 times as long as IV, antennomeres IV–X gradually shortening, antennomere XI sharply pointed apically, nearly equal in length of VI.

Pronotum wider than long, slightly constricted at basal 1/5 in lateral, length about 1.15 times as long as basal width, basal and apical equal in width, disc strongly raised centrally, anterior half of the protuberance strongly depressed medianly, posterior portion slightly narrowed with a middle longitudinal groove; each side provided with a lateral spine before the middle, subacute apically, slightly directed backward.

Scutellum triangle. Elytra elongate oval, about 2.74 times as long as humeral width, about 1.52 times as long as greatest elytral width; with sparse, deep punctures; strongly and steeply declivous behind the middle, apex rounded; surface scattered with tubercles of different sizes before black patches. Prosternal process narrow, lower than the coxae, gradually widening at apex; procoxal cavities closed posteriorly. Mesosternal process without tubercle; mesocoxal cavities opened externally to mesepimera. First abdominal ventrite longerst, distal abdominal ventrite distinctly concave, with arcuate apical margin.

Legs moderately long. Metafemora slightly curved, reaching fifth abdominal segment. First metatarsal segment slightly shorter than following two segments combined; claws divergent.



Figs 1–4. Habitus of *Morimospasma* spp. 1, 2 – *M. (Parvopama) shennongjiaensis* sp. n., holotype; 3, 4 – *M. (Parvopama) granulatum* Chiang, 1981, male; A, C – dorsal view; B, D – ventral view. Scale bar: 5 mm.

Male genitalia. Tergite VIII transverse, distinctly emarginate apically, length about 1.40 times as long as apical width, apical margin and apical 2/5 of lateral margins with sparse long setae. Tegmen slightly bent in lateral view, paramere moderately long, gently narrowed toward subacute apex, length about 1.19 times as long as width, apex with moderately dense long setae; endophallus long, mostly membranous.

Female. Unknown.

REMARKS. The new species has tergite VIII transverse with distinctly emarginate apical margin, which is obviously different from other members in this genus. At first glance the new species is very similar to *M. (Parvopama) granulatum* Chiang, 1981, however, it can



Figs 5–10. Genitalia of *Morimospasma (Parvopama) shenongjiaensis* sp. n. 5–7 – tegmen; 8, 9 – tergite VIII with sternites VIII and IX; 10 – parameres; 5, 8, 10 – ventral view; 6, 9 – dorsal view; 7 – lateral view. Scale bar: 1.0 mm.

be easily distinguished from the latter by the combination of the following characters: body mostly dark brown, elytral tubercles relatively large in size and more obvious, elytra more elongate, about 1.52 times as long as greatest elytral width, metafemora slightly curved. While in *M. (Parvopama) granulatum* Chiang, body usually reddish brown, elytra slightly wider, about 1.4–1.5 times as long as greatest elytral width (Bi, 2021), metafemora distinctly curved.

DISTRIBUTION. China: Hubei (Shennongjia).

ETYMOLOGY. This specific name is derived from the type locality, Shennongjia.



Figs 11–16. Genitalia of *Morimospasma (Parvopama) granulatum* Chiang, 1981. 11–13 – tegmen; 14, 15 – tergite VIII with sternites VIII and IX; 16 – median lobe; 11, 14 – ventral view; 12, 15 – dorsal view; 13, 16 – lateral view. Scale bar: 1.0 mm.

***Morimospasma (Parvopama) granulatum* Chiang, 1981**

Figs 3–4, 11–16

MATERIAL EXAMINED. **China:** Gansu, Tianshui, Maiji District, Maiji District, h = 2070 m, 18.VII 2021, 1 ♂, coll. Qi Liu and Shuqin Huo.

DISTRIBUTION. China: Gansu, Shaanxi, Hubei, Ningxia, Sichuan.

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REFERENCES

- Bi, W.X. 2021. Studies on the Flightless Lamiinae (Coleoptera: Cerambycidae) from China, IV. Genus *Morimospasma* Ganglbauer, 1889 (Lamiini). Japanese Journal of systematic Entomology, 27(2): 270–291.
- Tavakilian, G.J. & Chevillotte, H. 2022. Base de données Titan sur les Cerambycides ou Longicornes [online]. Available from: <http://titan.gbif.fr/index.html> [Accessed on 1 July 2022].
- Wang, P. Xie, G.L. & Wang, W.K. 2022. Study on the genus *Morimospasma* Ganglbauer, 1889 (Coleoptera, Cerambycidae, Lamiinae) from Hubei, China. *Zootaxa*, 5115(4): 532–540. DOI: 10.11646/zootaxa.5115.4.4

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