



<https://doi.org/10.70590/ice.2025.01.78>

<http://zoobank.org/urn:lsid:zoobank.org:pub:40083179-70F9-43C6-9C68-D60802C9501A>

## ● First record of *Paraleprodera bigemmata* (Thomson, 1865) (Coleoptera, Cerambycidae, Lamiinae, Monochamini) from China

Gui-Qiang HUANG<sup>1,3\*</sup>, Chao-Jun LONG<sup>2,4</sup> & Cheng WANG<sup>2,5</sup>

<sup>1</sup>School of Biological Science and Technology, Liupanshui Normal University, Liupanshui 553004, Guizhou, China

<sup>2</sup>College of Agriculture and Forestry Engineering and Planning, Guizhou Provincial Key Laboratory of Biodiversity Conservation and Utilization in the Fanjing Mountain Region, Tongren University, Tongren 554300, Guizhou, China

<sup>3</sup><https://orcid.org/0000-0002-0063-8157>; [hgqnasa@163.com](mailto:hgqnasa@163.com)

<sup>4</sup><https://orcid.org/0009-0005-6577-7341>; [3238442507@qq.com](mailto:3238442507@qq.com)

<sup>5</sup><https://orcid.org/0000-0003-1831-0579>; [296064584@qq.com](mailto:296064584@qq.com)

\*Corresponding authors

**Abstract:** *Paraleprodera bigemmata* (Thomson, 1865) is recorded from China (Yunnan) for the first time. Hind wing and terminalia of male are described for the first time. A diagnosis between *P. bigemmata* and *Paraleprodera insidiosa* (Gahan, 1888) is provided.

**Keywords:** China, hind wings, longicorn beetles, male terminalia, new faunistic records

## ● 芽斑齿胫天牛 *Paraleprodera bigemmata* (Thomson, 1865) (鞘翅目, 天牛科, 沟胫天牛亚科, 墨天牛族) 首次记录于中国

黄贵强<sup>1\*</sup>, 龙朝君<sup>2</sup> & 王成<sup>2</sup>

<sup>1</sup>生物科学与技术学院, 六盘水师范学院, 六盘水 553004, 贵州, 中国

<sup>2</sup>农林工程与规划学院, 贵州省梵净山地区生物多样性保护与利用重点实验室, 铜仁学院, 铜仁 554300, 贵州, 中国

\*通讯作者

**摘要:** 本文首次记录芽斑齿胫天牛 *Paraleprodera bigemmata* (Thomson, 1865) 分布于中国 (云南), 并首次描述了雄性的后翅和交尾器。提供了芽斑齿胫天牛与瘦齿胫天牛 *Paraleprodera insidiosa* (Gahan, 1888) 的鉴别特征。

**关键词:** 中国, 后翅, 天牛, 雄性交尾器, 新区系记录

**Citation:** Huang G-Q, Long C-J & Wang C 2025: First record of *Paraleprodera bigemmata* (Thomson, 1865) (Coleoptera, Cerambycidae, Lamiinae, Monochamini) from China. *The Indochina Entomologist*, 1 (78): 783–789. [黄贵强 龙朝君 & 王成 2025: 芽斑齿胫天牛 *Paraleprodera bigemmata* (Thomson, 1865) (鞘翅目, 天牛科, 沟胫天牛亚科, 墨天牛族) 首次记录于中国. 中南半岛昆虫学家, 1 (78): 783–789.]  
<https://doi.org/10.70590/ice.2025.01.78>

Accepted by Hao XU: 3.XI.2025; published online: 4.XI.2025

Copyright Gui-Qiang HUANG *et al.* This is an open access article distributed under the terms of the Creative Commons Attribution License (CCBY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

## ● Introduction

*Paraleprodera* Breuning, 1935 presently includes 19 species and 2 subspecies from Asia. Most of taxa are distributed in Southeast Asia, and 8 species and 1 subspecies are recorded from China (Tavakilian & Chevillotte 2025; Liang et al. 2025). Thomson (1865) described *Epicedia bigemmata* from India, then Breuning (1935) described *Paraleprodera assamensis* from India (Assam). Later Breuning (1949) treated *P. assamensis* as a junior synonym of *E. bigemmata*, and transferred *E. bigemmata* to the genus *Paraleprodera*. Presently, *Paraleprodera bigemmata* is only recorded from India.

In this paper, *P. bigemmata* is newly recorded from China (Yunnan), thus 9 species and 1 subspecies are currently recorded from China; besides, the description of hind wings and terminalia of male are presented for the first time.

## ● Material and methods

The examined specimens are deposited in BMNH (The Natural History Museum, London, United Kingdom) and LPSNU (School of Biological Science and Technology, Liupanshui Normal University, Liupanshui, Guizhou, China).

The methods of taking figure 2 followed Huang *et al.* (2020), figure 3 followed Liang *et al.* (2025). The terminology of hind wings vein followed Švácha & Lawrence (2014). The terminology of male terminalia followed Ślipiński & Escalona (2013).

## ● Taxonomy

### *Paraleprodera bigemmata* (Thomson, 1865) 芽斑齿胫天牛

Figs 1, 2, 3

*Epicedia bigemmata* Thomson, 1865: 295 (type locality: “India”); Gemminger 1873: 3012 (catalogue).

*Paraleprodera assamensis* Breuning, 1935: 255 (type locality: “Assam, India”); Breuning 1943: 154 (key), 268 (description), fig. 143.

*Paraleprodera bigemmata*: Breuning 1949: 2 (synonym); Breuning 1961: 334 (catalogue).

**Type material examined.** Holotype of *Paraleprodera assamensis* Breuning, 1935, ♂ (BMNH, examined from four photographs, Fig. 1A–D): Assam. (printed in black ink on a rectangular white label) / Atkinson. Coll. 92–3. (printed in black ink on a rectangular white label) / *Paraleprodera assamensis* mihi Typ. (handwritten) det. Breuning (printed in black ink on a rectangular white label) / Type (printed in black ink on a circular white label with red border) / NHMUK 014016930 plus a QR code (printed in black ink on a rectangular white label).

**Material examined.** 2♂♂ (LPSNU), Mangyun Village, Taiping Town, Yingjiang County, Dehong Dai and Jingpo Autonomous Prefecture, Yunnan Province, China, alt. 800 m, early June 2019, Shao-Fu Chen leg.; 1♂ (LPSNU, figs 2, 3), Taiping Town, Yingjiang County, Dehong Dai and Jingpo Autonomous Prefecture, Yunnan Province, China, alt. 900 m, 2.V.2019, Chang-Gui Liu leg.; 1♂ (LPSNU), Hulukou (Menglai River Secondary Power Station), Xima Town, Yingjiang County, Dehong Dai and Jingpo Autonomous Prefecture, Yunnan Province, China, alt. 1200 m, VI–VII.2018, Wei-Zhong Yang leg.

**Supplementary description of male.** Hind wing (Fig. 2E): apexes of these veins (AP<sub>3</sub>, AA<sub>4</sub>, AA<sub>3</sub>, CuA<sub>2</sub>, MP<sub>4</sub>, MP<sub>3</sub>, MS) distant from margin, apex of AV closed to margin. AA<sub>4</sub> vein nearly as long as AA<sub>3</sub> vein, Cu vein connected with AA<sub>3</sub> vein at base of AA<sub>3</sub> vein. CuA<sub>2</sub> vein distinctly shorter than MP<sub>4</sub> vein, MP<sub>4</sub> vein distinctly longer than MP<sub>3</sub> vein, MP<sub>3</sub> vein longer distinctly longer than MP<sub>3+4</sub> vein. The r<sub>4</sub> vein with a short spur on the right side of the middle, and r<sub>4</sub> vein connected with RP vein near base of RP vein, RP vein longer than MS.

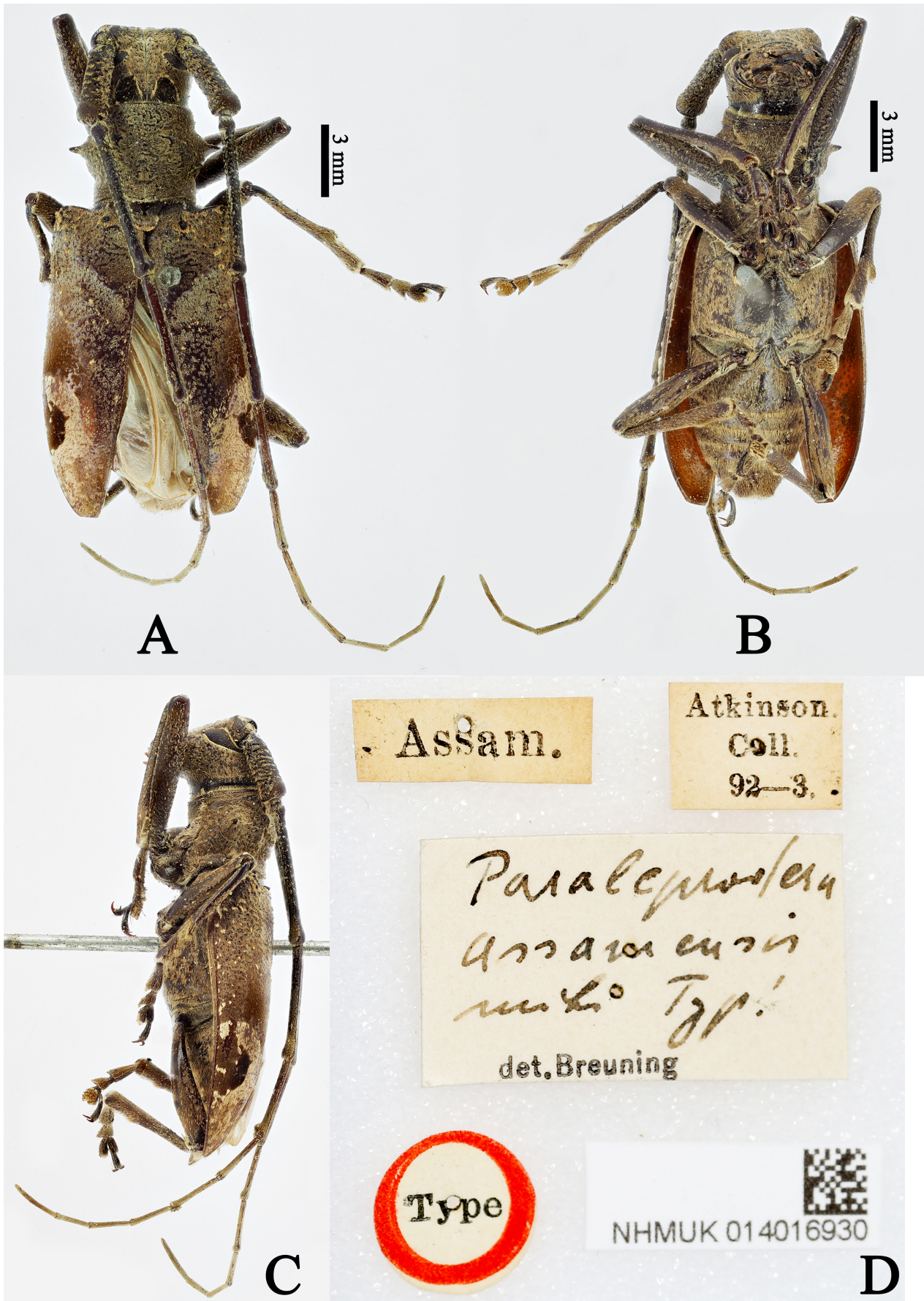
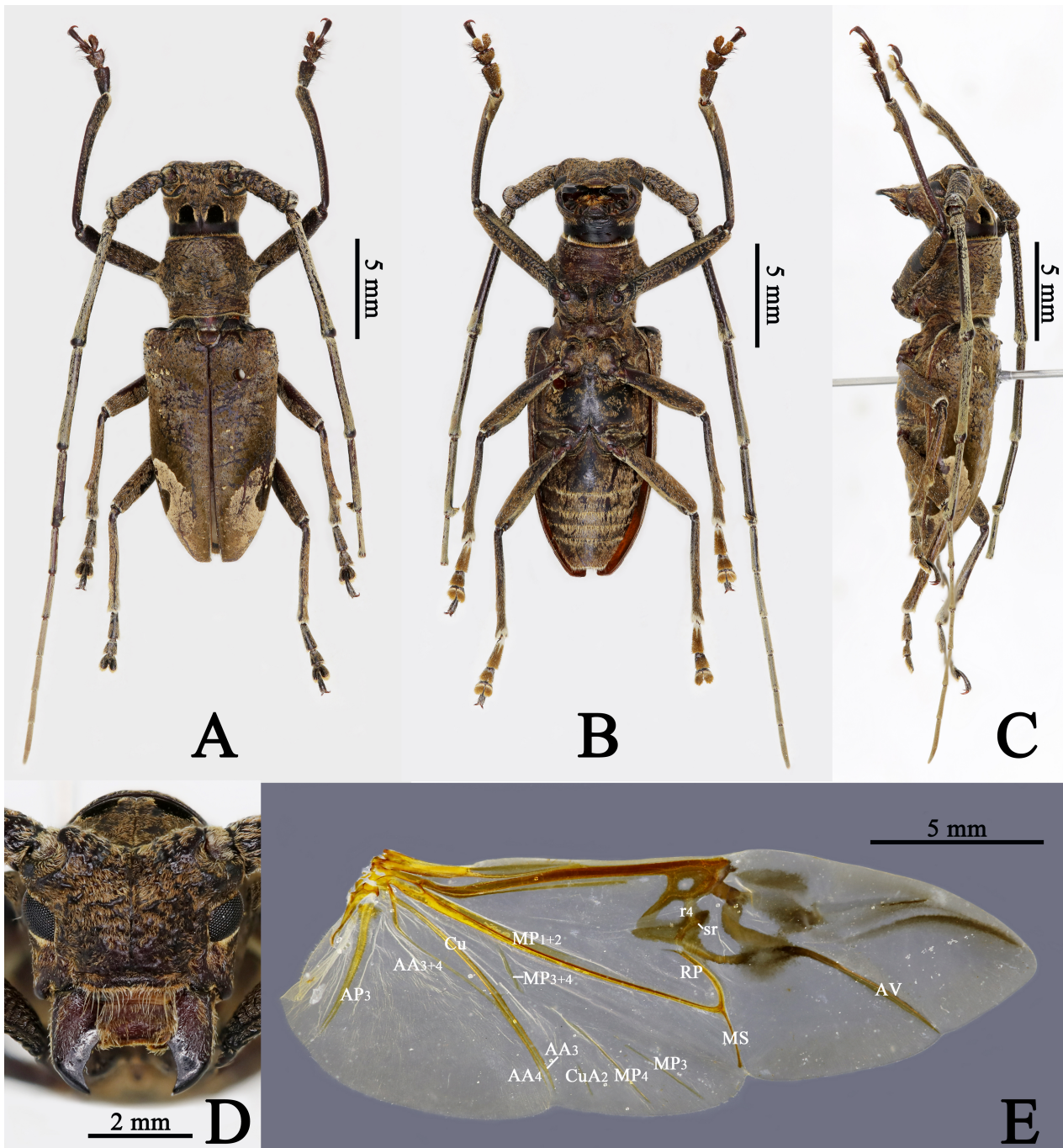


FIGURE 1. *Paraleprodera assamensis* Breuning, 1935, holotype, male: A habitus, dorsal view B habitus, ventral view C habitus, lateral view D labels (all photographs taken by Zhuo Chen).



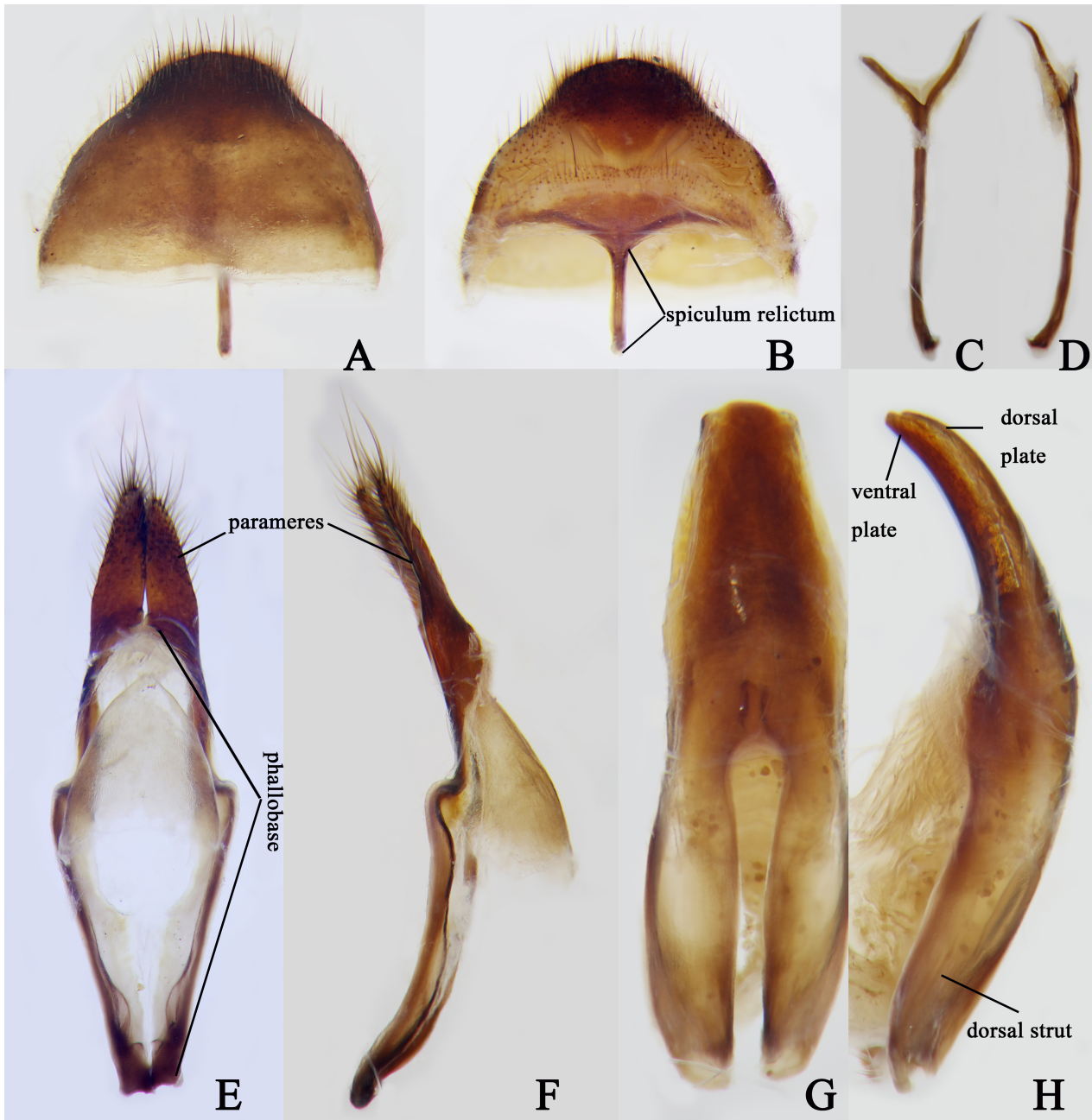
**FIGURE 2.** *Paraleprodera bigemmata*, male (Yunnan, China): **A** habitus, dorsal view **B** habitus, ventral view **C** habitus, lateral view **D** head, frontal view **E** right hind wing, dorsal view (**A** anal **AP** anal posterior vein **AV** veins in apical wing region **Cu** cubital **MP** medial posterior **MS** medial spur **r** radial **RP** radius posterior vein **sr** spur on crossvein **r4**).

Terminalia (Fig. 3A–H): the tergite VIII (Fig. 3A) wider than long, gradually constricted from base to apical 1/3, and abruptly constricted from apical 1/3 to apex, rounded apically; disc sparsely covered with long and short brown hairs from apical 1/3 to apex, sides of base to apical 1/3 with sparser long and short brown hairs. The sternite VIII (Fig. 3B) depressed at apex, with a small notch at apical middle; disc sparsely covered with long and short brown hairs at apical 1/2; spiculum relictum longer than sternite VIII. Stem of spiculum gastrale more than 2.0 times as long as a branch (the long one) of spiculum gastrale (Fig. 3C–D), and apex of the stem curved as a hook. Apexes of both parameres rounded and closed together, both parameres sparsely covered with short and several long brown hairs from basal 1/3 to apex (Fig. 3E–F); phallobase (Fig. 3E) expanded near apical 1/3, apex of each tegminal strut

notched. Penis abruptly constricted near middle in dorsal view (Fig. 3G) and expanded towards venter near middle in profile (Fig. 3H), ventral plate of penis slightly longer than dorsal plate, and truncated at apex, dorsal plate rounded at apex, apex of dorsal struts of penis rounded (Fig. 3G–H).

**Diagnosis.** This species is similar to *Paraleprodera insidiosa* (Gahan, 1888) (see Fig. 61a in Li & Chen 2020) in each elytron with sparse coarse granules at base, and with a big sub-oval black spot surrounded with a wide pale yellow hair band on the apical half. But *P. bigemmata* can be distinguished from it by the granule near base of elytral middle bigger (without bigger granule in *P. insidiosa*), the area of the spot and the band not beyond elytral middle (distinctly beyond elytral middle in *P. insidiosa*).

**Distribution.** China (Yunnan), India (Assam).



**FIGURE 3.** Male terminalia of *Paraleprodera bigemmata* (Yunnan, China): **A** tergite VIII, dorsal view **B** sternite VIII, ventral view **C** spiculum gastrale, dorsal view **D** spiculum gastrale, lateral view **E** tegmen, dorsal view **F** tegmen, lateral view **G** penis, dorsal view **H** penis, lateral view. Not to scale.

## ● Acknowledgements

We sincerely appreciate Zhuo Chen (China Agricultural University, Beijing, China) for providing the photographs of the holotype of *Paraleprodera assamensis* Breuning, 1935, and Fa-Lei Wang (Chongqing, China) for providing the specimens of *Paraleprodera bigemmata* (Thomson, 1865). We are grateful to Guang-Lin Xie (Yangtze University, Jingzhou, Hubei, China), Zhu Li (Southwest University, Chongqing, China), and Hao Xu (Subject editor of the Indochina Entomologist) for improving our manuscript.

## ● References

- Breuning S 1935: Novae species Cerambycidae. IV. *Folia Zoologica et Hydrobiologica, Riga*, 8 (2): 251–276.
- Breuning S 1943: Études sur les Lamières (Coleop. Cerambycidae). Douzième tribu: Agniini Thomson. *Novitates Entomologicae, 3ème supplément*, (89–106): 137–280.
- Breuning S 1949: Notes systématiques sur les Lamières (Coleoptera Cerambycidae). *Bulletin de l'Institut Royal des Sciences Naturelles de Belgique, Bruxelles*, 25 (38): 1–32.
- Breuning S 1961: Catalogue des Lamières du Monde. *Verlag des Museums G. Frey, Tutzing bei München*, (5): 287–382.
- Gemminger M 1873: Tom. X. Cerambycidae (Lamiini), Bruchidae. In: Gemminger M & Harold E 1873. *Catalogus coleopterorum hucusque descriptorum synonymicus et systematicus*. Munich, 2989–3232.
- Huang G-Q, Yan K & Li S 2020: Description of *Pseudoechthistatus rugosus* n. sp. from Yunnan, China (Coleoptera: Cerambycidae: Lamiinae: Lamiini). *Zootaxa*, 4747 (3): 593–600.  
<https://doi.org/10.11646/zootaxa.4747.3.12>
- Li Z & Chen L 2020: Primary types of longhorned beetles (Coleoptera, Cerambycidae, Vesperidae and Disteniidae) of Southwest University (SWU). *Zootaxa*, 4718 (1): 25–46.  
<https://doi.org/10.11646/zootaxa.4718.1.2>
- Liang X-Q, Gao C-Q & Huang G-Q 2025: First record of *Paraleprodera laosensis* Breuning, 1965 (Coleoptera, Cerambycidae, Lamiinae, Monochamini) from China. *International Journal of Fauna and Biological Studies*, 12 (5, part B): 135–137.  
<https://doi.org/10.22271/23940522.2025.v12.i5b.1140>
- Ślipiński A & Escalona HE 2013: *Australian Longhorn Beetles (Coleoptera: Cerambycidae). Vol. 1. Introduction and Subfamily Lamiinae*. ABRIS, Canberra & CSIRO Publishing, Melbourne, 504 pp.  
<https://doi.org/10.1071/9781486300044>
- Švácha P & Lawrence JF 2014: 2.4 Cerambycidae Latreille, 1802. In: Leschen RAB & Beutel RG (Eds) *Handbook of zoology, Coleoptera, Beetles. Vol. 3. Morphology and Systematics (Phytophaga)*. Walter de Gruyter, Berlin, pp. 77–177.  
<https://doi.org/10.1515/9783110274462.77>
- Tavakilian G & Chevillotte H 2025: *Titan: International Database on Worldwide Cerambycidae or Longhorn Beetles*. Available from: <http://titan.gbif.fr/index.html> (accessed 29.X.2025)
- Thomson J 1865: Diagnoses d'espèces nouvelles qui seront décrites dans l'appendix du systema cerambycidae. *Mémoires de la Société Royale des Sciences de Liège*, 19: 541–578.

## ● Additional information

**Author contributions:** Writing—original draft: G-Q Huang & C-J Long. Writing—review and editing: G-Q Huang & C Wang. Funding acquisition: G-Q Huang.

**Conflict of interest:** The authors have declared that no competing interests exist.

**Data availability:** All of the data that support the findings of this study are available in the main text.

**Ethical statement:** No ethical statement was reported.

**Funding:** This study was supported by the Fund Project of the Education Department of Guizhou Province (Qian Education Skill [2022]054#, Qian Education Skill [2022]091#), Guizhou Provincial Science and Technology Foundation (Qian Science combination Foundation-ZK[2022] general 527#).

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of *ICE* and/or the editor(s). *ICE* and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.

