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● Species checklist of the genus *Forcipula* Bolivar, 1897 (Dermaptera, Labiduridae), with the description of a new species from China

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Abstract: A new species of the genus *Forcipula* Bolivar, 1897 (Dermaptera, Labiduridae), *F. baoshana* sp. nov., is described from Baoshan City, Yunnan Province, China. This species can be distinguished by the presence of two prominent inner teeth on the male forceps and a minute, blunt epimerite on the male genitalia. A revised and updated checklist of *Forcipula* species is also provided, correcting several inaccuracies found on publicly accessible Dermaptera databases.

Keywords: Biodiversity, checklist, earwig, morphology, new species

● 钳螞属名录及中国一新种记述（革翅目：螞螞科）

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摘要：本文描述了中国云南省保山市的钳螞属一新种：保山钳螞 *Forcipula baoshana* sp. nov.。该新种雄虫尾铗内缘具二大齿突，且雄性外生殖器的阳茎基侧突先节粗短。本文提供了修订后的钳螞属物种名录，修改了革翅目公共数据库存在的信息错误。

关键词：生物多样性，名录，螞螞，形态学，新种

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● Introduction

The genus *Forcipula* Bolivar, 1897 belongs to the subfamily Labidurinae Verhoeff, 1902, within the family Labiduridae. The Dermaptera Species File website (<https://dermaptera.speciesfile.org/>) listed 27 species in *Forcipula*, but three of them were synonymized in Srivastava (1986). Following a series of taxonomic revisions, *Forcipula* currently comprises 24 valid species distributed globally (Srivastava 1986, 2003; Steinmann 1989; Waller *et al.* 1996).

Members of *Forcipula* are morphologically similar to those of *Labidura* Leach, 1815, but can be differentiated by certain diagnostic traits, including the typical presence of lateral tubercles on the male abdominal tergites, and the female forceps, which possess a dorsal ridge and often bear a preapical tooth (Steinmann 1989; Srivastava 2003).

In this study, I describe a new species of *Forcipula* collected from Heilong, Baoshan City, Yunnan Province, China. The species is illustrated, morphologically diagnosed, and compared with related congeners. Additionally, I provide an updated checklist of *Forcipula* species to facilitate future taxonomic and biodiversity research.

● Material and methods

The specimens examined in this study were hand-collected. Morphological observations were conducted using a SDPTOP SZM45 stereo microscope. Photographs of adults and genitalia were captured with a Canon EOS 5DSR digital camera, paired with a Canon MP-E 65 mm macro lens. Images were optimized and assembled using Adobe Photoshop 2021. The holotype and paratype are deposited in the Insect Collection of Jiangsu University of Science and Technology (ICJUST), Jiangsu Province, China. Terminology follows Srivastava (2003).

● Taxonomy

Forcipula baoshana sp. nov. 保山钳螋

(Figs 1–4)

<https://zoobank.org/4C6CD33F-4D83-49C5-A9CF-50BB2F5889DE>

Type material. Holotype: ♂ (ICJUST): CHINA: Yunnan Province, Baoshan City, Shidian County, Taiping Town, Heilong, 24.704582°N, 99.016119°E, 608 m, 24.IV.2025, local collector. **Paratype:** ♂ (ICJUST): with same data as holotype.

Etymology. The new species is named after its type locality in Baoshan City, Yunnan Province, China.

Description of holotype. Body elongated, near cylindrical (Fig. 1A, B); body length without forceps 20 mm; forceps length 14.5–15 mm.

Head brown, much longer than wide, with truncate posterior margin; frontal and coronal sutures distinct. Eyes large, near as long as post-ocular region. Antennae 36 segmented; first segment slightly shorter than distance between antennal bases, constricted basally; segments 2–8 short, near as long as wide; subsequent segments gradually elongated toward apex.

Pronotum narrower than head, longer than wide, with granular surface; lateral areas with long triangular dark marks; lateral margins gradually diverged posteriorly expect converged medially and posteriorly; posterior margin weakly emarginate medially; median longitudinal furrow distinct. Tegmina granular, subhyaline, near two times longer than pronotum, with ridge-like lateral edges at shoulder, posterior margin near truncate. Scales of hind wings granular, small, with dark stripes along inner margins. Legs slender, yellowish, with a broad dark band on posterior half of femora; first tarsal segments longer than the combined length of second and third.

Abdomen spinulose, gradually expanded to ultimate tergite. Abdominal tergite 2 with row of small, stout spines near posterolateral margins; tergites 3–5 with giant, subtriangular spines and lamellar ridges near posterolateral margins (Fig. 2A, B). Ultimate tergite transvers, subquadrate, mostly glabrous, median longitudinal furrow distinct,

with posterolateral papillary lobes near base of forceps. Pygidium hidden. Penultimate sternite transverse, near twice as wide as long, lateral margins obliquely truncate, posterior margin slightly emarginate. Forceps slightly undulated, sinuate, mostly depressed, apex conical (Fig. 3A, B); base of forceps with oblique ridge-like tooth dorsally; inner margin of basal half with 4–5 small teeth and numerous small tubercles ventrally; two giant subtriangular teeth present medially.

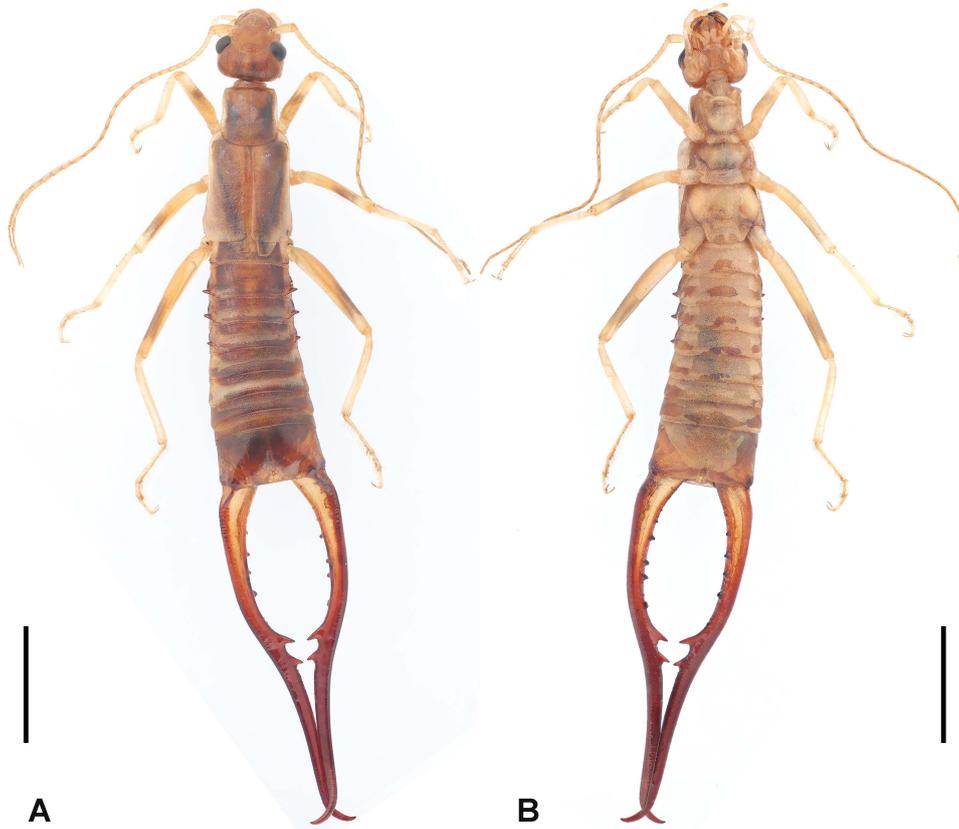


FIGURE 1. *Forcipula baoshana* sp. nov., male holotype: **A** habitus, dorsal view **B** habitus, ventral view. Scale bar = 5 mm.

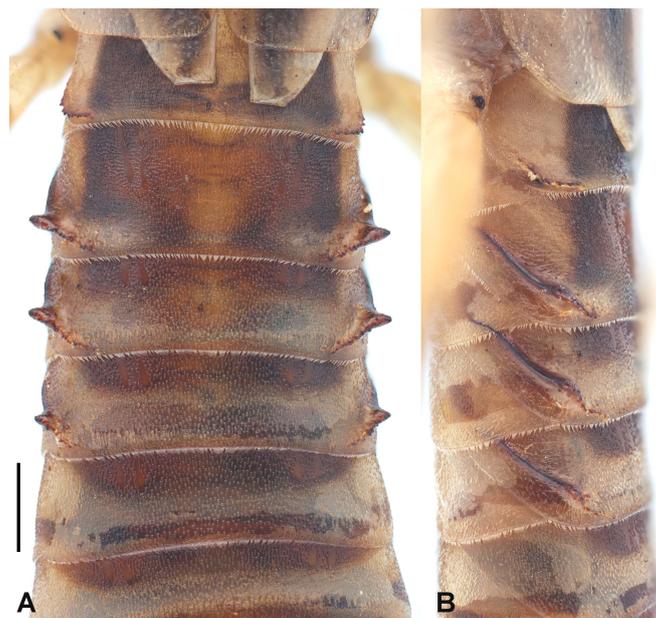


FIGURE 2. *Forcipula baoshana* sp. nov., male holotype: **A** abdominal spines and ridges, dorsal view **B** abdominal spines and ridges, lateral view. Scale bar = 1 mm.

Genitalia slender, median incision of anterior margin deep (Fig. 4A–D); paired genital lobes well developed; virga curved medially; basal vesicle small, elliptical, sclerotized. Paired external parameres long, inner and outer margins parallel at basal two-third; outer margin obliquely truncate at apical one-third; epimerite at tip of external paramere short, very tiny

Diagnosis. The inner armature of the male forceps is a relatively stable and informative character for distinguishing species within *Forcipula* (Srivastava 2003). In the newly described species, the forceps exhibit a pair of large, inward-facing teeth located at the bend, a feature shared with *F. tuberculata* Srivastava, 1977 from India and *F. americana* de Bormans, 1900 from Bolivia and Peru (Steinmann 1980, 1989; Srivastava 2003). However, *F. baoshana* **sp. nov.** can be readily distinguished from these species by its significantly reduced hind wing scales (versus fully developed wings) and the morphology of the epimerite at the tip of the external paramere, which is short and blunt (versus slender and pointed) (Steinmann 1980, 1989; Srivastava 2003). Moreover, *F. baoshana* **sp. nov.** differs from *F. tuberculata* in possessing eyes that are shorter than the post-ocular region (versus eyes approximately twice as long as the post-ocular area), and in the morphology of the forceps teeth, which are similar in size and lie on the same plane (versus a distinctly smaller posterior tooth positioned ventrally) (Steinmann 1980, 1989; Srivastava 2003).

Distribution. China (Yunnan Province).



FIGURE 3. *Forcipula baoshana* **sp. nov.**, male holotype: **A** forceps, dorsal view **B** forceps, ventral view. Scale bar = 5 mm.

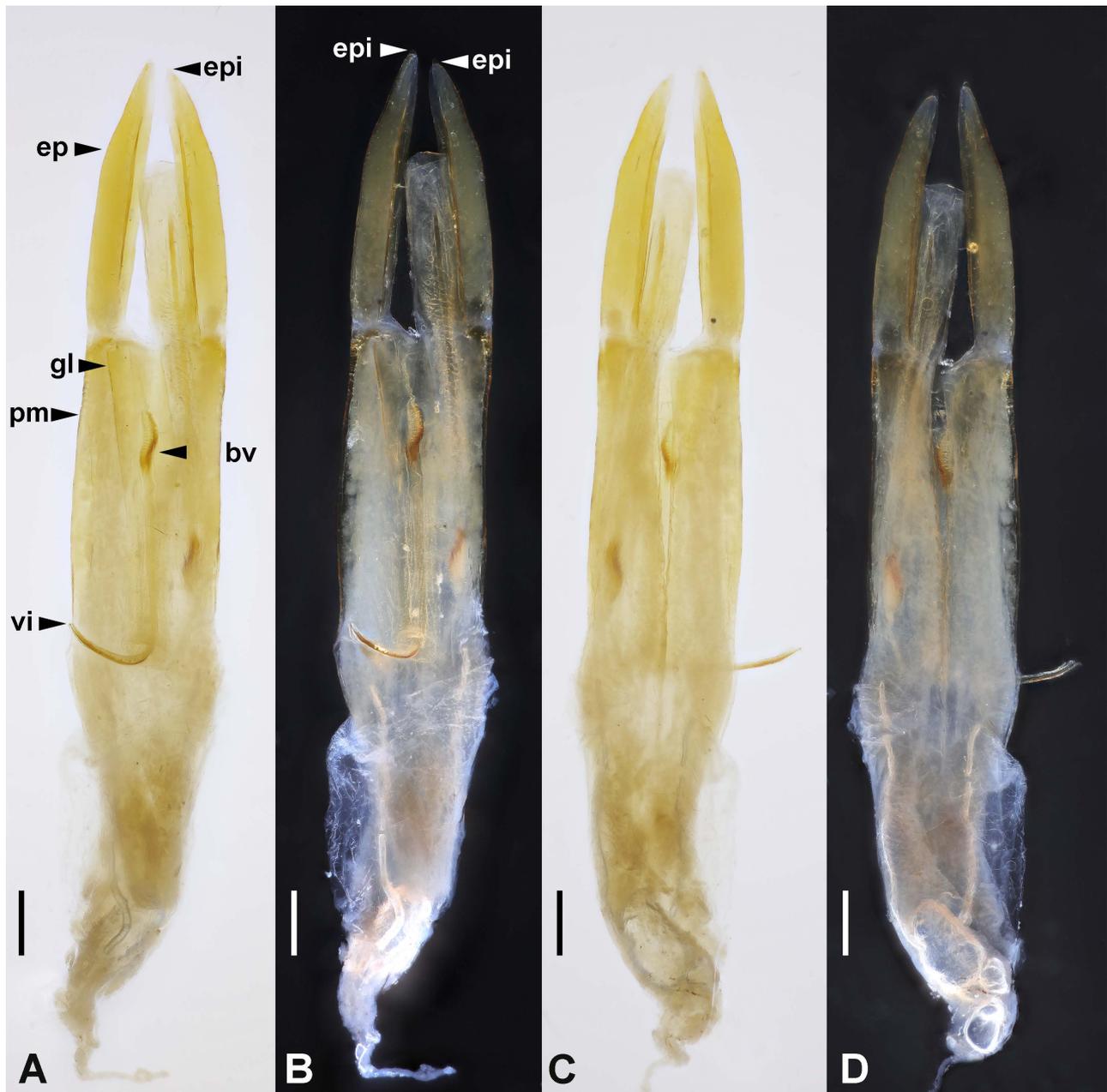


FIGURE 4. *Forcipula baoshana* sp. nov., male holotype: **A** genitalia on white background, dorsal view **B** genitalia on dark background, dorsal view **C** genitalia on white background, ventral view **D** genitalia on dark background, ventral view. Abbreviations: bv, basal vesicle; ep, external paramere; epi, epimerite; gl, genital lobe; pm, paramere; vi, virga. Scale bar = 0.2 mm.

Species checklist of the genus *Forcipula* Bolivar, 1897

Forcipula abbreviata Srivastava, 1986

Forcipula aborensis Brindle, 1966

Forcipula americana de Bormans, 1900

Forcipula banksi Borelli, 1915

Forcipula baoshana sp. nov.

Forcipula borellii Chopard, 1924

Forcipula caussaneli Waller, Jamet & Albouy, 1996

Forcipula clavata Liu, 1946

Note: *Forcipula obscura* Steinmann, 1980 was synonymized with the species in Srivastava (1986) but retained in Dermaptera Species File.

Forcipula congo Burr, 1900

Forcipula decolyi de Bormans, 1900

Forcipula despinosa Hebard, 1917

Forcipula elongata Srivastava, 1986

Forcipula gariazzi Borelli, 1900

Forcipula indica Brindle, 1966

Forcipula leonardii Steinmann, 1981

Forcipula lurida Bolivar, 1897

Forcipula quadrispinosa (Dohrn, 1863)

Note: *Forcipula simplex* Bey-Bienko, 1970 was synonymized with the species in Srivastava (1986) but retained in Dermaptera Species File.

Forcipula quelchi Burr, 1904

Forcipula tanganyikae Hincks, 1957

Forcipula tarsata (Westwood, 1857)

Forcipula trispinosa (Dohrn, 1863)

Note: *Forcipula afghana* Steinmann, 1980 was synonymized with the species in Srivastava (1986) but retained in Dermaptera Species File.

Forcipula tuberculata Srivastava, 1977

Forcipula vanheurni Boeseman, 1954

Forcipula walkeri (Kirby, 1896)

Forcipula yunnanea Bey-Bienko, 1970)

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