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● Description of *Chelidura dalijiashana* sp. nov. (Dermaptera: Forficulidae) from Gansu Province, China

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Abstract: A new species of the genus *Chelidura* Latreille, 1825 (Dermaptera: Forficulidae), *Chelidura dalijiashana* sp. nov., is described from Dalijia Mountain, Gansu Province, China. The new species is distinguished by its strongly undulating forceps, which subbasally has a prominent tubercle projecting forward on dorsal surface and another large ventrolateral tubercle directed posterolaterally. A comparison with other species within the genus is also provided.

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

● 中国甘肃省燕球螋属一新种记述——达力加燕球螋（革翅目：球螋科）

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摘要：本文描述了中国甘肃省达力加山的燕球螋属一新种：达力加燕球螋 *Chelidura dalijiashana* sp. nov.。该新种尾铗强烈弯曲，基部背面具向前伸的巨大齿突，腹侧面具向后侧伸的另一齿突。本文将新种与同属其他种进行了比较。

关键词：生物多样性，螋螋，形态学，新种，分类学

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● Introduction

The genus *Chelidura* Latreille, 1825, a relatively small group within the family Forficulidae, currently comprises 17 recognized species distributed throughout the Palearctic region (Chen 2024a, b; Hopkins *et al.* 2025). Members of *Chelidura* are typically brachypterous and are commonly found in high-altitude mountainous environments (Steinmann 1993; Chen & Ma 2004). Recently, Chen (2024b) described a new species of *Chelidura* from Gansu Province, China, clarified the type localities of previously known Chinese species, and provided an updated identification key for the genus in China.

In the present study, I describe and illustrate *Chelidura daliijashana* **sp. nov.**, based on male morphological characters. This newly discovered species represents the third documented *Chelidura* species from Gansu Province, following *C. redux* (Semenov, 1908) and *C. gansuensis* Chen, 2024. The strikingly modified forceps of this species readily differentiate it from all other congeners.

● Material and methods

The specimen examined in this study was 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. The holotype is deposited in the Insect Collection of Jiangsu University of Science and Technology (ICJUST), Jiangsu Province, China. Terminology follows Steinmann (1993).

● Taxonomy

Chelidura daliijashana **sp. nov.** 达力加燕球螋

(Figs 1–3)

<https://zoobank.org/DF824300-EC3A-4BFD-805E-231C30B92A72>

Type material. Holotype: ♂ (ICJUST): **CHINA:** Gansu Province, Xiahe County, Dalijia Mountain, 3200 m, 5.V.2025, local collector. **Paratype:** ♂ (ICJUST): with same data as holotype.

Etymology. The new species is named after its type locality in Dalijia Mountain.

Description of holotype. General appearance. General color uniformly black (Fig. 1A, B).

Size. Body length (from anterior of head to posterior of forceps) 21 mm. Forceps length (from visible lateral base to posterior end) 7.5 mm.

Head. Head large (Fig. 1A, B), slightly longer than wide, postfrontal suture indistinct, coronal sutures distinct; posterior margin faintly concave in middle. Eyes small, near half the length of head behind eyes. Antennae with 12 antennomeres preserved; antennomere 1 shorter than distance between antennal bases, narrowed basally, widened terminally; antennomere 2 slightly longer than wide; antennomere 3 much longer than antennomere 4, both subconical; antennomeres 5–12 near cylindrical.

Thorax. Pronotum transverse, subequal in width to head, with nearly parallel lateral margins and broadly rounded posterior margin, anterolateral angles slightly projected (Fig. 1A). Disc of pronotum weakly tumid medially, depressed laterally; median longitudinal furrow distinct. Tegmina rudimentary, visible part near as long as pronotum, with a medially overlapping section, hind margin obliquely truncate. Prosternum longer than wide, constricted medially, truncate posteriorly (Fig. 1B); mesosternum strongly transverse, ovate, nearly twice as wide as long, with broadly rounded posterior margin; metasternum transverse, with truncate posterior margin.

Abdomen. Abdomen widened in middle, widest at tergite 7; posterolateral glandular folds on tergites 3–4 distinct. Ultimate tergite strongly transverse, more than three times as wide as long, with a pair of conical tubercles laterally and another pair of smaller conical tubercles near forceps bases (Fig. 2A, B). Pygidium sloping, transverse,

very broad, subtriangular basally, apex with two bispinous conical tubercles on lateral angles (Fig. 2A, C). Penultimate sternite transverse, with broadly rounded posterior margin (Fig. 2C). Branches of forceps remote at base, strongly undulate horizontally and vertically (Fig. 2A–C); base of forceps distinctly enlarged and tumid, with a giant, subconical tubercle projecting forward on dorsal surface and a giant breast-like ventrolateral tubercle projecting posterolaterally.

Genitalia. Genitalia slender (Fig. 3A, B); central parameral plate narrowed basally, widened medially, with truncate anterior margin, ventral surface with two oblique thin sclerites near the middle; external parameres slender, with obtuse tips; virga within genital lobe slender, apex almost reaching half-length of external parameres; basal vesicle of virga strongly sclerotized, spiral.



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

Remarks. *Chelidura dalijiashana* sp. nov. is most similar to *C. gansuensis* in possessing strongly undulate forceps with large basal tubercles which are not observed in other members of the genus (Chen 2024b). Nevertheless, it can be reliably distinguished from *C. gansuensis* by the following characteristics: (1) in dorsal view, the basal one-third of the forceps branches are nearly parallel, whereas they are strongly divergent in *C. gansuensis*; (2) the dorsal tubercle of the forceps projects anteromedially, in contrast to the anterolateral projection in *C. gansuensis*; (3) the forceps of the new species bear only two tubercles, lacking the additional smaller ventral basal tubercle found in *C. gansuensis*; and (4) the male genitalia include two obliquely oriented thin sclerites, which are absent in *C. gansuensis* (Chen 2024b).

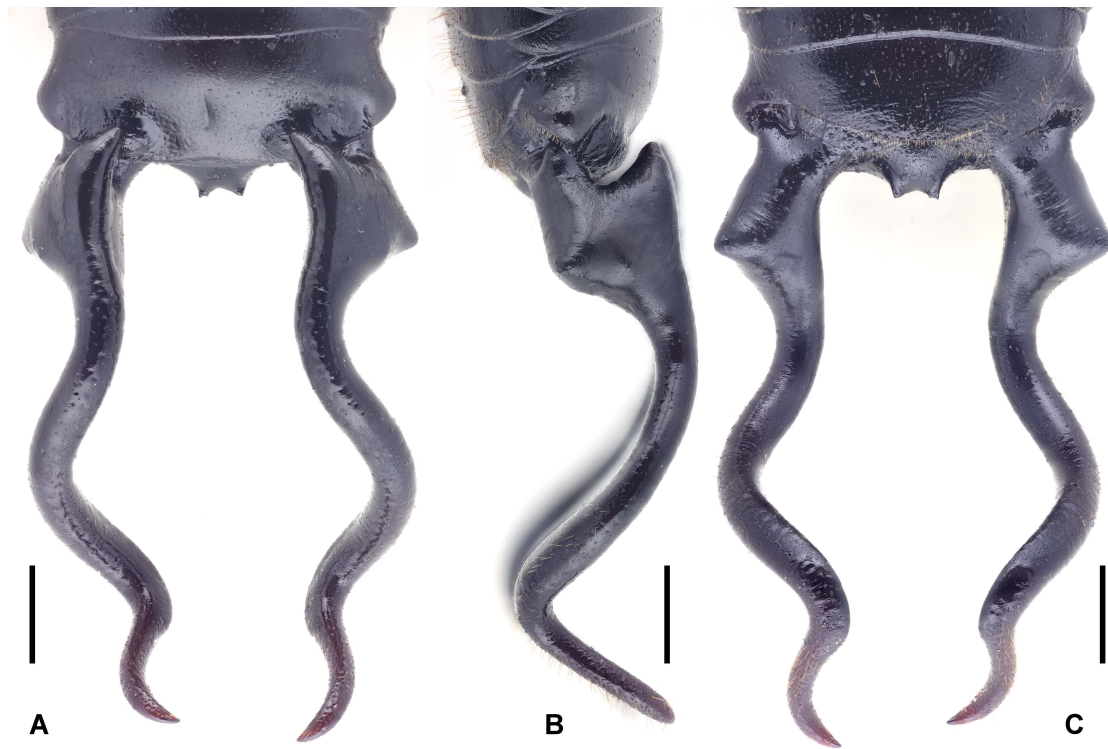


FIGURE 2. *Chelidura dalijiashana* sp. nov., male holotype: **A** terminalia, dorsal view **B** terminalia, lateral view **C** terminalia, ventral view. Scale bar = 1 mm.

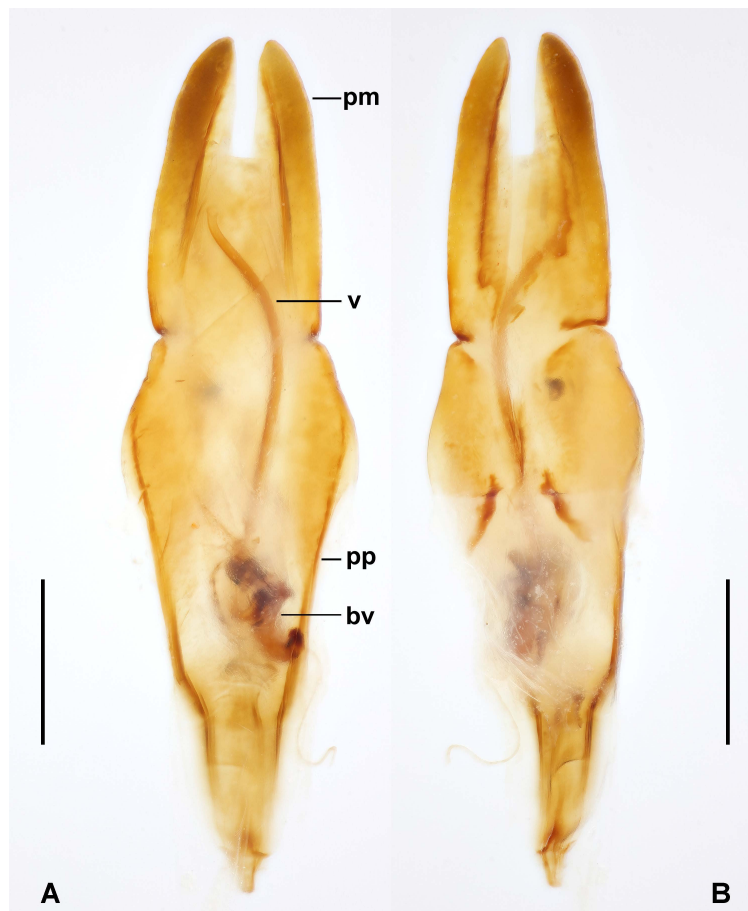


FIGURE 3. *Chelidura dalijiashana* sp. nov., male holotype: **A** genitalia, dorsal view **B** genitalia, ventral view. Abbreviations: bv, basal vesicle; pm, external paramere; pp, parameral plate; v, virga. Scale bar = 0.5 mm.

Interestingly, similarly undulate forceps are also present in *Chelidura semenovi* (Bey-Bienko, 1934), which is distributed across Sichuan and Xizang provinces, China. The recent discovery of several *Chelidura* species exhibiting such distinctive forceps morphology highlights the likely underexplored diversity of this genus in western China. Based on these shared morphological traits, I propose the establishment of a new species group within *Chelidura*, the *C. semenovi* group, comprising *C. daliyashana* sp. nov., *C. gansuensis*, and *C. semenovi*, all characterized by their conspicuously undulate forceps in both dorsal and lateral views.

Distribution. China (Gansu Province).

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● Additional information

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