

## **Article**



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# Oxytelus sishuishanus, a new species of Oxytelus Gravenhorst, 1802 (Coleoptera: Staphylinidae: Oxytelinae) from Sishui Mountain, China

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#### **Abstract**

A new species, *Oxytelus sishuishanus* Lü, is described from Hunan, China. This species closely resembles *O. ailaoshanicus* Lü & Zhou, 2012, but can be distinguished by the male clypeus, which is not so protruding as in *O. ailaoshanicus*, and by the symmetrically mirrored apical forking of the aedeagal parameres.

Key words: Staphylinidae, Oxytelinae, Oxytelus, China, new species

#### Introduction

Oxytelus Gravenhorst, 1802 is a genus of the rove beetle subfamily Oxytelinae, and its members are found all over the world. Before this study, a total of 216 living species have been documented (Lü 2024). The most recently described species is Oxytelus acriculiclypeatus Lü, 2024 (from Borneo). During Liang Lü's visit to Shanghai Normal University last year, he examined the insect collection and obtained specimens from the collecting expeditions in or around the Nanling National Forest Park (南岭国家森林公园). Within these specimens, we have discovered several specimens (collected from Sishui Mountain) pertaining to a species of Oxytelus that is previously unreported to science. Here, we present the description and images of the new species.

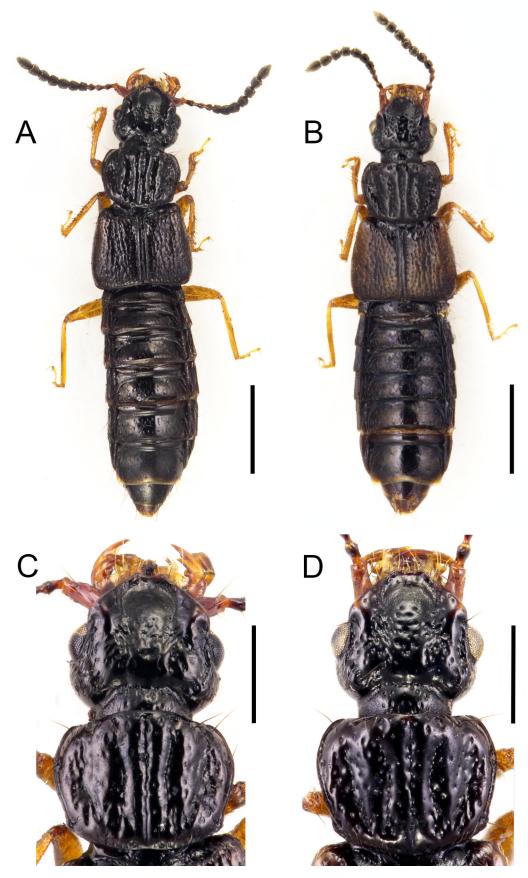
#### **Material and Methods**

The preparation for dissection of specimens followed the methods described by Lü & Zhou (2015). The observation, measurement, and photography were carried out using a Nikon SMZ18 stereomicroscope equipped with a Nikon DS-Ri2 camera and the tethering software NIS-Elements D version 5.2.3. Adobe Photoshop was employed for digital post-processing of the color photographs. All the types of the new species described here are deposited in the Insect Collection of Shanghai Normal University (SNUC), Shanghai, China.

#### **Taxonomy**

Oxytelus sishuishanus Lü, sp. nov. Chinese common name: 汜水山颈隐翅虫

(Figs 1–3)

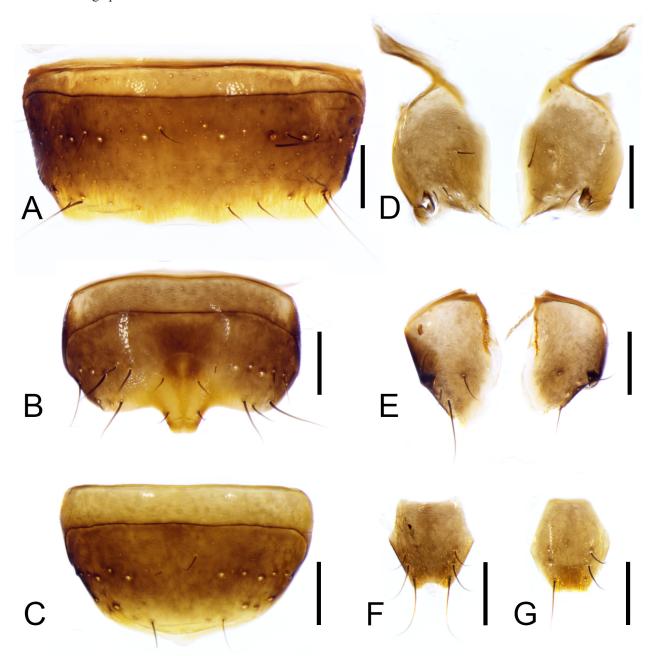


**FIGURE 1.** Habitus (A, B) and head and pronotum (C, D) of *O. sishuishanus*. **A, C.** Holotype  $\lozenge$ . **B, D.** Paratype  $\lozenge$ . Scale bars: A, B = 1 mm; C, D = 0.5 mm.

Type material. HOLOTYPE: CHINA: ♂, Hunan [湖南], Chenzhou City [郴州], Ruchen County [汝城县], Sishui Mt. [汜水山], 25°26′35″N, 113°56′5″E, 950–1520m, 11.v.2021, Hu & Lin (SNUC). PARATYPES: CHINA: 11 ♂♂, 15 ♀♀, the same data as holotype (SNUC).

**Description.** Body (Fig. 1A) medium-sized, black. Mandibles and legs tannish, and elytra blackish. Body length approximately 4.6 mm.

Head (Fig. 1C) sub-octagonal, widest at eyes. Disc covered with coarse and dense punctures. Clypeus subquadrangular, a little shorter than 1/3 head length, depressed along and behind anterior margin, surface glabrous and coriaceous, with little fine punctures in anterior part; anterior margin emarginate in middle and protruding a little beyond anterior margin of supra-antennal ridges. Epistomal suture with lateral portions incurved and running backward to level of anterior margin of eyes. Vertex densely punctate, slightly convex, posterior part well-limited from neck by occipital suture; two punctate paralateral sutures running anteriorly to middle level of head but very dull. Eyes with fine facets, slightly protruding laterally. Temples punctate and moderately dilated, bearing short and sparse yellowish hair. Occipital suture with middle portion present and punctate; nuchal ridge interrupted in middle, dorsal basal ridge present.



**FIGURE 2.** Tergites and sternites of *O. sishuishanus*. **A.** Sternite VII  $\Diamond$ , ventral. **B.** Sternite VIII  $\Diamond$ , ventral. **C.** Sternite VIII  $\Diamond$ , ventral. **D.** Tergite IX  $\Diamond$ , ventral. **E.** Tergite IX  $\Diamond$ , ventral. **G.** Tergite X  $\Diamond$ , dorsal. **G.** Tergite X  $\Diamond$ , dorsal. Scale bars = 0.2 mm.

Mandible (Fig. 1C) curved, with apex pointed; two denticles on inner edge. Antenna (Fig. 1A) of type I (see antennal types defined in Lü & Zhou (2012: 8)) as long as head and pronotum together, with apical antennomere shorter than two preceding together.

Pronotum (Fig. 1C&D) transverse, broadest at 1/3, broader than head. Disc 5-sulcate, median sulcus and two paramedial sulci deep and with punctures, two paralateral sulci shorter and oblique, each with punctate depression on lateral side. Lateral margins smooth, feebly crenulate at prominent posterolateral angles. Elytra punctate but not rugose, without lateral longitudinal ridge.

Abdomen coriaceous and pubescent, relatively narrow at base and broadening posteriorly, broadest at segment VI. Sternite VII (Fig. 2A) with two considerably obsolete denticles near middle of posterior margin. Sternite VIII (Fig. 2B) with two neighbored obsolete tubercles in middle but behind posterior margin, posterior margin protruding in middle into short tapering lobe, truncate at apex and with fine and curved transverse carina a little behind apical margin. Tergite IX (Fig. 2D) divided into two parts; each anterior margin with slender "ventral strut" (see Naomi 1989: 726, 728). Tergite X (Fig. 2F) hexagonal, slightly longer than wide, with three setae along each posterolateral side; posterior margin slightly emarginate and pubescent.

Aedeagus (Fig. 3A–F). Median lobe ovoid and elongated, with sclerite-like or membranous structures inside; apical orifice round; apico-medial hook curved, apical part weakly upcurved and sharply pointed, at middle with transverse ridge; dorsal membranous area covering more than half of dorsum of median lobe but not across whole length. Parameres arm-like, with short seta on apical 1/4, with apex forking into two tips, one truncate and curved slightly medially, the other one triangular and pointing medially.

Female. Head (Fig. 1D) slightly smaller than male; temples shorter than eyes, less dilated; occipital suture present in middle. Abdominal sternite VII with posterior margin straight. Sternite VIII (Fig. 2C) broadly rounded and slightly protruding in middle. Tergite IX (Fig. 2E) without "ventral strut" on anterior margin. Tergite X (Fig. 2G) hexagonal, posterior margin straight. Spermatheca (Fig. 3G) v-shaped, moderately sclerotized, almost rightly angulate at middle, basal portion slightly bulbous, apical portion narrower than basal portion, apex rounded.

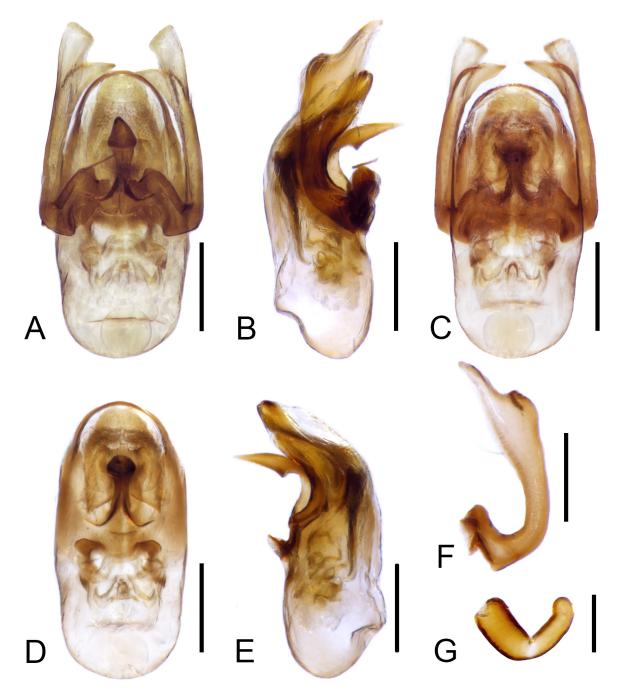
Distribution. China (Hunan).

**Etymology.** The specific epithet is from the name (Chinese Pinyin) of the type locality "Sishuishan" (= Sishui Mountain).

**TABLE 1.** Measurements (in millimeters, mean  $\pm$  standard deviation) of the types of *Oxytelus sishuishanus*.

|      |                   | (n = 5)           |  |
|------|-------------------|-------------------|--|
| BL   | $4.554 \pm 0.442$ | $4.562 \pm 0.289$ |  |
| FL   | $2.482 \pm 0.044$ | $2.485 \pm 0.047$ |  |
| HL   | $0.849 \pm 0.044$ | $0.842 \pm 0.043$ |  |
| HWE  | $0.791 \pm 0.026$ | $0.782 \pm 0.017$ |  |
| HWT  | $0.752 \pm 0.032$ | $0.723 \pm 0.012$ |  |
| EL   | $0.205 \pm 0.007$ | $0.199 \pm 0.010$ |  |
| TL   | $0.223 \pm 0.026$ | $0.209 \pm 0.005$ |  |
| SARD | $0.469 \pm 0.023$ | $0.476 \pm 0.029$ |  |
| NW   | $0.503 \pm 0.027$ | $0.485 \pm 0.012$ |  |
| PL   | $0.701 \pm 0.016$ | $0.721 \pm 0.023$ |  |
| PW   | $0.905 \pm 0.031$ | $0.914 \pm 0.018$ |  |
| ETL  | $0.951 \pm 0.019$ | $0.956 \pm 0.040$ |  |
| ELW  | $0.615 \pm 0.020$ | $0.606 \pm 0.013$ |  |
| ERW  | $0.574 \pm 0.023$ | $0.613 \pm 0.032$ |  |
| AW   | $1.086 \pm 0.029$ | $1.186 \pm 0.014$ |  |

Abbreviations: BL—body length; FL—forebody length; HL—head length; HWE—head width at eyes; HWT—head width at temples; EL—eye length; TL—temple length; SARD—Supra-antennal ridge vertex distance; NW—neck width; PL—pronotum length; PW—pronotum width; ETL—elytra length; ELW—left elytra width; ERW—right elytra width; AW—abdomen width.



**FIGURE 3.** Reproductive organs of *O. sishuishanus*. **A.** aedeagus, ventral. **B.** aedeagus, lateral. **C.** aedeagus, dorsal. **D.** median lobe of aedeagus, ventral. **E.** median lobe of aedeagus, lateral. **F.** right paramere of aedeagus, lateral. **G.** spermatheca. Scale bars: A-F=0.2 mm; G=0.1 mm.

**Remarks.** This species closely resembles *O. ailaoshanicus* Lü & Zhou, 2012, even on the sexual dimorphic traits on sternites VII–VIII. However, they can be distinguished by the male morphological features. The male clypeus of the new species is not so protruding as in *O. ailaoshanicus* (cf. Fig. 3A in Lü & Zhou 2012), and the apical forking of the aedeagal parameres is symmetrically mirrored in the new species but asymmetric in *O. ailaoshanicus* (cf. Fig. 3K, L in Lü & Zhou 2012).

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### 湖南汜水山颈隐翅虫属Oxytelus—新种(鞘翅目: 隐翅虫科: 颈隐翅虫亚科)

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**摘要:**描述湖南颈隐翅虫属*Oxytelus*—新种——汜水山颈隐翅虫*O. sishuishanus* **sp. nov.**;该种与哀牢山颈隐翅虫*O. ailaoshanicus* Lü & Zhou, 2012类似,但可通过雄性特征相区分,即新种雄性唇基前突不如哀牢山颈隐翅虫明显,且新种阳茎侧叶顶端分叉呈镜像对称。

关键词: 隐翅虫科; 颈隐翅虫亚科; 颈隐翅虫属; 中国; 新种