

A new species in the genus *Oxyporus* Fabricius (Coleoptera: Staphylinidae) from Guizhou, China

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Abstract: A new species in the genus *Oxyporus* Fabricius, *Oxyporus zhengkuni* sp. nov., from Jiangkou County, Guizhou, China, is described and illustrated. It can be easily recognized by its unique body coloration, which is predominantly reddish-yellow with an inverted equilateral black triangle macula on the frontal middle edge of the pronotum. It is also the first record of the genus *Oxyporus* in Guizhou.

Key words: Staphylinoidea; Oxyporinae; taxonomy

中国贵州巨须隐翅虫属一新种（鞘翅目：隐翅虫科）

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摘要：记述来自中国贵州江口的隐翅虫属 1 新种：政坤巨须隐翅虫 *Oxyporus zhengkuni* sp. nov.。此新种体色特殊，通体红黄色，只有前胸背板的前缘正中有 1 倒三角形黑斑。这是巨须隐翅虫属首次在贵州报道。

关键词：隐翅虫总科；巨须隐翅虫亚科；分类

Introduction

The genus *Oxyporus* Fabricius, 1775 is distributed in the Palearctic, Oriental, Nearctic, and Neotropical Realms (Herman 2001). It is comprised of 136 species, including seven extinct species (Herman 2001; Senda 2021, 2024). This genus exhibits significant species diversity in East Asia and the Oriental Region with numerous species reported from southwestern China, particularly in Sichuan and Yunnan (Zheng & Li 2010; Zheng & Yang 2011; Zheng *et al.* 2013; Li 2020; Yan & Zheng 2022, 2023). Before this study, no species in this genus had been documented in Guizhou Province which is situated in southern China adjacent to Sichuan and Yunnan.

The female genitalia can be used as a diagnostic character for species identification within this genus. 13 species of this genus, including 11 species from Japan, 1 species from China, and 1 species from the Malay Peninsula have been described (Senda 2021, 2023, 2024). This article describes a new species, *Oxyporus zhengkuni* sp. nov., based on a female specimen and represents a new distributional record for the genus *Oxyporus* in Guizhou. The type specimen

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is deposited in the College of Life Science, China West Normal University, Nanchong, Sichuan, China (CWNU).

Material and methods

This study is based on a female specimen soaked in 95% ethanol. For detailed examination, the specimen was first softened in warm water for several hours and then dissected. Subsequently, the female terminal segments were soaked in 5% KOH solution at room temperature for seven hours to facilitate tissue maceration. The habitus image was taken using a Leica DFC425 camera in conjunction with a Leica M205C stereomicroscope. Images of the morphological details were made using a Canon 6D Mark II camera with a Mitutoyo M Plan APO 10x lens combined. Multiple pictures were stacked using Helicon Focus 7.6.1. All images were modified and grouped in Adobe Photoshop 2021.

The following abbreviations are used in descriptions: AL — antennal length; AW — abdominal maximum width; BL — body length, apex of the clypeus to apex of abdomen; EL — elytra maximum length; ESL — elytral suture maximum length; EW — elytra maximum width; EYL — eye maximum length; FBL — forebody length (sum of HL+PL+EL); HL — head length, apex of clypeus to posterior margin of head capsule; HW — head maximum width; PL — pronotal maximum length; PW — pronotal maximum width; TL — temple maximum length. All measurements are in millimeters (mm).

Taxonomy

Oxyporus zhengkuni sp. nov. (Fig. 1)

Measurement. Female. BL: 11.4 mm, FBL: 6.7 mm, ML: 1.9 mm, HL: 2.1 mm, HW: 2.7 mm, TL: 1.2 mm, AL: 1.75 mm, PL: 2.0 mm, PW: 2.1 mm, ELL: 2.9 mm, ELW: 3.5 mm, EYL: 0.8 mm, AW: 3.0 mm, ESL: 2.1 mm.

Description. Body moderately stout, surface almost smooth, reddish-yellow and shining. Head, antennae, labrum, maxillary and labial palpi reddish-yellow; mandibles brownish-yellow; eyes black. Pronotum reddish-yellow with an inverted equilateral black triangle macula on the frontal middle edge, and scutellum reddish-yellow. Elytra brownish-yellow, each with a subtriangular black marking at outer apical angle extending from posterior one third of lateral margin to apex of suture and meeting with each other. Prosternum, meso-metasternum, legs and abdomen reddish-yellow (Fig. 1A).

Head subquadrate, wider than long (ratio 1.28), broader (ratio 1.28) and longer (ratio 1.05) than pronotum, gently arcuate behind eyes, posterior angles obtuse; eyes slightly large and convex; temples distinctly longer than eyes in dorsal view (ratio 1.50). Antennae slightly shorter than head (ratio 0.83); antennomeres 1–4 elongate; antennomeres 5–10 progressively transverse, weakly asymmetrical and flattened; antennomere 11 bullet-shaped, narrower than preceding segment, all antennomeres with long setae near apices; antennomeres 6–10 glabrous dorsomedially and covered with fine setae laterally. Labrum broadly and deeply emarginate at anterior margin; mandibles shorter than head (ratio 0.91), moderately broad, inner edges evenly

curved to acute apices; maxillary palpi with first segment shortest, second longer than third, third slightly wider than last and almost equal in length; apical segment of labial palpi wider than length of eye (ratio 1.19). Clypeus with anterior margin broadly, shallowly emarginate medially; frons broadly, shallowly impressed between antennal insertions; vertex nearly smooth.

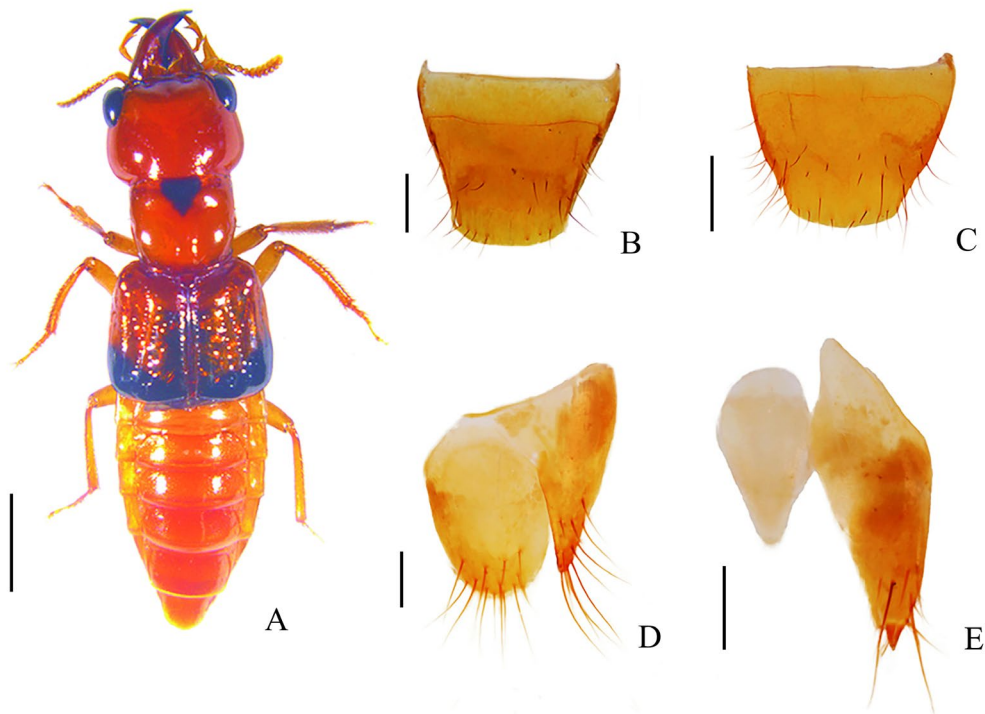


Figure 1. *Oxyporus zhengkuni* sp. nov., ♀. A. Habitus, dorsal view; B. Tergite 8; C. Sternite 8; D. Terga 9 (right half) and 10; E. Gonocoxites (right half). Scale bars = 2.0 mm (A); 0.2 mm (B–E).

Pronotum subquadrate, slightly wider than long (ratio 1.05), markedly shorter (ratio 0.68) and narrower (ratio 0.60) than elytra; disc almost smooth, with a slightly wide and distinct middle transverse sulcus and slightly distinct basal longitudinal sulci; lateral margins slightly sinuate in the middle and narrowed posteriad, widest at about posterior third; anterior margin weakly emarginated at the middle; posterior margin arcuate; four setiferous punctures bearing at anterior margin, two at posterior margin and three at each lateral margin.

Scutellum impunctate, surface almost smooth, rounded at apex.

Elytra wider than long (ratio 1.18), slightly widened apicad; each elytron with a row of regular small punctures along suture, two longitudinal rows of coarse irregular punctures in middle, a few scattered coarse punctures on medial and lateral sides of rows; apical, lateral, and posterior margins bearing a few short setae. Hind wings well-developed.

Abdomen with tergites 3 and 4 each with a pair of pruinose spots in middle; punctation of tergites very sparse and vague, surface between punctures with exceedingly fine and dense microsculpture of transverse striae; tergite 8 reddish-yellow, furnished with about 23 macrosetae, slightly arcuate at the caudal margin (Fig. 1B); sternite 8 reddish-yellow, furnished

with about 38 macrosetae, slightly arcuate at the caudal margin (Fig. 1C); tergite 9 setigerous in the apical 1/3, rounded in the apex; tergite 10 slightly longer than wide, with about 14 macrosetae in the apicomedial area densely fringed with tiny setae along the arcuate caudal margin (Fig. 1D). Gonocoxites as shown in Fig. 1E; proximal gonocoxite almost as long as distal gonocoxite; distal gonocoxite subtriangular, with a few setae on the outer margin; styli subconical, with several setae on near apices; medial gonocoxite semitransparent and subpentagon, projected at the basal margin.

Male. Unknown.

Holotype. ♀, **China**, Guizhou, Jiangkou County, Fanjingshan Natural Reserve, 27°54'N, 108°41'E, 2,160 m, 10- VIII -2023, Zhengkun HU.

Habitat and distribution. This species was found in fungi. It is at present only known from the type locality in Guizhou, China.

Etymology. The specific epithet is in honor of Mr. Zhengkun HU (Administrative Bureau of Fanjingshan National Nature Reserve) who is the collector and a beetle enthusiast.

Remarks. *Oxyporus zhengkuni* **sp. nov.** is a highly distinctive member of the genus *Oxyporus* found in China. It can be easily distinguished from other species by its unique body coloration. The whole body is predominantly reddish-yellow with only an inverted equilateral black triangle macula on the frontal-middle edge of pronotum. This new species looks a little similar to *O. bingshengae* Li *et al.* from Yunnan Province, China (Li *et al.* 2015), but can be recognized by the following characters: head without any black marking (head bearing a large black marking in *O. bingshengae*); abdomen without any black marking (abdominal tergites 6–8 black in *O. bingshengae*); and pronotum lateral margins slightly sinuate in the middle (pronotum-lateral margins strongly bisinuate at anterior 1/3 and middle in *O. bingshengae*).

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