

## A new species of the genus *Indoquedius* (Coleoptera: Staphylinidae: Staphylininae) from Sichuan, China

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**Abstract:** A new species, *Indoquedius qiuae* sp. nov. in the genus *Indoquedius* Blackwelder, is described and illustrated from Sichuan, China. The species is similar to *I. nonparallelus* Zhao & Zhou from Yunnan Province, but differs in the aedeagus more narrowed at apical part of median lobe, paramere constricted drastically at the bottom, being more narrow and straight throughout whole length, sensory peg setae on underside less numerous, and deeper middle emargination of male sternite 9. It was found in Heizhugou Forest Park in Sichuan, China.

**Key words:** Staphylinoidea; taxonomy; key

中国四川印度颊脊隐翅虫属一新种（鞘翅目：隐翅虫科：隐翅虫亚科）

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**摘要：**记述采自中国四川的印度颊脊隐翅虫属 *Indoquedius* Blackwelder 1 新种：*Indoquedius qiuae* sp. nov.。该新种与云南的 *I. nonparallelus* Zhao & Zhou 很相似，但其雄性外生殖器中叶端部更窄缩，侧叶在基部急剧收缩，侧叶整体很细长，感觉钉刚毛数量较少（12–14 个），第 9 腹板端凹缘更深，与后者不同。

**关键词：**隐翅甲总科；分类；检索表

### Introduction

*Indoquedius* was established by Blackwelder in 1952. Twenty-two species (Herman 2001; Smetana 2004; Zheng & Wang 2007; Zhao & Zhou 2010) were known in the world before this study. Eleven species have been reported from China: *I. formosae* Cameron, *I. bing* Smetana, *I. shibatai* Smetana, *I. chuen* Smetana, *I. praeditus* Sharp, *I. liuae* Zheng & Wang, *I. baliyo* Smetana, *I. aculeus* Zhao & Zhou, *I. bicornutus* Zhao & Zhou, *I. nonparallelus* Zhao & Zhou, *I. radius* Zhao & Zhou (Cameron 1949; Smetana 1995, 2001; Zheng & Wang 2007; Zhao & Zhou 2010). Five of these species were reported from Sichuan: *I. liuae* Zheng, *I. aculeus* Zhao, *I. bicornutus* Zhao, *I. formosae* (Cameron), *I. baliyo* Smetana (Zheng & Wang 2007; Zhao & Zhou 2010).

In this paper, the characteristics of the genus *Indoquedius* are detailed and a new species is described: *Indoquedius qiuae* sp. nov. Type specimens are deposited in the Life Science College, China West Normal University, Nanchong, Sichuan, China.

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## Taxonomy

### Key to the Chinese species of *Indoquedius*

1. Antenna at least partially brownish black to black ..... 2
- Antenna not brownish black to black ..... 6
2. Antenna mostly brown ..... 3
- Antenna black at the base, reddish testaceous at apical portion ..... 5
3. Antenna mostly brownish black to black, II–III reddish brown ..... *I. bing* Smetana
- Antenna mostly or partially pale brown ..... 4
4. Aedeagus with paramere from base to apex first narrowed and split into two branches .....  
..... *I. aculeus* Zhao & Zhou
- Aedeagus with paramere from base to apex gradually narrowed and forming rod-shaped apical portion .....  
..... *I. radius* Zhao & Zhou
5. Leg with tarsus reddish testaceous ..... *I. praeditus* (Sharp)
- Leg with tarsus brownish black ..... *I. baliyo* Smetana
6. Antenna entirely or partially reddish testaceous ..... 7
- Antenna nearly entirely yellowish-brown ..... 11
7. Antenna I–III dark reddish brown, IV–V pale brown ..... *I. nonparallelus* Zhao & Zhou
- Antenna entirely reddish testaceous ..... 8
8. Large lateral puncture of pronotum situated quite close to lateral pronotal groove, distinctly touching it ..... 9
- Large lateral puncture of pronotum situated close to lateral pronotal groove, but distinctly not touching it .....  
..... 10
9. Tergite 10 of female genital segment emarginate apically ..... *I. formosae* (Cameron)
- Tergite 10 of female genital segment not emarginate apically ..... *I. liuae* Zheng
10. Aedeagus with paramere distinctly reaching apex of median lobe, sensory peg setae of underside of paramere less numerous ..... *I. chuen* Smetana
- Aedeagus with paramere not reaching apex of median lobe, sensory peg setae of underside of paramere more numerous ..... *I. shibatai* Smetana
11. Aedeagus with apex of paramere not protruding beyond that of median lobe .....  
..... *I. bicornutus* Zhao & Zhou
- Aedeagus with apex of paramere much protruding beyond that of median lobe ..... *I. qiuae* sp. nov.

### *Indoquedius qiuae* sp. nov. (Figs. 1–7)

Male. Body length 8.2–9.0 mm. Body black, antennae, maxillary and labial palpi yellowish-brown, legs dark brown.

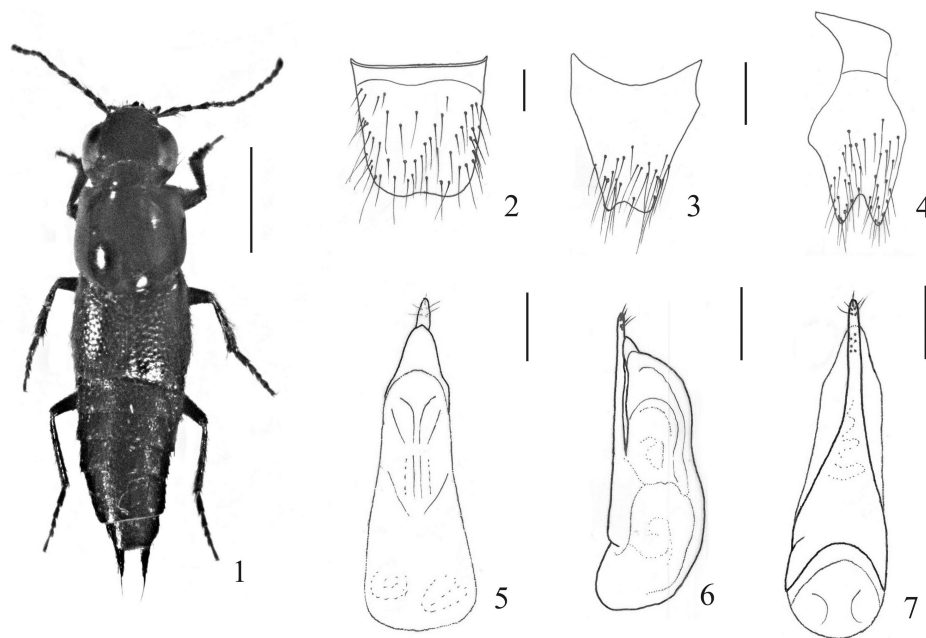
Head wider than long (ratio 1.36), widest at about middle, eyes large and slightly convex, in dorsal view longer than tempora (ratio 3.00), the inner margin of the eyes with two to three setiferous punctures and a few small ones on the temple, a curved emargination in posterior of the head. Antenna slightly slender, almost reaching posterior margin of pronotum when reclined, all segments longer than wide, segments 4–10 gradually decreasing in length, last segment asymmetrically acuminate.

Pronotum wider than long feebly (ratio 1.09), anterior angles angulate, posterior rounded, lateral margin nearly parallel, dorsal rows each with two fine punctures, sublateral rows without any punctures. Scutellum small, punctuated, lacking any setae. Elytra feebly wider (ratio 1.03) and longer (ratio 1.06) than pronotum, slightly wider than long (ratio 1.06), punctures fine, dense and pubescence sparse, moderately coarse, surface between punctures

lacking microsculpture.

Each abdominal tergite evenly covered with dense setiferous punctures similar to elytra, surface between punctures with indistinct microsculpture of transverse striae, spiracles also just behind basal ridge.

Sternite 8 shallowly emarginate in middle of posterior margin with two large setae on each side, the small subtriangular area around emargination impunctate; sternite 9 with basal portion very small and narrowed posteriorad slightly, numerous setae on each side, apical margin with a deep middle emargination forming two lateral parts; tergite 9 with basal side broadly concaved, apical margin with middle emargination.



Figures 1–7. *Indoquedius qiuae* sp. nov. 1. Male; 2. Sternite 8; 3. Tergite 9; 4. Sternite 9; 5. Aedeagus, dorsal view; 6. Aedeagus, lateral view; 7. Aedeagus, ventral view. Scale bars = 2 mm (Fig. 1); 0.5 mm (Figs. 2–7).

Aedeagus in lateral view with apex of paramere protruding beyond that of median lobe, paramere straight and slender throughout whole length, apical portion of median lobe bent towards paramere. Aedeagus in ventral view with paramere constricted drastically at the bottom and remaining slender, paramere narrower than median lobe throughout whole length, apical portion of paramere with two apical setae, two subapical setae on each side, underside covered with about 12–14 sensory peg setae, forming an irregular longitudinal group from apex to far below the insertions of subapical setae.

Female. Unknown.

**Holotype.** ♂, **China**, Sichuan, Heizhugou Forest Park, Ebian County, 29°N, 103°E; alt. 2000 m, 25-VIII-2006, collected by Guanghui QIU. **Paratype.** 1♂, same data as holotype.

**Habitat and distribution.** This species was found in a haystack. It is known only from Heizhugou Forest Park, Ebian County, Sichuan, China.

**Remarks.** This species is similar to *I. nonparallellus* Zhao & Zhou from Yunnan Province,

but can be recognized by aedeagus more narrowed at apical part of median lobe, paramere constricted drastically at the bottom, narrowed and straight throughout whole length, sensory peg setae on underside less numerous, deeper middle emargination of male sternite 9.

Etymology. The specific epithet is a patronymic in honor of the collector of the holotype, Guanghui QIU.

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