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A new genus and species of tiger beetle, *Pseudocollyris shooki*
(Coleoptera: Cicindelidae), from Yunnan, China

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A new genus and species of tiger beetle, *Pseudocollyris shooki* (Coleoptera: Cicindelidae), from Yunnan, China

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Abstract. A new genus, *Pseudocollyris* Bi and Wiesner, is established for the new species *Pseudocollyris shooki* Bi and Wiesner (Coleoptera: Cicindelidae), from Western Yunnan, China. A description, diagnostic features and illustrations of habitus are provided.

Key words. Taxonomy, Cicindelini, Prothymina, diagnosis, new species, Oriental region.

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Introduction

In 2017, the first author collected one remarkable tiger beetle during a survey in Western Yunnan, China. The beetle shows an elongated body, a metallic purple elytral surface with a pair of bright median spots and coarse punctuation. Such appearance superficially resembles species of the tribe Collyridini (e.g. *Collyris* Fabricius, 1801 or *Neocollyris* Horn, 1901). However, detailed investigations of the beetle indicate it belongs to a new genus of the tribe Cicindelini (subtribe Prothymina) close to *Pronyssya* Bates, 1874 and is described herein.

Materials and Methods

All measurements (in mm) were made using a stereomicroscope as follows: the total body length (from the front of the clypeus to the apex of elytra), length of the labrum without apical teeth (along the midline), width of the labrum (in the widest place), length of the pronotum (along the midline), width of the pronotum (in the widest place), length of the metepisternum (along the top edge), width of the metepisternum (along the anterior edge), length of the elytra (from the base of scutellum to the apex along the suture), width of the elytra (in the widest place).

The photographs of habitus and anatomical details were taken using a Canon EOS 60D camera in conjunction with a Canon MP-E 65mm f/2.8 1–5× macro lens. Canon MT-24EX Macro Twin Lite Flash was used as light source. CombineZM was used for image stacking. All photos were processed using Adobe Photoshop CS3.

The specimen mentioned here is deposited in: SNUC - Shanghai Normal University, Shanghai.

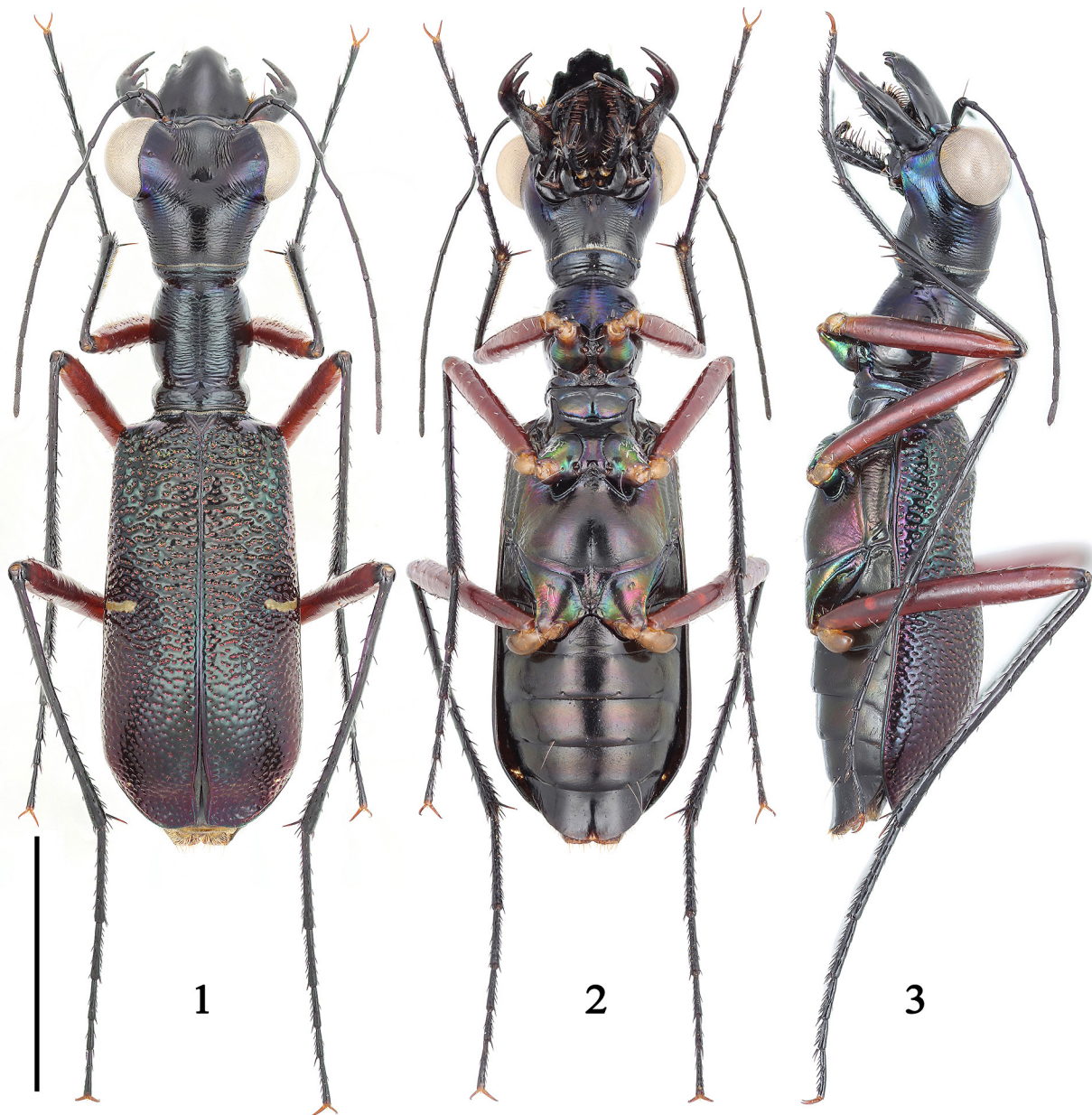
Results

Genus *Pseudocollyris* Bi and Wiesner, new genus

Type species. *Pseudocollyris shooki* Bi and Wiesner, new species

Description. Size large, elongated. Head large, wider than long, same width as elytra. Labrum slightly longer than wide, with three apical and two lateral teeth. Mandible with three inner teeth. Maxillary palpi with third segment shorter than fourth. Antennae short, slender, slightly extending posteriorly beyond the elytral base;

first four antennomeres and basal one-third of antennomere five glabrous, rest pubescent; scape with a single apical bristle. Clypeus glabrous. Frons finely rugose. Eyes large, prominent. Orbital plates with two orbital setae on each side. Vertex with two small frontal impressions and one central transverse impression, laterally densely and deeply rugose. Occiput elongated, as long as ocular diameter, densely and shallowly rugose. Pronotum glabrous, elongated, more than 1.4 times as long as width, anterior and posterior collum of equal width, with strong constrictions and transverse furrows; median lobe oval-shaped; dorsally shallowly transversely rugose, median line distinct. Scutellum triangular and obvious. Flight wings present. Elytra elongated, slightly enlarged distally, more than twice as long as width, about 1.4 times as long as the head and pronotum together; distinctly punctate throughout, partially connected to form short transverse rows; basodiscal convexity with impressions on lateral and apical margins, apices round with angular sutural corner and elongated impression; ground color dark brown



Figures 1–3. Habitus of *Pseudocollyris shooki* n. sp., holotype, female, scale = 5 mm. 1) Dorsal view. 2) Ventral view. 3) Lateral view.

with purple to bluish-green reflections. Maculation bright, comprised of a narrow transverse central band near lateral margin and an obscure apical spot. Mesoepisternum short. Metaepisterna twice as long as wide, shallowly grooved. Epipleura distinct. Ventral body largely glabrous. Legs moderately long, front trochanter with subapical seta, coxae of front and mid legs sparsely pubescent anteriorly, tarsal segments slender.

Diagnosis. This new genus is characterized by the elongated body, large head with elongated occiput, short antennae, elongated pronotum with oval-shaped median lobe, and the metallic purple coloration and coarse punctuation of elytra with bright central maculae and the short mesoepisternum. Due to its short proepisternum, the not dilated tarsal segments and the ventral glabrouisity the genus is placed close to *Dilatotarsa* Dokhtoureff, 1882, *Heptodonta* Hope, 1838 and *Pronyssa* Bates, 1874, within the subtribe Prothymina Horn, 1906. It can be distinguished from the abovementioned genera by the median lobe of pronotum which is elongated oval-shaped, while cylindrical in *Dilatotarsa*, inverted trapezoidal in *Heptodonta* and spherical in *Pronyssa*. *Pseudocollyris* can be further separated from *Dilatotarsa* and *Heptodonta* by the bright maculation of the elytra and the narrower anterior collum of the pronotum, from *Pronyssa* by the shorter antennae and the reduced apical spot of elytron.

Etymology. From the combination of Greek ‘*pseudés*’, meaning resembling, and ‘*Collyris*’, a generic name of tiger beetles, gender feminine.

Pseudocollyris shooki Bi and Wiesner, new species

Fig. 1–5

Type depository. Holotype female in the Insect Collection of Shanghai Normal University, Shanghai, China (SNUC).

Type status. Holotype female, type labels: China, Yunnan, Yingjiang, Nabang, 950 m, 2017.VII.1, leg. Wen-Xuan Bi. Male unknown.

Description. *Size:* Total length 13.76 mm (without labrum), width 3.93 mm. *Head:* Width 3.77 mm, 1.3 times wider than long; shining black. Mandibles black with reddish-brown inner teeth. Labrum longer than wide (1.92 × 1.88 mm) with four lateral setae; uniformly black. Labial and maxillary palpi black, distal joints apically yellowish. Antennae black, scape with dark purple reflections, first four antennomeres and basal one-third of



Figures 4–5. *Pseudocollyris shooki* n. sp., holotype, female, scale = 0.5 mm. 4) Head in front view. 5) Pronotum in dorsal view.

antennomere five glabrous and shiny, rest finely and evenly pubescent. Clypeus bluish-green. Frons with antennal insertions and orbital plates bluish-violet. Genae with bluish reflections ventrally. *Thorax*: Pronotum distinctly longer than wide (2.95×2.02 mm); shining black with bluish reflections; ventrally bluish-green, shallowly transversely rugose. Elytra length 8.08 mm, as wide as head with eyes and dark brown with purple to bluish-green reflections; densely and deeply punctate except for the smooth basal edges, becoming shallower distally, basal two-thirds partially connected to form short transverse rows, each puncture annulated with fuchsia except for basal ones yellowish-green. Maculation bright, comprised of a narrow transverse central band near lateral margin, about one-sixth of elytral width, white in fresh specimen, becoming yellowish when dried and a small, distinctive apical spot of same color. *Abdomen*: Ventral side dark brown with coppery purple reflections. Ventriles glabrous, second to fourth ventrite dark brown with coppery purple reflections, last ventrite brownish. Legs moderately long; coxae mostly iridescent; trochanters yellowish; femora reddish-brown, apically darkened; tibiae and tarsi blackish except light brown claws.

Distribution. Western Yunnan, China.

Etymology. Cordially dedicated to our friend Gary Shook for our friendship and his contribution to the cicindelid fauna of China.

Remarks. The only specimen of this species was captured by beating on broad-leaved shrubs in a shady subtropical rainforest in Western Yunnan, China. Because the appearance of this species is so similar to some Collyridini species, especially genus *Neocollyris*, which can also be found in the same habitat, it may be part of a mimicry complex.

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