

A new species of the genus *Cerylambus* from southern China (Coleoptera: Staphylinidae: Pselaphinae)

Peter HLAVÁČ¹⁾, Pavel KRÁSENSKÝ²⁾ & Oto NAKLÁDAL¹⁾

¹⁾Czech University of Life Sciences, Faculty of Forestry and Wood Sciences, Department of Forest Protection and Game Management, Kamýcká 1176, CZ-165 21 Praha 6-Suchdol, Czech Republic;
e-mail: peterclaviger@gmail.com; corresponding author

²⁾Zahradní 5194, 43004 Chomutov, Czech Republic; e-mail: krasensky.pavel@volny.cz

Abstract. *Cerylambus fikaceki* sp. nov. from Hainan Island, southern China, a new species of the clavigerite ant-loving beetle, is described and illustrated.

Key words. Coleoptera, Staphylinidae, Pselaphinae, Clavigeritae, Clavigerini, *Cerylambus*, new species, southern China

Introduction

The genus *Cerylambus* Newton & Chandler, 1989 was erected under the name *Amblycerus* by RAFFRAY (1895) (preoccupied, nec. THUNBERG 1815) for his single new species *Amblycerus reticulatus* Raffray, 1895 from Penang, Malaysia. The genus was a subject of a modern revision (NOMURA et al. 2008) where two additional species, *Cerylambus thailandicus* Nomura, Sakchoowong & Idris, 2008 from Thailand and *Cerylambus maruyamai* Nomura, Sakchoowong & Idris, 2008 from Pahang, Malaysia were described. The genus is readily recognized within the subtribe Clavigerodina, tribe Clavigerini by the coarsely punctate head and pronotum, and 3-segmented clavate antennae, with the truncate apex of terminal antennomere bearing long dense setae.

The aim of this paper is the description of a new species, *Cerylambus fikaceki* sp. nov. collected by our colleague Martin Fikáček during his expedition to Hainan Island and to update the diagnosis of the genus.

Material and methods

Specimens prepared for morphological study were examined with a Leica S8APO stereoscopic microscope with diffuse lighting at magnifications up to 128×. Habitus images were taken with a Canon EOS 5D Mark II in combination with a Canon MP-E65 1–5× macro lens. The resulting images were focus stacked by Zerene Stacker and postprocessed in Adobe Photoshop CC 2015.

The aedeagus was studied using a Zeiss transmitted-light microscope at magnifications up to 500×. The aedeagus was dissected and preserved in Euparal on a plastic label pinned together with the specimen. All drawings were made using a drawing tube attached to Zeiss.

The head length was measured from the occipital constriction to the anterior margin of the frontal rostrum; head width was measured across the eyes; the elytral length was measured along the suture, the width means maximum width across the pronotum, elytra, or other structure. The body length is a combined length of the head, pronotum, elytra, and abdomen. The lengths of the basal and apical parts of the median lobe were measured in dorsal view.

The terminology applied here follows CHANDLER (2001), except we use ‘ventrite’ instead of ‘sternite’ when discussing ventral thoracic structures.

Label data are cited verbatim. All labels of the studied material are printed; a slash (/) separates different labels. All type specimens were provided with the following red printed label: HOLOTYPE or PARATYPE, *Cerylambus fikaceki* sp. n., P. Hlaváč det., 2016.

The examined material is deposited in the collection of National Museum, Prague, Czech Republic (NMPC) and in the privat collection of Peter Hlaváč, Prague, Czech Republic (PHPC).

Results

Cerylambus fikaceki sp. nov.

(Figs 1–3)

Type locality. China, Hainan Island, Bawangling National Forest Park, 12.3 km SEE of Baotie, 19°5.20'N 109°11.8'E, 1050 m a.s.l.

Type material. HOLOTYPE: 1 m*, ‘China: Hainan isl. [MF23], Bawangling Nat. Forest Park, 12.3 km SEE of Baotie, 19°5.20'N 109°11.8'E, 1050m, 8.v.2011, Fikáček / sifting: moist accumulations of leaf litter along a stream in a primary forest’ (NMPC). PARATYPE: 1 ♀*, the same data as holotype (PCPH).

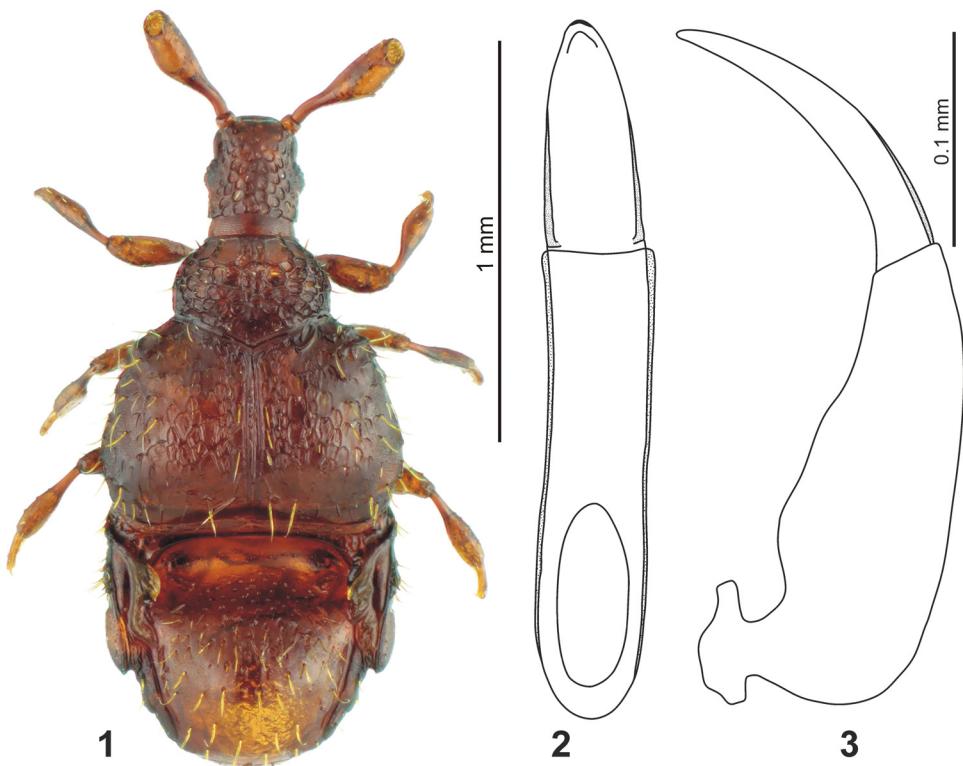
Description. Body (Fig. 1) reddish-brown, head, pronotum and elytra with coarse, mesh-like sculpture, composite tergite smooth, shiny, head, pronotum and elytra with short sparse setae. Length 1.60–1.65 mm, maximum width 0.71–0.77 mm.

Head widest accross eyes, temples parallel-sided behind eyes to posterior margins of head capsule, head capsule short, separated from short neck region by well-defined occipital constriction, rostrum obtuse, straight, temples parallel-sided, slightly longer than diameter of eyes, shorter than rostrum, frontal and vertexal foveae absent. Clypeus not visible dorsally. Venter of head with coarse microsculpture, lacking setae.

Antennae long, with three antennomeres, scape and pedicel small, pedicel slightly larger, scape invisible dorsally, antennomere III long, clavate in apical half, about six times as long as pedicel, truncate at apex with few short setae.

Pronotum transverse, 1.38–1.74 times as wide as long, 1.10–1.20 times as long as head, anterior lateral margins strongly convergent, posterior ones parallel, lateral margins with few stout setae, with strong median triangular projection on basal margin, lacking foveae or sulci.

Venter: Prosternum about half length of pronotum, with coarse sculpture, procoxae closely separated. Mesoventrite with rough sculpture, about half as long as metaventrite, fused together, anterior mesoventral process wide, mesocoxae widely separated by short wide isthmus.



Figs 1–3. *Cerylambus fikaceki* sp. nov. 1 – habitus. Scale bar: 1.0 mm; 2 – aedeagus, dorsal view. Scale bar: 0.1 mm; 3 – aedeagus, lateral view. Scale bar: 0.1 mm.

Metaventrite on anterior metaventral process and sides with shallow large punctures, disc smooth, lacking punctures, about 1.3 times as wide as long, anterior metaventral process truncate, metacoxae widely separated by wide, short, slightly convex posterior metaventral process. First visible sternite (III) smooth, a little more than one-third length of second (IV), with well defined lateral carinae, second (IV) with carinae directed towards lateral margin of sternite, visible sternites three (V) to five (VII) short with large punctures on basal margin, with few stout setae.

Elytra about 1.60–1.70 times as wide as long and 1.90–2.00 times as wide as pronotum, lacking basal foveae, striae or carinae, humeri well-defined, lateral third with bunch of stout setae, posterior corners rounded, lacking trichomes.

Abdomen slightly wider than long, about 1.5 times as long as elytra; composite tergite smooth, with large basal depression which is unpunctured, basal half of remaining part of composite tergite with dense punctures, posterior half smooth, with sparse stout setae, lacking trichomes; abdominal paratergites each with one large, posterolaterally projected lateral apophysis in basal part, first visible paratergite with well-developed trichomes.

Legs short and stout, clavate at apical half, lacking male sexual characters.

Aedeagus (Figs 2–3) long, symmetrical in dorsal view, basal part 2.2 times as long as apical lobe, ventrolateral foramen strongly projecting, phallobase diaphragm elliptical, about 2.5 times as long as basal part of median lobe.

Sexual dimorphism. Not apparent.

Differential diagnosis. The new species belongs to the group of species with abdominal paratergites each with a large, posterolaterally projected lateral apophysis in basal part together with *Cerylambus thailandicus* Nomura et al., 2008 and *C. reticulatus* (Raffray, 1895). It is easily separated from all so far known *Cerylambus* by the truncate apex of antennomere III which lacks long, dense setae. Therefor this character state must be excluded from the diagnosis of *Cerylambus* (NOMURA et al. 2008: 124).

Etymology. Patronymic, named after our friend Dr. Martin Fikáček (NMPC), well-known specialist on Hydrophilidae and the collector of the type series.

Distribution. China: Hainan Island.

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References

- CHANDLER D. S. 2001: Biology, morphology, and systematics of the ant-like litter beetles of Australia (Coleoptera: Staphylinidae: Pselaphinae). *Memoirs on Entomology International* **15**: 1–560.
- NOMURA S., SAKCHOOWONG W. & IDRIS A. G. 2008: A taxonomic revision of the Clavigerine genus *Cerylambus* (Insecta, Coleoptera, Staphylinidae, Pselaphinae). *Bulletin of the National Science Museum, Series A: Zoology* **34**: 123–140.
- RAFFRAY A. 1894: Révision des Psélaphides des Iles de Singapore et de Penang. *Revue d'Entomologie* **13**: 197–282.
- THUNBERG C. P. 1815. De coleopteris rostratis. *Nova Acta Regiae Societatis Scientiarum Upsalensis* **7**: 104–125.