

**New genera of Alleculinae
(Coleoptera: Tenebrionidae: Alleculinae: Alleculini)
from the Palaearctic Region. Part III - *Upilaena* gen. nov.**

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Abstract. A new genus of Alleculini Laporte, 1840 - *Upilaena* gen. nov. with the type species *Upilaena yunnanica* sp. nov. from China (Yunnan Province) is described and illustrated. New genus *Upilaena* gen. nov. is compared with habitually similar genus *Upinella* Mulsant, 1856.

INTRODUCTION

New Alleculine genus *Upilaena* gen. nov. is described with a type species *Upilaena yunnanica* sp. nov. from China (Yunnan Province). New species of the new genus distinctly differs from habitually similar species of the genus *Upinella* Mulsant, 1856 mainly by these characters: body widest near two thirds elytra length, pronotum convex, almost circular, widest near middle, longer than in base wide, base almost straight, elytra convex, oval, antenna long, antennomere 2 very short, antennomere 3 longest (1.3-2.0 times longer than each of antennomeres 4-11). Species of *Upilaena* gen. nov. distinctly resemble to the species of the genus *Laena* Dejean, 1821, but clearly differ by comb-clawed tarsal claws; while *Laena* species have tarsal claws simple. *Upilaena yunnanica* gen. nov. and sp. nov. is described and illustrated.

MATERIAL AND METHODS

Two important morphometric characteristics used for the descriptions of species of the subfamily Alleculinae, the 'ocular index' dorsally (Campbell & Marshall 1964) and 'pronotal index' (Campbell 1965), are used in this paper as well. The ocular index equals $(100 \times \text{minimum dorsal distance between eyes}) / (\text{maximum width of head across eyes})$. The pronotal index is calculated as $(100 \times \text{length of pronotum along midline}) / (\text{width across basal angles of pronotum})$.

'Type material' information is taken from recent locality labels.

In the list of type material, a slash (/) separates data in separate rows.

The following collection code is used:

VNPC private collection of Vladimír Novák, Praha, Czech Republic.

Measurements of body parts and corresponding abbreviations used in text are as follows: AL - total antennae length, BL - maximum body length, EL - maximum elytral length, EW - maximum elytral width, HL - maximum length of head (visible part), HW - maximum width of head, OI - ocular index dorsally, PI - pronotal index dorsally, PL - maximum pronotal length, PW - pronotal width at base, PW1/2 - pronotal width in middle, RLA - ratios of relative lengths of antennomeres 1-11 from base to apex (3=1.00), RL/WA - ratios of length / maximum width of antennomeres 1-11 from base to apex, RLT - ratios of relative lengths of tarsomeres 1-5 respectively 1-4 from base to apex (1=1.00).

Measurements were made with an Olympus SZ 40 stereoscopic microscope with continuous

magnification and with the Soft Imaging System AnalySIS. Snapshots were taken by using camera Canon EOS 550 D and a Canon Macro Photo Lens MP-E and software Helicon Focus 7.7.5.

TAXONOMY

Genus *Upilaena* gen. nov.

(Figs. 1-4)

Type species: *Upilaena yunnanica* sp. nov.

Description (female). Habitus as in Fig. 1, body outline (Fig. 2), medium-sized, elongate oval, *Laena*-shaped, convex, matte, from pale reddish brown to black, dorsal surface with pale setae, punctures and microgranulation, widest near two thirds elytral length. Head (Fig. 3) approximately as wide as long, through the eyes wider than anterior margin and as wide as base of pronotum. Clypeus transverse, eyes smaller, transverse, excised, space between eyes wide, distinctly wider than diameter of one eye. Antenna (Fig. 4) long, matte, antennomeres narrow. Antennomere 2 shortest, antennomere 3 longest. Maxillary palpus (Fig. 3) matte, ultimate palpomere widely triangular, shoe-shaped. Pronotum (Fig. 3) almost circular, longer than wide in base, matte, convex, widest near middle, in base slightly narrower than elytra at humeri. Base and anterior margin almost straight. Anterior angles indistinct, posterior angles obtuse. Elytra widely oval, convex, matte, widest near two thirds elytra length. Elytral striae with rows of small, coarse punctures, elytral intervals slightly convex. Scutellum semicircular, semi-matte. Elytral epipleura well-developed, distinctly narrowing to ventrite 1, then relatively wide and parallel on apical part. Legs long and narrow, penultimate tarsomeres slightly widened and lobed. Protarsal claws with a few teeth.

Male. Unknown.

Differential diagnosis. New species of the new genus *Upilaena* gen. and sp. nov. distinctly differs from habitually similar species of the genus *Upinella* Mulsant, 1856 mainly by these characters: body widest near two thirds of length of elytra, pronotum convex, almost circular, widest near middle, longer than wide at base, base almost straight, elytra convex, oval, antennomere 3 longest (1.56 times as long as antennomere 4); while *Upinella* species have body broadest in basal half of elytra length, pronotum is more flat, not circular, not mostly broadest in middle, basally wider than long, elytra more flat, antennomere 3 as long or slightly longer or slightly shorter than antennomere 4.

Etymology. Compound name marking similarity to the genus *Upinella* Mulsant, 1856 - *Upi*- and similarity to Lagriinae genus *Laena* Dejean, 1821 - *laena*. Gender: feminine.

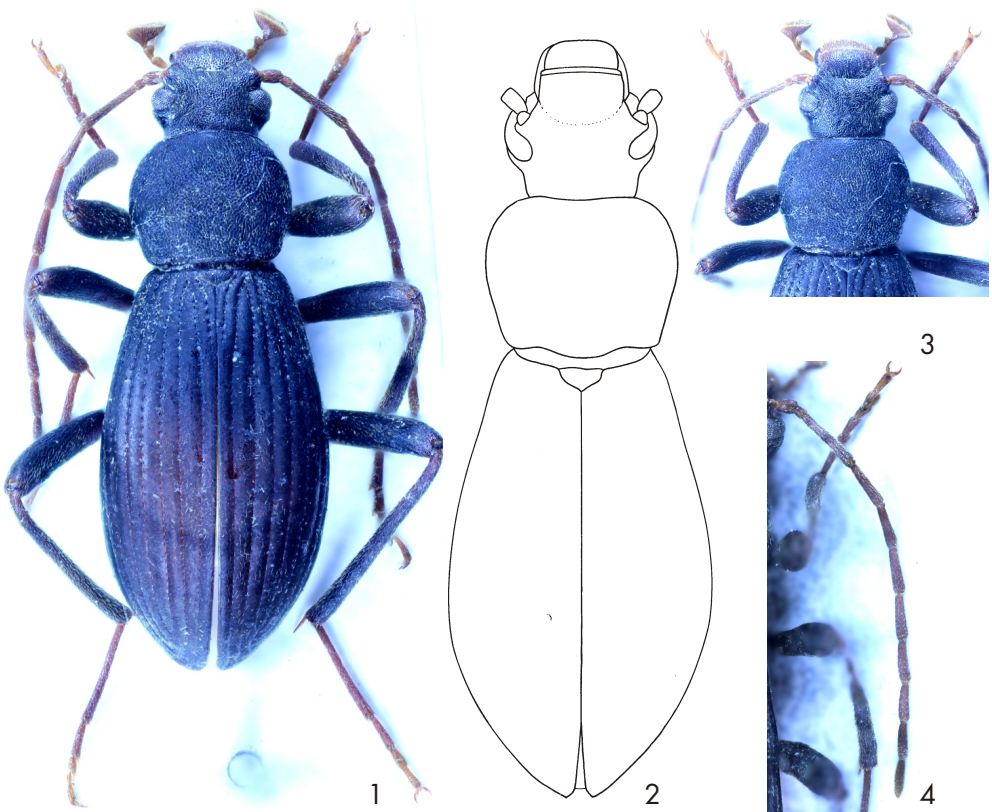
Distribution. China (Yunnan Province).

Upilaena yunnanica sp. nov.

(Figs. 1-4)

Type locality. China, Yunnan Province, Daju.

Type material. Holotype (♀): CHINA - YUNNA / DAJU / 3.7.-8.7.1995 / E. Kučera leg., (VNPC). Paratype: (1 ♀): CHINA, YUNNAN Prov. / DAJU-50km N L i j i ang / 27, 21N ; 100,19E / 21.-27.6. 1993 / lgt. S. Becvar, (VNPC). The types are provided with a printed red label: '*Upilaena* / *yunnanica* sp. nov. / HOLOTYPUS or PARATYPUS / V. Novák det. 2024'.



Figs. 1-4. *Upilaena yunnanica* sp. nov. (female holotype): 1- habitus; 2- body outline; 3- head, pronotum and maxillary palpus; 4- antenna.

Description of holotype. Habitus as in Fig. 1, body outline as in Fig. 2, medium-sized, elongate oval, *Laena*-shaped, convex, matte, from pale reddish brown to black, dorsal surface with pale setae, punctures and microgranulation, BL 10.04 mm. Widest near two thirds elytral length; BL/EW 2.94.

Head (Fig. 3) approximately as wide as long, through the eyes wider than anterior margin and as wide as base of pronotum. Dorsal surface matte with dense and long, pale setae, fine microgranulation and dense punctures. Posterior part dark brown, anterior part reddish brown. Clypeus pale reddish brown, transverse, with dense and long, pale setae, punctures and microgranulation. Mandibles brown, glabrous, shiny with sparse very small punctures, and pale setae in sides. HW 1.87 mm; HW/PW 1.04; HL (visible part) 1.86 mm. Eyes smaller, transverse, excised, space between eyes wide, distinctly wider than diameter of one eye; OI equal to 63.03.

Antenna (Fig. 4). Long, brown, matte, antennomeres narrow (AL 6.90 mm, exceeding two thirds body length - AL/BL 0.68). Dorsal surface with dense, pale setae, microgranulation and punctures. Antennomere 2 shortest, antennomere 3 longest, antennomeres 4-11 shorter than antennomere 3.

RLA(1-11): 0.30 : 0.18 : 1.00 : 0.64 : 0.64 : 0.68 : 0.65 : 0.62 : 0.56 : 0.51 : 0.55.

RL/WA(1-11): 2.20 : 1.57 : 7.44 : 4.78 : 4.50 : 4.42 : 4.52 : 5.00 : 3.61 : 3.82 : 3.96.

Maxillary palpus (Fig. 3) pale reddish brown, matte, with pale setae, microgranulation and very small punctures. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular, shoe-shaped.

Pronotum (Fig. 3). Blackish brown, almost circular, matte, convex, widest near middle, in base slightly narrower than elytra at humeri. Dorsal surface with pale setae, small punctures and fine microgranulation. Lateral margins narrower in base and wider in middle than pronotal length (PL 2.09 mm; PW (base) 1.80 mm; PW1/2 2.51 mm; PI equal to 116.11). Border lines very narrow, margins conspicuous from dorsal view. Base and anterior margin almost straight. Anterior angles indistinct, posterior angles obtuse.

Elytra. Blackish brown, widely oval, convex, matte, widest near two thirds elytra length. Dorsal surface with sparse, short, pale setae. EL 6.09 mm; EW 3.42 mm; EL/EW 1.78. Elytral striae with rows of small, coarse punctures, intervals between punctures in rows narrower or as wide as diameter of punctures. Elytral intervals slightly convex, with microgranulation.

Scutellum. Black, semicircular, semi-matte, with a few long, pale setae, fine microgranulation and shallow punctures.

Elytral epipleura well-developed, dark reddish brown, with punctures and sparse, pale setae distinctly narrowing to ventrite 1, then relatively wide and parallel on apical part.

Legs. Long and narrow, femora and tibiae blackish brown, tarsi reddish brown, dorsal surface with pale setae, and small punctures. Penultimate tarsomeres slightly widened and lobed. RLT: 1.00 : 0.42 : 0.39 : 0.43 : 0.58 (protarsus); 1.00 : 0.39 : 0.27 : 0.27 : 0.60 (mesotarsus); 1.00 : 0.34 : 0.21 : 0.32 (metatarsus).

Protarsal claws pale reddish brown with 3 and 4 teeth.

Ventral side of body blackish brown with pale setae and dense punctures. Abdomen dark reddish brown, semi-matte with short, pale setae, dense, small punctures and fine microgranulation.

Male unknown.

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Females (n= 2). BL 9.31 mm (8.58-10.04 mm); HL 1.67 mm (1.48-1.86 mm); HW 1.68 mm (1.44-1.87 mm); OI 62.20 (61.37-63.03); PL 1.94 mm (1.78-2.09 mm); PW (base) 1.75 mm (1.70-1.80 mm); PW1/2 2.30 mm (2.09-2.51 mm); PI 110.76 (105.40-116.11); EL 5.70 mm (5.31-6.09 mm); EW 3.10 mm (2.77-3.42 mm).

Differential diagnosis. See the differential diagnosis of the genus *Upilaena* gen. nov.

Etymology. Toponymic, named after the type locality Yunnan Province in China.

Distribution. China (Yunnan Province).

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