

New genera of Alleculinae (Coleoptera: Tenebrionidae: Alleculinae: Alleculini) from the Oriental Region. XV - *Bubu* gen. nov.

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Taxonomy, new genus, new species, descriptions, Coleoptera, Tenebrionidae, Alleculinae, Alleculini, *Bubu*, Oriental Region

Abstract. A new genus *Bubu* gen. nov. of the tribe Alleculini Laporte, 1840 (subtribe Alleculina Laporte, 1840) from the Oriental Region is described with the type species *Bubu siamensis* sp. nov. from Thailand.

INTRODUCTION

The new genus *Bubu* gen. nov. with the type species *Bubu siamensis* sp. nov. from Thailand (Soppong) is described. The new genus distinctly belongs to the subtribe Alleculina Laporte, 1840 and differs from similar genera with elongated bodies living in Thailand (*Allecula* Fabricius, 1801, *Bolbostetha* Fairmaire, 1896, *Chitwania* Novák, 2015, *Dioxycula* Fairmaire, 1896, *Gerdacula* Novák, 2015, *Indricula* Novák, 2016, *Indrimera* Novák, 2025, *Jaklia* Novák, 2010, *Ksukolcula* Novák, 2017, *Loriculoides* Novák, 2016, *Makicula* Novák, 2012, *Mycetocula* Novák, 2015, *Oracula* Novák, 2019, *Potocula* Novák, 2012, *Spinecula* Novák, 2019, *Upinella* Mulsant, 1856, *Upinelloides* Novák, 2021) mainly by these characters: unusually shaped protibiae (widened apically with a large hollow place on the apical part of the inner side), pronotum approximately as long as wide with arcuate lateral and anterior margins, space between the eyes distinctly wider than diameter of one eye, profemora distinctly wider than the meso- and metafemora, protarsal claws hollow with dense teeth on the upper side and long antennae with narrow antennomeres.

The new species *Bubu siamensis* sp. nov. is illustrated including male genitalia.

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 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, 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 a Canon EOS 550 D camera and a Canon Macro Photo Lens MP-E and processed with Helicon Focus 8.3.11 software.

TAXONOMY

Genus *Bubu* gen. nov.

Type species: *Bubu siamensis* sp. nov.

Description (male). Body medium-sized, elongate, parallel, shiny, dorsal surface with pale setae, punctures and very fine microgranulation, widest near middle of elytra length. Head through the eyes slightly narrower than base of pronotum. Eyes relatively large, transverse, excised, space between eyes distinctly wider than diameter of one eye, wider than length of antennomere 1. Antenna long, antennomeres narrow, antennomere 2 shortest, antennomeres 4-11 longer than antennomere 3. Ultimate maxillary palpomere widely triangular. Pronotum convex, widest near middle, approximately as wide as long, lateral and anterior margins arcuate, slightly narrower than elytra at humeri. Elytra elongate, almost parallel, widest near middle. Elytral striae with rows of coarse punctures, interspaces between punctures distinctly narrower than diameter of punctures, elytral intervals convex. Scutellum slightly elevated up to the level of the elytron. Elytral epipleura well-developed, parallel on apical part. Legs long and strong. Protibiae unusually shaped, widened apically with angle and large hollow place on apical part of inner side. Profemora distinctly wider than meso- and metafemora. Pro- and mesotarsomeres 3, 4 and penultimate metatarsomeres widened and lobed. Protarsal claws hollow with dense visible teeth on upper side. Basal piece of aedeagus rounded laterally and narrowing in dorsal view. Apical piece triangular from dorsal view, beak-shaped in dorsal and lateral views.

Female. Unknown.

Differential diagnosis. The male of this unusual species of the new genus *Bubu* gen. nov. clearly differs from species of other similar genera with narrow, elongate, parallel body by combination of these characters:

- 1- Unusually shaped protibiae as in Fig. 3 (widened apically with large hollow place on apical part of inner side)
- 2- Pronotum (Fig. 2) approximately as long as wide with arcuate lateral and anterior margins
- 3- Space between eyes (Fig. 2) distinctly wider than diameter of one eye
- 4- Profemora (Fig. 1) distinctly wider than meso- and metafemora
- 5- Protarsal claws hollow with dense teeth on upper side
- 6- Antennae long, antennomeres narrow

Etymology. Named after the author's family new french bulldog puppy - *Bubu*. Gender: masculine.

Distribution. Thailand.

***Bubu siamensis* sp. nov.**
(Figs. 1-5)

Type locality. Thailand, Soppong, 19°27' N, 98°20' E, 1500 m.

Type material. Holotype (♂): THAI 28-31/5 1995 / 19.27N 98.20E / SOPPONG 1500 m / Vít Kubáň leg., (VNPC). The type is provided with a printed red label: 'Bubu / siamensis sp. nov. / HOLOTYPUS / V. Novák det. 2026'.

Description of holotype. Habitus as in Fig. 1, body medium-sized, elongate, parallel, shiny, from ochre yellow to black, dorsal surface with pale setae, punctures and very fine microgranulation, BL 10.33 mm. Widest near middle of elytra length; BL/EW 3.77.

Head (Fig. 2) slightly longer than wide, through the eyes slightly narrower than base of pronotum. Dorsal surface black, shiny with coarse punctures and pale setae. Clypeus pale reddish brown, transverse, half heart-shaped, surface with long, pale setae, fine microgranulation and very small punctures, apex excised in middle. Mandibles pale reddish brown, glabrous, shiny with sides and apex darker and pale setae in sides. HW 1.46 mm; HW/PW 0.75 HL (visible part) 1.53 mm. Eyes relatively large, transverse, excised, space between eyes distinctly wider than diameter of one eye, wider than length of antennomere 1; OI equal to 39.46.

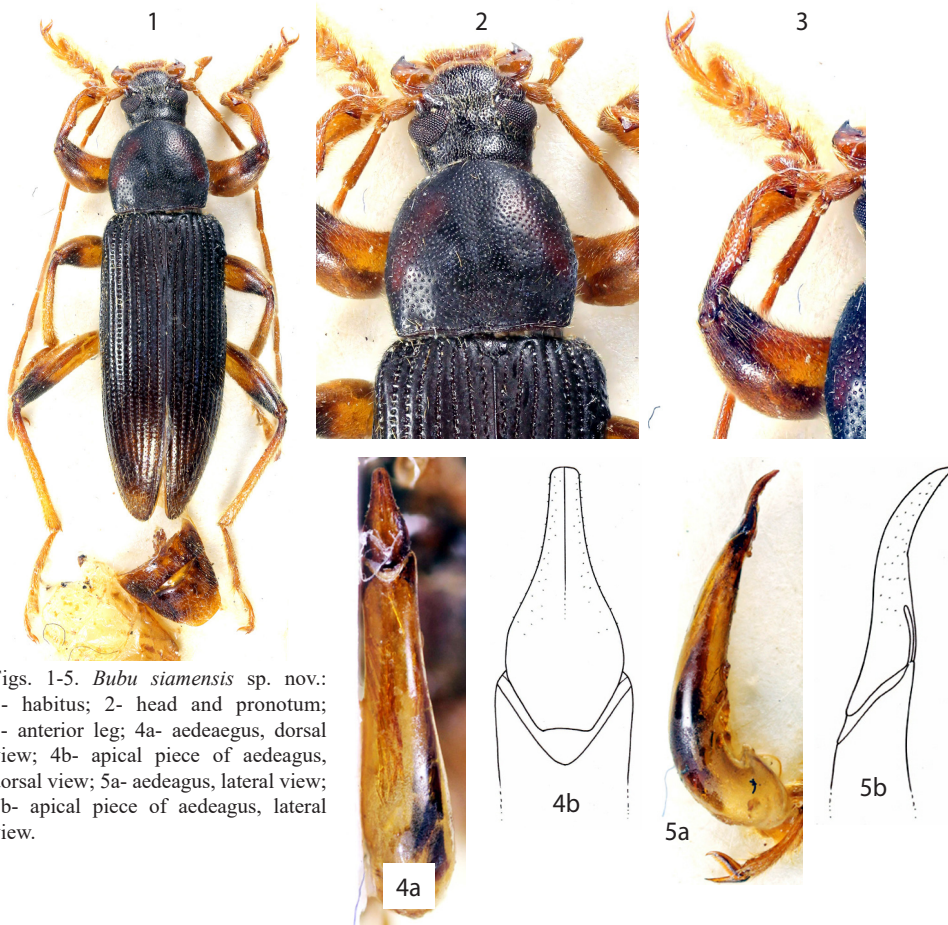
Antenna long, ochre yellow (AL(1-11) 8.13 mm, exceeding three quarters body length - AL(1-11)/BL 0.79). Antennomeres narrow, antennomere 2 shortest, antennomeres 4-8 longer than antennomere 3. Dorsal surface with recumbent, pale setae, microgranulation and small, shallow punctures.

RLA(1-11): 0.53 : 0.24 : 1.00 : 1.11 : 1.22 : 1.20: 1.22 : 1.22 : 0.87 : 0.76 : 1.22.

RL/WA(1-11): 2.00 : 1.38 : 5.00 : 5.56 : 6.11 : 6.75 : 6.88 : 6.11 : 4.88 : 4.25 : 6.11.

Maxillary palpus ochre yellow, shiny, with pale setae, small, shallow punctures and microgranulation. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular.

Pronotum (Fig. 2) black with reddish brown spots as in Fig. 2, shiny, convex, widest near middle, approximately as wide as long, slightly narrower than elytra at humeri. Dorsal



Figs. 1-5. *Bubu siamensis* sp. nov.:
 1- habitus; 2- head and pronotum;
 3- anterior leg; 4a- aedeagus, dorsal
 view; 4b- apical piece of aedeagus,
 dorsal view; 5a- aedeagus, lateral view;
 5b- apical piece of aedeagus, lateral
 view.

surface with very sparse pale setae, dense, small and coarse punctures, microgranulation not clearly distinct. PL 2.01 mm; PW 1.96 mm; PI equal to 102.55. Border lines very narrow, distinct dorsally, only in the middle of anterior margin not clearly conspicuous. Base almost straight, anterior and lateral margins regularly arcuate. Posterior angles distinct, obtuse.

Elytra. Black, elongate, almost parallel, shiny, widest near middle. Dorsal surface with sparse pale setae. EL 6.79 mm; EW 2.74 mm; EL/EW 2.48. Elytral striae with rows of coarse punctures, interspaces between punctures distinctly narrower than diameter of punctures. Elytral intervals convex, with very fine microgranulation.

Scutellum. Black, semi-circular, slightly elevated up to the level of elytron, surface matte with pale setae, punctures and microgranulation.

Elytral epipleura well-developed, blackish brown narrowing to metaventrite, then becoming parallel on apical part.

Legs (Fig. 3). Long and strong, pale reddish brown, apex of femora and base of tibiae blackish. Dorsal surface with pale setae, punctures and fine microgranulation. Protibiae

unusually shaped (Fig. 3), widened apically with angle and large hollow place on apical part of inner side. Profemora distinctly wider than meso- and metafemora. Pro- and mesotarsomeres 3, 4 and penultimate metatarsomeres widened and lobed. RLT: 1.00 : 0.68 : 0.82 : 1.18 : 1.68 (protarsus); 1.00 : 0.67 : 0.80 : 0.90 : ---- (mesotarsus); 1.00 : 0.55 : 0.62 : 1.02 (metatarsus).

Protarsal claws hollow with about 30 visible teeth on upper side.

Ventral side of body blackish brown with pale setae and small punctures. Abdomen blackish brown, with pale setae. Ultimate and penultimate ventrites shiny, pale brown in middle with small, shallow punctures and microgranulation.

Aedeagus (Figs. 4a, b, 5a, b) from ochre yellow to pale brown, shiny. Basal piece rounded laterally and narrowing in dorsal view. Apical piece triangular from dorsal view, beak-shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece in dorsal view 1 : 3.95.

Female. Unknown.

Differential diagnosis. See Differential diagnosis in *Bubu* gen. nov.

Etymology. Toponymic, named after the old name of the country of its origin (*Siam*).

Distribution. Thailand.

ACKNOWLEDGEMENTS. I am very obliged to Larry G. Bezark (U.S.A.) for revision of the English text of the manuscript. Sincere thanks are due to Zuzana Čadová (Liberec, Czech Republic) for the excellent drawings.

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Received: 15.6.2026

Accepted: 10.7.2026

Printed: 5.10.2026