

**New genera of Alleculinae (Coleoptera: Tenebrionidae: Alleculinae: Alleculini)  
from the Oriental Region. Part IV - *Pizura* gen. nov.**

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**Taxonomy, new species, description, new distribution, Coleoptera, Tenebrionidae, Alleculinae, *Alleculini*, *Pizura*, Oriental Region**

**Abstract.** A new genus of Alleculinae *Pizura* gen. nov. is described to include the following three new species, all from Thailand: *Pizura barbucha* sp. nov. as a type species, *Pizura kubakubikula* sp. nov. and *Pizura kubula* sp. nov. The new genus is compared with a similar genus, *Hymenalia* Mulsant, 1856. All the new species are illustrated and keyed together.

INTRODUCTION

Mulsant (1856) described the genus *Hymenalia* in 1856. This genus belongs to the subtribe *Alleculina* Laporte, 1840. Borchmann (1910) knew 11 species, Mader (1928) 16 species, and Novák & Pettersson (2008) listed 33 species in two subgenera of the genus *Hymenalia*. Novák (2007), recently described five new species of this genus from Iran, Yemen and Oman, later two new species from China (Novák 2008) and seventeen new species from China, North India, North Vietnam and Thailand (Novák 2010, 2015a). Further 5 new species from the Palaeartic Region were described by Novák (2015b).

The new genus *Pizura* gen. nov. is described to include the following three new species from Thailand - *Pizura barbucha* sp. nov., *Pizura kubakubikula* sp. nov. and *Pizura kubula* sp. nov. Species differ from those of *Hymenalia* Mulsant mainly by dorsal surface setose and matter (species of the *Hymenalia rufipennis* species group from East Palaeartic Region have glabrous and shiny dorsal surface); mainly by body flatter, clypeus widened apically and distinctly roundly excised at middle of apical margin, by differences in ratios of lengths of antennomeres in both genders: antennomere 3 1.5-2.5 times longer than antennomere 2; antennomere 4 only 1.25-2.5 times longer than antennomere 3; anterior tarsal claws longer, with more teeth, abdomen of male with 6 visible ventrites; elytral epipleura wide and regularly narrowing up to ventrite 5. Species of *Hymenalia* (if having dorsal surface setose) have not clypeus widened apically and its apical margin straight without excision at middle; male antennomere 3 is approximately as long as or very slightly longer than antennomere 2, male antennomere 4 is more than 3.5 times longer than antennomere 3; short anterior tarsal claws have a few teeth; male abdomen has 5 visible ventrites; elytral epipleura narrower, narrowing up to ventrite 1, then leading parallel.

New species are illustrated and keyed.

## 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 the present 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  $(100 \times \text{length of pronotum along midline}) / (\text{width across basal angles of pronotum})$ .

In the list of type or examined material, a slash (/) separates data in separate lines, a double slash (//) separates different labels.

The following collection codens are used:

KMTJ private collection of Kimio Masumoto, Tokio, Japan;

NMTJ National Museum, Tokio, Japan;

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 Olympus SZ 40 stereoscopic microscope with continuous magnification and with Soft Imaging System AnalySIS.

## TAXONOMY

### DESCRIPTION OF THE GENUS *PIZURA* GEN. NOV.

**Type species:** *Pizura barbucha* sp. nov.

**Description.** Habitus of male as in Figs. 1-3, 9, 14. Dorsal surface from ochre yellow to black, setose, with fine microgranulation and punctuation, matter. Body relatively large, elongate oval, rather flat than convex, BL 6.7-9.4 mm, widest near middle of elytra length, ratio BL/EW 2.4-2.7. Head (Figs. 4, 10, 15) relatively narrow, with fine and dense microgranulation, punctuation, punctures small-sized and pale setation. Head widest across eyes, distinctly narrower than pronotum at base. Eyes large, transverse, strongly excised. Space between eyes narrow, OI 20-37. Clypeus widened anteriorly, heart-shaped, distinctly excised in middle of anterior margin. Antenna (Figs. 5, 11, 16) relatively long, narrow, filiform, longer than half body length, almost with short setation, fine microgranulation and punctuation, matte. Antennomere 2 shortest, each of antennomeres 4-11 distinctly longer than antennomere 3. Maxillary palpus (Fig. 6) with pale setation and microgranulation and punctuation. Palpomeres 2-4 distinctly widest at apex, penultimate palpomere shorter than palpomere 2 and ultimate palpomere. Ultimate palpomere longer, knife-shaped.

Pronotum (Figs. 4, 10, 15) almost semicircular, from pale brown to blackish brown, with pale setation, in base distinctly narrower than elytron at base, with fine microgranulation and dense punctation, punctures small-sized, rather matte. Widest near middle, PI 52-62. Borders complete and more or less distinct. Posterior margin bisinuate. Posterior angles clearly distinct, anterior angles indistinct, rounded, lateral margins more or less regularly arcuate. Dorsal surface of elytra from ochre yellow to blackish brown, unicolorous or bicolor, with relatively dense and short pale setation, widest near middle of elytra length. Elytral striae with distinct rows of small-sized punctures. Surface of elytral intervals with fine microgranulation, dense punctation with very small punctures, rather matte. Elytral intervals flat or slightly vaulted. Elytral epipleura well developed, relatively wide up to ventrite 5, with pale setation. Scutellum with fine microgranulation, punctures, pale setae, matte, almost paler than elytron itself. Legs long and narrow, with setation, punctation and microgranulation. Penultimate tarsomere of all tarsi distinctly widened with membranous lobes. Metatarsomere 1 longest. Anterior tarsal claws with 12-36 visible teeth. Aedeagus (Figs. 7, 8, 12, 13, 17, 18) pale brown, slightly shiny. Basal piece large and long, longer than relatively short apical piece.

**Female.** Without distinct differences, only space between eyes slightly wider, body more robust.

**Differential diagnosis.** Species of new genus *Pizura* gen. nov. are similar to those of the genus *Hymenalia* Mulsant, 1856. They differ by dorsal surface setose and matter (species of the *Hymenalia rufipennis* species group from the East Palaearctic Region have glabrous and shiny dorsal surface); mainly by body flatter, clypeus widened apically and distinctly roundly excised at middle of apical margin, by differences in ratios of lengths of antennomeres in both genders: antennomere 3 1.5-2.5 times longer than antennomere 2; antennomere 4 only 1.25-2.5 times longer than antennomere 3; anterior tarsal claws longer with more teeth, abdomen of male with 6 visible ventrites; elytral epipleura wide and regularly narrowing up to ventrite 5. Species of *Hymenalia* (if have dorsal surface setose) have clypeus usually not widened apically and its apical margin straight without excision at middle; their pronotum is widest at base, base of pronotum is approximately as wide as base of elytra; male antennomere 3 is approximately as long as or very slightly longer than antennomere 2, male antennomere 4 is more than 3.5 times longer than antennomere 3; short anterior tarsal claws have a few teeth; male abdomen has 5 visible ventrites; elytral epipleura narrower, narrowing up to ventrite 1, then leading parallel.

**Etymology.** Named after a four-legged friend - cat Pizura. Gender feminine.

**Distribution.** Thailand.

***Pizura barbucha* sp. nov.**

(Figs. 1-8)

**Type locality.** North Thailand, Chiang Rai prov., env. of Wiang Pa Pao.

**Type material.** Holotype: (♂): Thailand, Chiang Rai, / Wiang Pa Pao, / 17-21. V. 2015 / K. Takahashi leg., (NMTJ). Paratypes: (2 ♂♂ 1 ♀): same data as holotype, (KMTJ, VNPC); (2 ♂♂ 2 ♀♀): same data as holotype, but 27. V.-1. VI.2014, (VNPC, KMTJ); (1 ♂ 2 ♀♀): N THAILAND - Chiang / Rai prov.; Wiang Pa / Pao env. 21.5.-10.6. / 2011; P. Viktora lgt., (VNPC); (16 ♂♂ 21 ♀♀): Thailand N, Chiang Rai / prov., WIANG PA PAO / 5.-10.vi.2016 / K. Takahashi leg., (KMTJ, VNPC). The types are provided with a printed red label: '*Pizura barbucha* sp. nov. HOLOTYPE [or PARATYPE] V. Novák det. 2015'.

**Description of holotype.** Habitus as in Fig. 1, body elongate oval, relatively flat, from ochre yellow to black, more matte, dorsal surface setose, with punctuation and microgranulation, rather matte. BL 7.39 mm. Widest near half elytra length; BL/EW 2.76.

Head (Fig. 4) relatively narrow, slightly wider than anterior margin of pronotum, dorsal surface with pale setation, dense and shallow punctuation. Posterior part dark blackish brown with fine microgranulation, punctuation coarser, punctures small-sized, interspaces between punctures narrow, rather matte. Paler anterior part and pale brown clypeus with long pale setation, fine microrugosities and shallow punctures, shiny. Clypeus shinier, punctures sparse, distinctly widened to apex and with anterior margin excised in middle. HL (visible part) 1.18 mm; HW 1.28 mm; HW/PW 0.69. Eyes large, transverse, distinctly excised, space between eyes narrow; narrower than diameter of one eye, approximately as wide as length of antennomere 1; OI equal to 25.73.

Antennae (Fig. 5). Long, narrow, with punctuation and fine microgranulation, AL 5.43 mm; AL/BL 0.74. Antennomeres 1-3 ochre yellow, with pale setation, shiny. Antennomeres 4-11 matte, with dark setation, each more than twice longer than antennomere 3, antennomeres 4-10 distinctly widest at apex. Antennomere 2 shortest.

RLA: 0.93 : 0.64 : 1.00 : 2.00 : 2.07 : 2.18 : 2.14 : 2.39 : 2.25 : 2.18 : 2.14.

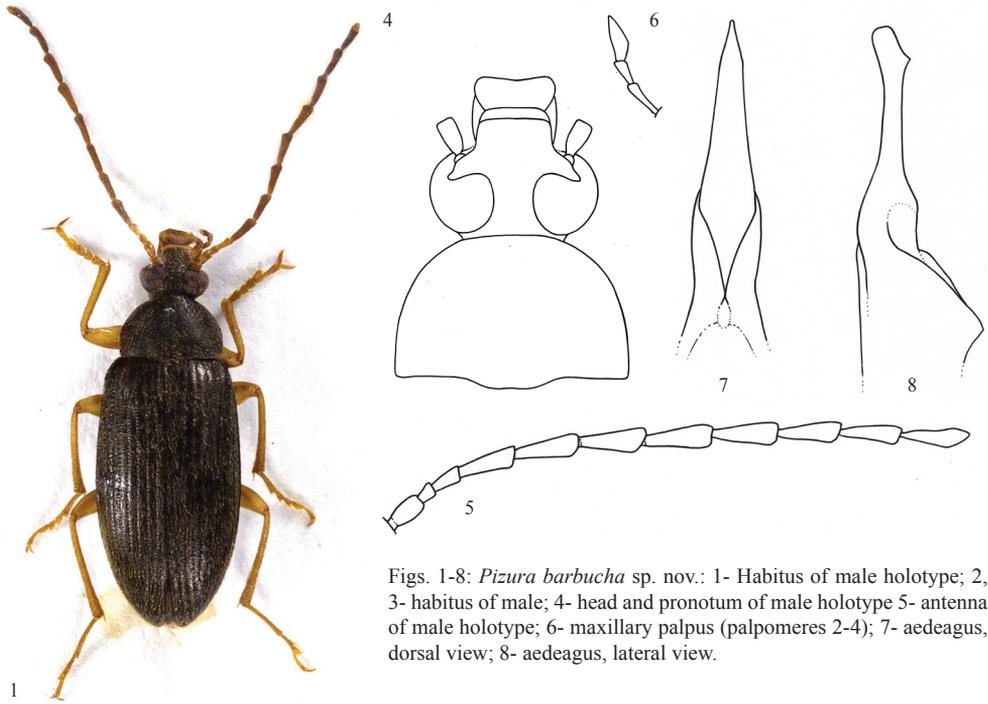
RL/WA: 1.95 : 1.65 : 2.10 : 3.14 : 3.96 : 4.36 : 3.62 : 3.28 : 3.30 : 3.69 : 3.36.

Maxillary palpus (Fig. 6). Pale brown, with longer, yellow setation, slightly shiny. Palpomeres 2, 3 distinctly narrowest at base and widest at apex, with a few long pale setae. Ultimate palpomere knife-shaped.

Pronotum (Fig. 4). Black, approximately semicircular, widest near half of lateral margins, with dense pale setation, dense shallow punctuation and fine microgranulation. Punctures small-sized. PL 1.16 mm; PW 1.86 mm; PI equal to 62.33. Border lines complete, lateral margins arcuate, base finely bisinuate, distinctly narrower than base of elytra. Anterior margin slightly arcuate. Posterior angles rectangular, anterior angles indistinct, rounded.

Ventral side of body from reddish brown to black prothorax and metathorax, with short setation and small punctures. Abdomen with 6 visible ventrites pale reddish brown with long, ochre yellow setation, punctuation and fine microgranulation. Punctures small-sized.

Elytron. Black, widest near half elytra length, dorsal surface with dense and short yellow setation, fine microgranulation and punctuation. Elytral striae with distinct rows of small-sized punctures, elytral intervals with sparse, very small punctures. EL 5.05 mm; EW 2.68 mm. EL/EW 1.88.



Figs. 1-8: *Pizura barbucha* sp. nov.: 1- Habitus of male holotype; 2, 3- habitus of male; 4- head and pronotum of male holotype 5- antenna of male holotype; 6- maxillary palpus (palpomeres 2-4); 7- aedeagus, dorsal view; 8- aedeagus, lateral view.



Scutellum. Smaller, triangular, pale brown with sides darker, slightly shiny, with fine microgranulation.

Elytral epipleura. Well developed, black, very wide, with pale setae, widest near base, regularly narrowing to ventrite 5.

Legs. Ochre yellow, narrow, slightly shiny, with yellow setation, microgranulation and sparse punctuation, punctures very small. Tibiae and tarsi relatively narrow, with denser and longer setation than those in stronger femora. Penultimate tarsomere of each tarsus distinctly widened and lobed. RLT: 1.00 : 0.62 : 0.55 : 0.83 : 1.43 (protarsus); 1.00 : 0.32 : 0.40 : 0.42 : 0.78 (mesotarsus); 1.00 : 0.39 : 0.24 : 0.53 (metatarsus).

Anterior tarsal claws long with 36 visible teeth.

Aedeagus (Figs. 7, 8). Ochre yellow, shiny. Basal piece rounded laterally and slightly narrowing dorsally. Apical piece elongate, narrowly triangular dorsally and with irregular shape laterally. Ratio of length of apical piece to length of basal piece 1 : 2.28.

**Female.** Without distinct differences, only space between eyes slightly wider. Anterior tarsal claws with 7 teeth.

RLA: 0.94 : 0.62 : 1.00 : 2.27 : 2.12 : 2.46 : 2.46 : 2.52 : 2.30 : 2.33 : 2.58.

RL/WA: 1.70 : 1.59 : 1.83 : 3.41 : 3.04 : 3.38 : 3.24 : 3.19 : 3.30 : 3.08 : 3.54.

RLT: 1.00 : 0.55 : 0.49 : 0.55 : 1.38 (protarsus); 1.00 : 0.40 : 0.41 : 0.42 : 0.87 (mesotarsus); 1.00 : 0.38 : 0.23 : 0.55 (metatarsus).

**Variability.** Colour variability (Figs. 1-3): seventeen specimens (8 ♂♂ 9 ♀♀) with black dorsal surface; twenty five specimens (11 ♂♂ 14 ♀♀) have brown or reddish brown pronotum and ochre yellow elytra with dark brown spot near suture (widest near base); six specimens (3 ♂♂ 3 ♀♀) have elytron black with pale reddish brown pronotum.

The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n=22). BL 7.24 mm (6.78-7.72 mm); HL 1.07 mm (0.90-1.23 mm); HW 1.27 mm (1.22-1.32 mm); OI 23.56 (20.10-25.73); PL 1.13 mm (0.99-1.22 mm); PW 1.94 mm (1.75-2.16 mm); PI 57.61 (53.61-62.33); EL 5.05 mm (4.89-5.27 mm); EW 2.69 mm (2.53-2.87 mm). Females (n=26). BL 7.60 mm (7.23-8.33 mm); HL 1.01 mm (0.91-1.23 mm); HW 1.28 mm (1.21-1.43 mm); OI 33.59 (30.97-36.80); PL 1.22 mm (1.12-1.38 mm); PW 2.13 mm (1.99-2.40 mm); PI 57.36 (55.52-60.53); EL 5.37 mm (5.13-5.72 mm); EW 2.95 mm (2.83-3.12 mm).

**Differential diagnosis.** *Pizura barbucha* sp. nov. clearly differs from the species *Pizura kubakubikula* sp. nov. and *Pizura kubula* sp. nov. mainly by each of antennomeres 4-11 more than twice longer than antennomere 3, anterior tarsal claws of male long with 36 visible teeth; while *P. kubakubikula* and *P. kubula* have antennomeres 4-11 each less than twice longer than antennomere 3 and anterior tarsal claws of males are short with 12 respectively 15 teeth.

**Etymology.** Named after the figure of ghost (Barbucha) in the famous fairy tale of Czech writer Vladislav Vančura.

**Distribution.** Thailand.

***Pizura kubakubikula* sp. nov.**

(Figs. 9-13)

**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). Paratypes: (1 ♂ 1 ♀): same data as holotype, (VNPC). The types are provided with a printed red label: 'Pizura kubakubikula sp. nov. HOLOTYPUS [or PARATYPUS] V. Novák det. 2015'.

**Description of holotype.** Habitus as in Fig. 9, body elongate oval, relatively flat, from pale brown to brown, dorsal surface setose, with punctuation and microgranulation, rather matte. BL 7.86 mm. Widest near half elytra length; BL/EW 2.54.

Head (Fig. 10) relatively narrow, slightly wider than anterior margin of pronotum. Posterior part dark brown with fine microgranulation, dense punctuation and sparser and shorter pale setation. Punctures small-sized, interspaces between punctures narrow, rather matte. Slightly paler anterior part and pale reddish brown clypeus with long pale setation, fine microrugosities and shallower punctures. Clypeus shinier, punctures sparse, distinctly widened to apex and with anterior margin excised in middle. HL (visible part) 1.06 mm; HW 1.32 mm; HW/PW 0.59. Eyes large, transverse, distinctly excised, space between eyes narrow; narrower than diameter of one eye, approximately as wide as length of antennomere 3; OI equal to 28.70.

Antennae (Fig. 11). Long, narrow, brown, with punctuation and fine microgranulation, matte, AL 4.76 mm; AL/BL 0.61. Antennomere 2 and base of antennomeres 3 and 4 pale brown, antennomeres 1-3 with pale setation, setation of antennomeres 4-11 darker. Antennomeres 4-11 1.2-1.5 times longer than antennomere 3, antennomeres 4-10 distinctly widest at apex. Antennomere 2 shortest.

RLA: 0.76 : 0.41 : 1.00 : 1.40 : 1.35 : 1.34 : 1.43 : 1.35 : 1.26 : 1.20 : 1.46.

RL/WA: 2.02 : 1.36 : 3.33 : 4.00 : 3.68 : 3.58 : 3.11 : 2.89 : 2.96 : 3.00 : 3.43 .

Maxillary palpus. Reddish brown, with longer, pale setation and microgranulation, slightly shiny. Palpomeres 2, 3 distinctly narrowest at base and widest at apex. Ultimate palpomere broadly knife-shaped.

Pronotum (Fig. 10). Brown, approximately semicircular, widest near half of lateral margins, with dense pale setation, dense shallow punctuation and fine microgranulation. Punctures small-sized. PL 1.30 mm; PW 2.25 mm; PI equal to 57.78. Border lines complete, distinct, lateral margins arcuate, base finely bisinuate, distinctly narrower than base of elytra. Anterior margin more straight than slightly arcuate. Posterior angles roundly obtuse, anterior angles indistinct, rounded.

Ventral side of body brown with pale setation and small punctures. Abdomen with 6 visible ventrites brown with long and dense, pale setation and punctuation, punctures small-sized.

Elytron. Brown, with suture narrowly pale reddish brown, widest near half elytra length, dorsal surface with dense and short, ochre yellow setation, fine microgranulation and punctuation. Elytral striae with distinct rows of small-sized punctures, elytral intervals slightly convex, with sparse, very small punctures. EL 5.50 mm; EW 3.09 mm. EL/EW 1.78.

Scutellum. Triangular, pale brown, with fine microgranulation and long, pale setae.

Elytral epipleura. Well developed, brown, wide, with pale setae and small punctures, widest near base, leading wide up to ventrite 2; then regularly narrowing.

Legs. Narrow, brown, with pale setation, punctuation and fine microgranulation, punctures very small. Tarsi pale reddish brown, penultimate tarsomere of each tarsus distinctly widened and lobed. RLT: 1.00 : 0.56 : 0.55 : 0.65 : 1.49 (protarsus); 1.00 : 0.36 : 0.33 : 0.39 : 1.16 (mesotarsus); 1.00 : 0.41 : 0.32 : 0.76 (metatarsus).

Anterior tarsal claws with 12 visible teeth.

Aedeagus (Figs. 12, 13). Ochre yellow, shiny. Basal piece almost straight laterally and narrowing dorsally. Apical piece wide dorsally and beak-shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece 1 : 2.54.

**Female.** Without distinct differences. Space between eyes very slightly wider, antennomere 3 slightly longer than that in male. Anterior tarsal claws with 7 visible teeth.

Measurements of female body: BL 8.28 mm; HL 1.24 mm; HW 1.35 mm; OI 32.13; PL 1.28 mm; PW 2.37 mm; PI 54.01; EL 5.76 mm; EW 3.35 mm; AL 4.76 mm; AL/BL 0.58; HW/PW 0.57; BL/EW 2.47; EL/EW 1.72.

RLA: 0.66 : 0.39 : 1.00 : 1.25 : 1.15 : 1.22 : 1.13 : 1.12 : 1.13 : 1.02 : 1.26.

RL/WA: 1.92 : 1.54 : 3.34 : 4.75 : 3.95 : 3.98 : 3.23 : 2.96 : 3.04 : 3.11 : 3.33.

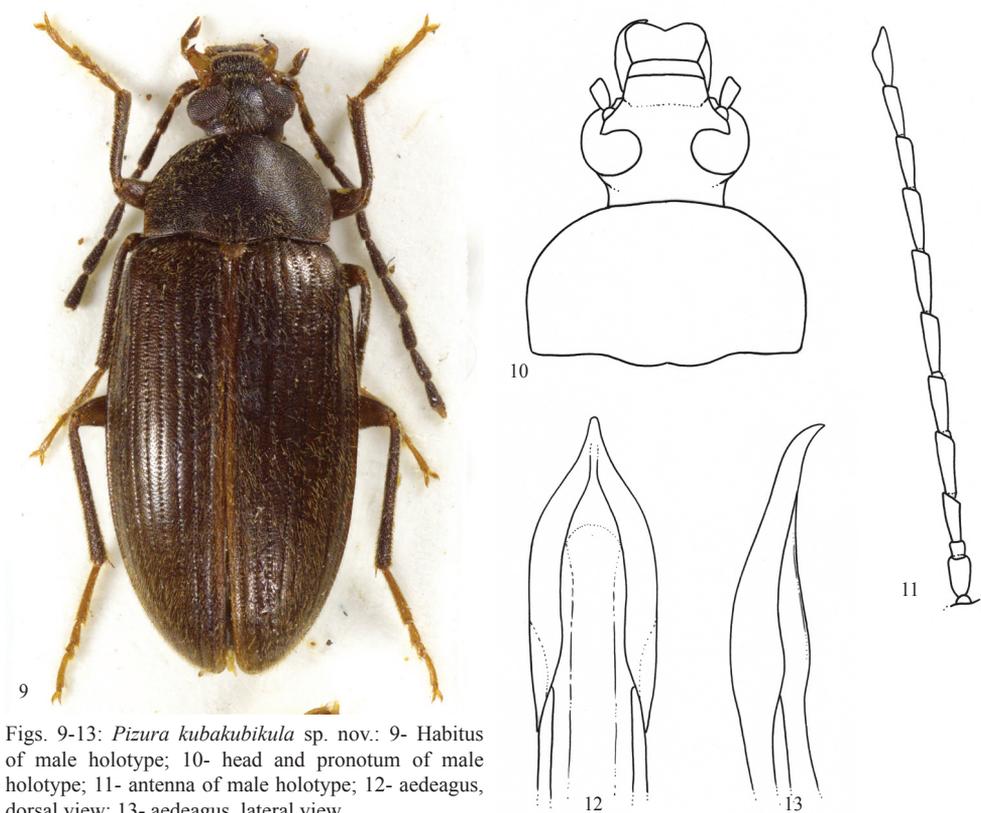
RLT: 1.00 : 0.62 : 0.55 : 0.72 : 1.85 (protarsus); 1.00 : 0.47 : 0.35 : 0.39 : 1.32 (mesotarsus); 1.00 : 0.41 : 0.28 : 0.62 (metatarsus).

**Variability.** The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n=2). BL 7.85 mm (7.83-7.86 mm); HL 1.06 mm; HW 1.33 mm (1.32-1.34 mm); OI 30.33 (28.70-31.96); PL 1.29 mm (1.28-1.30 mm); PW 2.24 mm (2.23-2.25 mm); PI 57.73 (57.42-58.04); EL 5.50 mm (5.49-5.50 mm); EW 3.08 mm (3.06-3.09 mm).

**Differential diagnosis.** *Pizura kubakubikula* sp. nov. distinctly differs from the species *Pizura barbucha* sp. nov. mainly by each of antennomeres 4-11 less than twice longer than antennomere 3 and by short anterior tarsal claws with only 12 visible teeth in male; while *P. barbucha* has each of antennomeres 4-11 more than twice longer than antennomere 3 and anterior tarsal claws of males are long, with 36 teeth. *P. kubakubikula* is clearly different from the species *Pizura kubula* sp. nov. mainly by clearly distinct border lines of pronotum, elytral intervals slightly convex and by elytral suture distinctly paler than elytron itself; while *P. kubula* has border lines of pronotum indistinct, elytral intervals more flat and elytron unicolored.

**Etymology.** Named after the main character (Kuba Kubikula), man who practices the bear, in the famous fairy tale of Czech writer Vladislav Vančura.

**Distribution.** Thailand.



Figs. 9-13: *Pizura kubakubikula* sp. nov.: 9- Habitus of male holotype; 10- head and pronotum of male holotype; 11- antenna of male holotype; 12- aedeagus, dorsal view; 13- aedeagus, lateral view.

***Pizura kubula* sp. nov.**  
(Figs. 14-18)

**Type locality.** Thailand, Chiang Mai, Mae Rin.

**Type material.** Holotype: (♂): Thailand, Chiang Mai, / Mae Rin, / 24-26.V.2014, / K. Takahashi leg., (NMTJ); Paratypes: (1 ♂ 2 ♀♀): same data as holotype, (KMTJ, VNPC). The types are provided with a printed red label: 'Pizura kubula sp. nov. HOLOTYPUS [or PARATYPUS] V. Novák det. 2015'.

**Description of holotype.** Habitus as in Fig. 14, body elongate oval, relatively flat, from reddish brown to black, matte, dorsal surface with pale setation, punctuation and microgranulation. BL 8.43 mm. Widest near half elytra length; BL/EW 2.42.

Head (Fig. 15) relatively narrow, slightly shiny. Posterior part dark black with dense punctuation, fine microgranulation, and dense and relatively long pale setation. Punctures small-sized, interspaces between punctures narrow. Slightly paler anterior part and pale reddish brown clypeus with sparse and long pale setae, fine microgranulation and fine microrugosities and shallower punctures. Clypeus partly shinier, punctures sparse, distinctly widened to apex and with anterior margin excised in middle. HL (visible part) 1.03 mm;

HW 1.45 mm; HW/PW 0.58. Eyes large, transverse, distinctly excised, space between eyes narrow; narrower than diameter of one eye, distinctly wider than length of antennomere 3; OI equal to 29.79.

Antennae (Fig. 16). Long, narrow, blackish brown, with punctuation and fine microgranulation, matte, AL 4.95 mm; AL/BL 0.59. Antennomeres 2 and 3 pale reddish brown, antennomeres 1-5 with pale setation, setation of antennomeres 6-11 partly darker. Antennomeres 4-11 1.45-1.70 times longer than antennomere 3, antennomeres 4-10 distinctly widest at apex. Antennomere 2 shortest.

RLA: 0.73 : 0.40 : 1.00 : 1.48 : 1.39 : 1.68 : 1.57 : 1.60 : 1.46 : 1.47 : 1.58.

RL/WA: 1.78 : 1.13 : 2.55 : 3.19 : 2.84 : 3.30 : 4.00 : 3.20 : 2.72 : 2.90 : 3.34.

Maxillary palpus. Palpomeres 2 and 3 pale reddish brown, with pale setation and microgranulation, slightly shiny, distinctly narrowest at base and widest at apex. Ultimate palpomere blackish brown with paler apex, broadly knife-shaped, rather matte.

Pronotum (Fig. 15). Black, approximately semicircular, widest near half of lateral margins, with dense pale setation, dense shallow punctuation and fine microgranulation. Punctures small-sized. PL 1.38 mm; PW 2.52 mm; PI equal to 54.76. Border lines thin, narrow, not clearly conspicuous, lateral margins arcuate, base finely bisinuate, distinctly narrower than base of elytra. Anterior margin slightly arcuate. Posterior angles finely sharp angled, anterior angles indistinct, rounded.

Ventral side of body black with setation and small punctures. Abdomen with 6 visible ventrites black with long and dense, pale setation, fine microgranulation and punctuation, punctures small-sized, slightly shiny.

Elytron. Black, suture brown, widest near half elytra length, dorsal surface with dense and relatively short, pale setation, fine microgranulation and punctuation. Elytral striae with distinct rows of small-sized punctures, elytral intervals flat, with sparse, irregular punctuation. EL 6.02 mm; EW 3.48 mm. EL/EW 1.73.

Scutellum. Triangular, reddish brown, sides narrowly darker, with fine microgranulation.

Elytral epipleura. Well developed, black with dense pale setation and dense punctuation, punctures small, widest near base, regularly narrowing to ventrite 1, then leads parallel.

Legs. Narrow, reddish brown, with ochre yellow setation, punctuation and fine microgranulation, punctures very small. Penultimate tarsomere of each tarsus distinctly widened and lobed. RLT: 1.00 : 0.50 : 0.56 : 0.58 : 1.56 (protarsus); 1.00 : 0.43 : 0.33 : 0.34 : 0.91 (mesotarsus); 1.00 : 0.34 : 0.26 : 0.59 (metatarsus).

Anterior tarsal claws with 15 visible teeth.

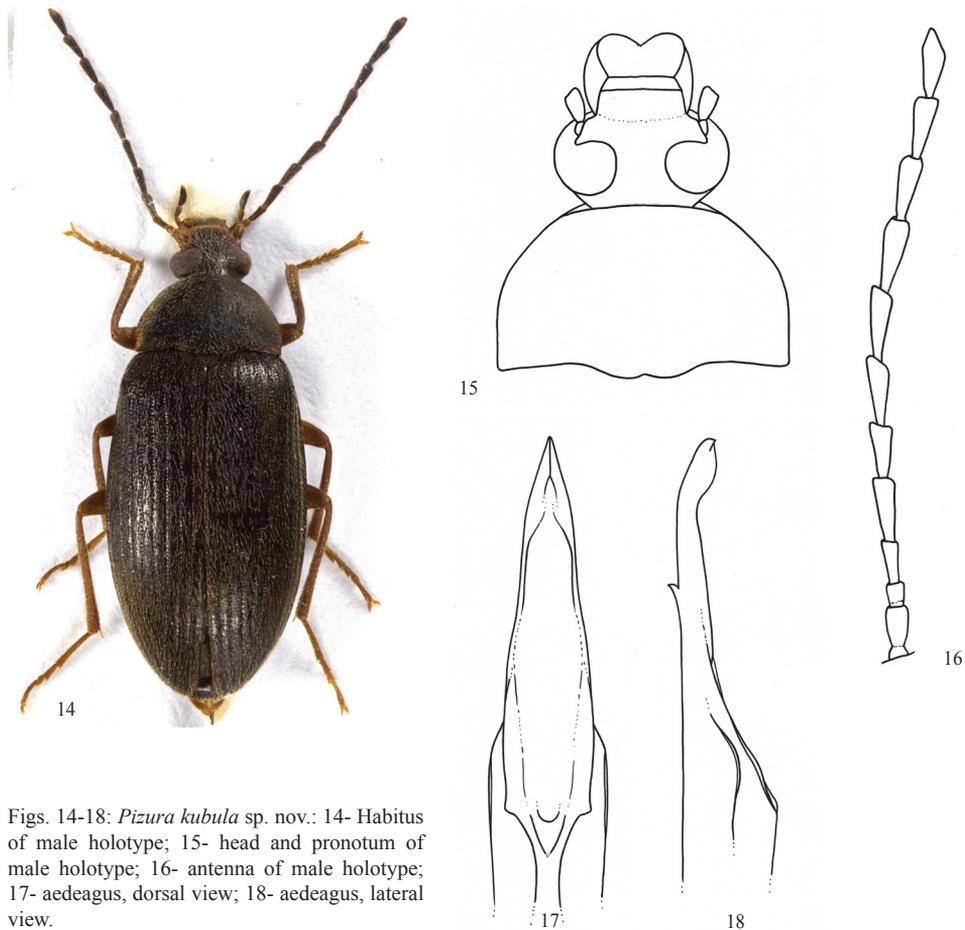
Aedeagus (Figs. 17, 18). Ochre yellow, shiny. Basal piece almost straight laterally and narrowing dorsally. Apical piece wide dorsally and beak-shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece 1: 2.59.

**Female.** Without distinct differences. Space between eyes very slightly wider, antennomere 3 slightly longer than those in male. Anterior tarsal claws with 7 visible teeth.

RLA: 0.72 : 0.41 : 1.00 : 1.28 : 1.22 : 1.35 : 1.33 : 1.40 : 1.37 : 1.37 : 1.56.

RL/WA: 1.56 : 1.33 : 3.05 : 2.90 : 2.71 : 3.20 : 3.76 : 3.06 : 2.79 : 2.94 : 3.85.

RLT: 1.00 : 0.67 : 0.46 : 0.52 : 1.41 (protarsus); 1.00 : 0.39 : 0.32 : 0.41 : 1.11 (mesotarsus); 1.00 : 0.36 : 0.22 : 0.61 (metatarsus).



Figs. 14-18: *Pizura kubula* sp. nov.: 14- Habitus of male holotype; 15- head and pronotum of male holotype; 16- antenna of male holotype; 17- aedeagus, dorsal view; 18- aedeagus, lateral view.

**Variability.** Colour variability: legs from pale reddish brown to blackish brown, dorsal surface from dark brown to black. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n=2). BL 8.52 mm (8.43-8.61 mm); HL 1.03 mm; HW 1.44 mm (1.42-1.45 mm); OI 31.64 (29.79-33.48); PL 1.36 mm (1.34-1.38 mm); PW 2.50 mm (2.47-2.52 mm); PI 54.51 (54.25-54.76); EL 6.13 mm (6.02-6.24 mm); EW 3.41 mm (3.33-3.48 mm). Females (n=2). BL 9.04 mm (8.69-9.39 mm); HL 1.09 mm (1.06-1.11 mm); HW 1.43 mm (1.38-1.47 mm); OI 35.24 (34.31-36.16); PL 1.40 mm (1.29-1.51 mm); PW 2.70 mm (2.52-2.88 mm); PI 51.96 (51.35-52.56); EL 6.56 mm (6.29-6.82 mm); EW 3.60 mm (3.40-3.79 mm).

**Differential diagnosis.** *Pizura kubula* sp. nov. distinctly differs from the species *Pizura barbucha* sp. nov. mainly by each of antennomeres 4-11 less than twice longer than antennomere 3 and by short anterior tarsal claws with only 12 visible teeth in males; while *P. barbucha* has each of antennomeres 4-11 more than twice longer than antennomere 3

and anterior tarsal claws of males are long, with 36 teeth. *P. kubula* is clearly different from the species *Pizura kubakubikula* sp. nov. mainly by border lines of pronotum indistinct and narrow, elytral intervals rather flat and unicolored elytron; while *P. kubakubikula* has border lines of pronotum clearly distinct, elytral intervals slightly convex and elytral suture distinctly paler than elytron itself.

**Etymology.** Named after the figure of bear (Kubula), in the famous fairy tale of Czech writer Vladislav Vančura.

**Distribution.** Thailand.

#### KEY TO THE SPECIES OF *PIZURA* GEN. NOV.

- A(B) Dorsal surface setose and rather matte, body rather flat, clypeus widened apically and distinctly, roundly excised at middle of apical margin, male abdomen with 6 visible ventrites, antennomere 3 1.5-2.5 times longer than antennomere 2; antennomere 4 only 1.25-2.5 times longer than antennomere 3. Differences between males and females (OI and ratios between antennomeres 2-4) very fine. .... *Pizura* gen. nov. .... 1
- B(A) Dorsal surface glabrous (sparsely setose), shiny. Clypeus not widened apically and its apical margin straight, without excision at middle; abdomen with 5 visible ventrites, male antennomere 3 is approximately as long as or very slightly longer than antennomere 2, male antennomere 4 is more than 3.5 times longer than antennomere 3. Differences between males and females (OI and ratios between antennomeres 2-4) distinct. .  
..... *Hymenalia* Mulsant
- 1(2) Antennomeres 4-11 more than twice longer than antennomere 3, anterior tarsal claws of male long, with 36 visible teeth. Habitus as in Figs. 1-3, head and pronotum (Fig. 4), antenna (Fig. 5), maxillary palpus (Fig. 6), aedeagus (Figs. 7, 8). Thailand. .... *Pizura barbucha* sp. nov.
- 2(1) Antennomeres 4-11 less than twice longer than antennomere 3, anterior tarsal claws of male short, with 12 respectively 15 teeth. .... 3
- 3(4) Border lines of pronotum distinct, elytral intervals slightly convex, elytral suture distinctly paler than elytron itself. Habitus as in Fig. 9, head and pronotum (Fig. 10), antenna (Fig. 11), aedeagus (Figs. 12, 13). Thailand. .... *Pizura kubakubikula* sp. nov.
- 4(3) Border lines of pronotum narrow, thin, not clearly distinct, elytral intervals flat, elytron unicolored blackish brown. Habitus as in Fig. 14, head and pronotum (Fig. 15), antenna (Fig. 16), aedeagus (Figs. 17, 18). Thailand. .... *Pizura kubula* sp. nov.

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#### REFERENCES

- BORCHMANN F. 1910: PARS 3: ALLECULIDAE. IN: JUNK W. & SCHENKLING S. (eds.): *Coleopterorum Catalogus*. Berlin: W. Junk, 80 pp.
- CAMPBELL J. M. 1965: A revision of the genus *Charisius* (Coleoptera: Alleculidae). *The Coleopterist's Bulletin* 19: 41-56.
- CAMPBELL J. M. & MARSHALL J. D. 1964: The ocular index and its applications to the taxonomy of the Alleculidae (Coleoptera). *The Coleopterist's Bulletin* 18: 42.
- LAPORTE F. L. N. de [comte de Castelnau] 1840: *Histoire naturelle de insectes Coléoptères; avec une introduction renfermant l'anatomie et la physiologie de animaux articulés, par M. Brullé. Tome deuxième*. Paris: P. Duménil, 563 + [1] pp., pls. 20-37.
- MADER L. 1928: *Alleculidae*. Columns 901-913. In: WINKLER A. (ed.) 1924-1932: *Catalogus coleopterorum regionis palaearticae*. Wien: Winkler & Wagner, 1698 pp.
- MULSANT M. E. 1856: *Histoire naturelle des Coléoptères de France. Pectinipèdes*. Paris: L. Maisson, 96 pp.

- NOVÁK V. 2007: New species of the genus *Hymenalia* Mulsant, 1856 (Coleoptera: Tenebrionidae: Alleculinae) from Palaearctic region. *Studies and Reports of District Museum Prague-East* (1-2) 3: 149-170.
- NOVÁK V. 2008: New Alleculinae from China (Coleoptera: Tenebrionidae). *VERNATE (Veröffentlichungen Naturkundemuseum Erfurt)* 27: 207-220.
- NOVÁK V. 2010: Review of *Hymenalia* species (Coleoptera: Tenebrionidae: Alleculinae) from China. *Studies and Reports, Taxonomical Series* 6 (1-2): 190-231.
- NOVÁK V. 2015a: New *Hymenalia* species (Coleoptera: Tenebrionidae: Alleculinae) from China and Oriental Region. *Studies and Reports, Taxonomical Series* 11 (1): 371-389.
- NOVÁK V. 2015b: Contribution to the knowledge of *Hymenalia badia* species group from the Palaearctic Region (Coleoptera: Tenebrionidae: Alleculinae). *Folia Heyrovskyana, Series A* 23 (2): 71-88.
- NOVÁK V. & PETTERSSON R. 2008: *Alleculinae*. Pp. 319-339. In: LÖBL I. & A. SMETANA (eds.): *Catalogue of Palaearctic Coleoptera, Vol. 5. Tenebrionoidea*. Stenstrup: Apollo Books, 670 pp.

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