# New genera of Alleculinae (Coleoptera: Tenebrionidae: Alleculinae: Alleculini) from Palaearctic and Oriental Regions VIII - *Zizu* gen. nov.

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**Abstract.** A new genus of Alleculini Laporte, 1840 - *Zizu* gen. nov. is described to include the following new species *Zizu keralaensis* sp. nov. and *Zizu kejvali* sp. nov. as a type species both from India, *Zizu nepalensis* sp. nov. from Nepal, *Zizu novis* sp. nov. from Thailand, *Zizu tenebris* sp. nov. from Pakistan and *Zizu viator* sp. nov. from Laos. The new genus is compared with similar genera (*Borboresthes* Fairmaire, 1897 and *Bobina* Novák, 2015) and new species are described, illustrated and keyed.

#### INTRODUCTION

The eighth part of descriptions of new Alleculinae genera from the Palaearctic and Oriental Regions follows previous works by the present author (Novák 2008, 2013, 2015a, b, c, 2016, 2018).

The new genus Zizu gen. nov. is described to include the new species Zizu keralaensis sp. nov. and Zizu kejvali sp. nov. (as a type species) from India, Zizu nepalensis sp. nov. from Nepal, Zizu novis sp. nov. from Thailand, Zizu tenebris sp. nov. from Pakistan and Zizu viator sp. nov. from Laos. The new genus is compared with similar genera Borboresthes Fairmaire, 1897 and Bobina Novák, 2015. All new species are described, illustrated and keyed.

The differentiating characters are mainly shape of body, long tibiae, ultimate antennomere arcuate, half drop-shaped, widest near middle, large eyes with very narrow space between eyes and ultimate ventrite of male with large, shallow depression.

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

In the list of type or examined material, a slash (/) separates data in separate rows. The following collection codens are used:

DHBC private collection of David Hauck, Brno, Czech Republic;

NMEG collection of Naturkundemuseum, Erfurt, Germany;

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

SMNS collection of Staatliches Museum fur Naturkunde, Stuttgart, Germany.

Measurements of body parts and corresponding abbreviations used in text are as follows: ALtotal 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).

All locality labels are in white, printed black.

Measurements were made with Olympus SZ 40 stereoscopic microscope with continuous magnification and with Soft Imaging System AnalySIS. Snapshots were taken by using camera Canon EOS 550 D, and Canon Macro Photo Lens MP-E and software Helicon Focus 5.2.

#### **TAXONOMY**

### DESCRIPTION OF THE GENUS ZIZU GEN. NOV.

### Zizu gen. nov.

Type species: Zizu kejvali sp. nov.

**Description.** Habitus as in Figs. 1, 6, 11, 16, 21 and 26, body relatively narrow, elongate BL/EW (2.67-2.87), slightly oval, slightly convex, dorsal surface with punctuation, microgranulation and pale setation, widest near half elytra length. Head (Figs. 2, 7, 12, 17, 22 and 27) relatively small, approximately as wide as long. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; OI (from 12 to 19). Antenna (Figs. 3, 8, 13, 18, 23 and 28) long, slightly exceeding half body length AL/ BL (0.54-0.62), narrow, filiform. Antennomere 2 shortest, antennomere 4 longest, each of antennomeres 4-11 almost longer than antennomere 3. Ultimate antennomere half dropshaped, widest near middle. Ultimate palpomere widely triangular, palpomeres 2 and 3 distinctly dilated anteriorly. Pronotum (Figs. 2, 7, 12, 17, 22 and 27) transverse (PI 56-65), setated, with punctuation, punctures almost very small and shallow, almost smaller than those in head, interspaces between punctures broad. Border lines distinct and complete or in the middle of base or in the middle of anterior margin not clearly distinct. Lateral margins straight in basal part or arcuate, posterior margin bisinuate, anterior angles indistinct or obtuse, posterior angles rectangular or obtuse. Ultimate ventrite with large, roundly triangular depression in middle. Elytron elongate EL/EW (1.80-1.96), slightly oval, slightly convex. Dorsal surface setated. Elytral striae with distinct rows of punctures, almost distinctly larger and coarser than those in pronotum, elytral interspaces with fine microgranulation and

very small and shallow punctures. Widest near middle. Elytral epipleura well-developed, regularly narrowing to ventrite 1 or to metasternum, then leading parallel. Legs long and relatively narrow, tibiae slightly dilated anteriorly, protibiae with short strong setae in inner side. Pro- and mesotarsomeres 3, 4 and metatarsomere 3 widened and lobed, metatarsomere 1 long. Anterior tarsal claws with 8-12 visible teeth. Dorsal view of apical piece of aedeagus (Figs. 4, 9, 14, 19, 24 and 29), lateral view of apical piece as in Figs. 5, 10, 15, 20, 25 and 30.

**Female** without distinct differences, only body more robust and broader, space between eyes wider than those in males. Anterior tarsal claws have less visible teeth than in males.

**Differential diagnosis.** Species of new genus *Zizu* gen. nov. are similar to those of the genera *Borboresthes* Fairmaire, 1897 and *Bobina* Novák, 2015.

Species of *Zizu* differ from species of *Borboresthes* mainly by habitus more elongate, only slightly oval (as in Fig. 1), by large eyes with very narrow space between eyes (OI in males 12-19; in females 21-33). This sexual dimorphism is not usual in *Borboresthes* species. Ultimate antennomere is arcuate, half drop shaped, widest near middle, and ultimate ventrites of males have large, shallow depression; while *Borboresthes* species have usually eyes small, space between eyes wide, approximately as wide in males as in females, ultimate antennomere is narrow, filiform and ultimate ventrites have no depression.

Species of *Zizu* are distinctly different from species of *Bobina* mainly by body more oval BL/EW (2.67-2.87), by anterior angles of pronotum almost indistinct, by anterior margin of pronotum arcuate, by lateral margins of pronotum arcuate in apical part, by male protibiae long and straight, by ultimate antennomere arcuate, half drop shaped, widest near middle, by apex of elytra rounded and ultimate ventrite of male with large depression; while *Bobina* species have body in males more elongate BL/EW (2.99-3.27), anterior margin of pronotum is usually excised, lateral margins of pronotum are straight or very slightly arcuate, anterior angles of pronotum are distinct, protibiae of males are usually short and bent, ultimate antennomere is narrow, filiform, apex of elytron usually ended by short extension and ultimate ventrite is without depression.

**Etymology.** Named after our four-legged friend - male cat Zizu. Gender: masculine. **Distribution.** India, Laos, Nepal, Pakistan, Thailand.

# Zizu keralaensis sp. nov. (Figs. 1-5)

Type locality. Southern India, Kerala state, Ponmudi Hill resort, 30 km NE of Trivandrum,  $77^{\circ}$  06 E,  $8^{\circ}46 \text{ N}$  ca 1300-1500 m.

Type material. Holotype ( $\circlearrowleft$ ): S INDIA Kerala state 1999 / PONMUDI Hill resort 7.-13.v. / 30 km NE of TRIVANDRUM / 77° 06 E; 8°46 N; ca 1300-1500 m / Z. Kejval & M. Trýzna lgt., (VNPC). The types are provided with a printed red label: 'Zizu / keralaensis sp. nov. / HOLOTYPUS / V. Novák det. 2018°.

**Description of holotype.** Habitus as in Fig. 1, body relatively narrow, elongate, slightly oval, slightly convex, dorsal surface from ochre yellow to brown, with punctuation,

microgranulation and ochre yellow setation, BL 9.04 mm. Widest near half elytra length; BL/EW 2.87.

Head (Fig. 2) relatively small, approximately as wide as long, with microgranulation, short pale setation and relatively dense punctuation, punctures medium sized and shallow. Posterior part dark reddish brown, shiny, microgranulation very fine, but distinct. Anterior part slightly paler than posterior part, reddish brown, with distinct microgranulation. Clypeus pale reddish brown with fine microgranulation and ochre yellow setation distinctly denser than in head, apex straight. Mandibles shiny, pale brown, with sides dark. HW 1.38 mm; HW/PW 0.56. HL (visible part) 1.34 mm. Eyes large, transverse, excised, space between eyes very narrow, slightly wider than length of antennomere 2; OI equal to 13.58.

Antenna (Fig. 3). Long (AL 4.84 mm, slightly exceeding half body length AL/BL 0.54), filiform, narrow, unicolored ochre yellow, with fine microgranulation, small, shallow punctures and relatively short, recumbent, ochre yellow setation. Antennomeres 1 and 2 slightly shiny, antennomeres 3-11 rather matte. Antennomere 2 shortest, antennomere 4 longest, each of antennomeres 4-11 distinctly longer than antennomere 3. Ultimate antennomere half drop-shaped, widest near middle.

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RLA(1-11): 0.77 : 0.31 : 1.00 : 1.55 : 1.37 : 1.34 : 1.29 : 1.26 : 1.34 : 1.26 : 1.32.
RL/WA(1-11): 1.78 : 1.06 : 3.88 : 5.33 : 4.25 : 4.15 : 3.81 : 3.55 : 4.15 : 3.39 : 3.42.
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Maxillary palpus ochre yellow, slightly shiny, with short, ochre yellow setae, fine microgranulation and very small and shallow punctures. Ultimate palpomere widely triangular, palpomeres 2 and 3 distinctly dilated anteriorly.

Pronotum (Fig. 2). Dark reddish brown, transverse, arcuate, slightly convex, with long, semierect, ochre yellow setation, relatively sparse punctuation, punctures very small, interspaces between punctures very broad with distinct microgranulation, matte. Border lines narrow, distinct and complete. Lateral margins straight in basal part, anterior margin and lateral margins in apical half arcuate, posterior margin bisinuate, anterior angles indistinct, posterior angles slightly obtuse. PL 1.58 mm; PW 2.48 mm; PI equal to 63.71.

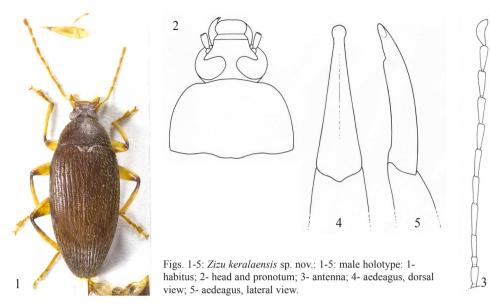
Ventral side of body reddish brown with punctuation and short pale setation. Abdomen dark brown, ventrites with a few pale setae, very small and shallow punctures, fine microgranulation, shiny. Ventrite 1 slightly paler than other ventrites. Ultimate ventrite with large, roundly triangular depression in middle.

Elytron brown, elongate, slightly oval, slightly convex. Dorsal surface with ochre yellow, long and relatively dense, semierect setation, slightly shiny. Elytral striae with distinct rows of small sized punctures distinctly larger than those in pronotum, elytral interspaces slightly convex, with fine microgranulation and very small, sparse and shallow punctures. EL 6.12 mm; widest near middle, EW 3.15 mm. EL/EW 1.94.

Scutellum brown, with dark sides, distinctly paler than pronotum, pentagonal, with long, ochre yellow setae and microgranulation.

Elytral epipleura well-developed, reddish brown, with pale setae, regularly narrowing to metasternum in basal half, then relatively wide, leading parallel.

Legs long and relatively narrow, with very fine microgranulation. Femora and tibiae yellow, shiny with ochre yellow setation, apex of femora and basal part of tibiae blackish brown or dark brown. Tibiae slightly dilated anteriorly, protibiae slightly bent, with



short strong setae in inner side. Tarsi ochre yellow, pro- and mesotarsomeres 3, 4 and metatarsomere 3 widened and lobed. RLT: 1.00: 0.63: 0.52: 0.61: 1.18 (protarsus); 1.00: 0.37: 0.39: 0.42: 0.82 (mesotarsus); 1.00: 0.31: 0.23: 0.48 (metatarsus).

Both anterior tarsal claws with 11 visible teeth.

Aedeagus (Figs. 4 and 5). Ochre yellow, slightly shiny. Basal piece slightly arcuate laterally and in apical part distinctly narrowing dorsally. Apical piece elongate triangular with rounded top dorsally and beak-shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1: 3.75.

#### Female unknown.

**Differential diagnosis.** New species *Zizu keralaensis* sp. nov. distinctly differs from similar species *Zizu tenebris* sp. nov. mainly by metatarsomeres 1 oval in cross section; while *Z. tenebris* has metatarsomeres 1 flat.

- *Z. keralaensis* is clearly different from similar species *Z. viator* sp. nov. mainly by anterior part of head without transverse, rounded keel; while *Z. viator* has in anterior part of head transverse, rounded keel.
- Z. keralaensis distinctly differs from similar species Z. nepalensis sp. nov. mainly by punctuation of pronotum sparse, punctures very small and interspaces between punctures distinctly wider than those in pronotum of Z. nepalensis.
- Z. keralaensis is clearly different from similar species Z. novis sp. nov. mainly by legs bicolour (yellow with basal part of tibiae blackish brown and by distinctly larger punctures in rows of elytral striae than those in rows of elytral striae of Z. novis, which has legs unicolored pale reddish brown.
- Z. keralaensis distinctly differs from similar species Z. kejvali sp. nov. mainly by

antennomeres 5-11 1.26-1.37 times longer than antennomere 3; while *Z. kejvali* has antennomeres 5-11 only 0.95-1.16 times longer than antennomere 3.

**Etymology.** Named after the type locality - Kerala state (India).

Distribution. India (Kerala state).

### Zizu kejvali sp. nov. (Figs. 6-10)

**Type locality.** Southern India, Karanataka state, Coorg. District, 10 km SE of Virajpet, near road Virajpet - Cannanore, 75°46′E, 12°06′N, 500-900 m.

**Type material.** Holotype ( $\circlearrowleft$ ): S-INDIA Karanataka state / Coorg. Distr. 10 km SE of / Virajpet, near road Virajpet / -Cannanore 75° 46 E 12°06 N / 500-900 m, 5.-7.vi.1999 / Z. Kejval & M. Trýzna lgt,, (VNPC). Paratypes: (1  $\circlearrowleft$ , 10  $\circlearrowleft$  $\circlearrowleft$ ): same data as holotype, (VNPC); (2  $\circlearrowleft$  $\circlearrowleft$ ): INDIA, Maharastra, ca 30 / km W of Pune, the valley / E of MULSHI, 18°29′N / 73°30′E, ca 700 m, 13.- / 16.vi.2006 Z. Kejval lgt., (VNPC). The types are provided with a printed red label: 'Zizu / kejvali sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2018°.

**Description of holotype.** Habitus as in Fig. 6, body relatively narrow, elongate, slightly oval, slightly convex, dorsal surface from yellow to reddish brown, with punctuation, microgranulation and ochre yellow setation, BL 8.38 mm. Widest near half elytra length; BL/EW 2.82.

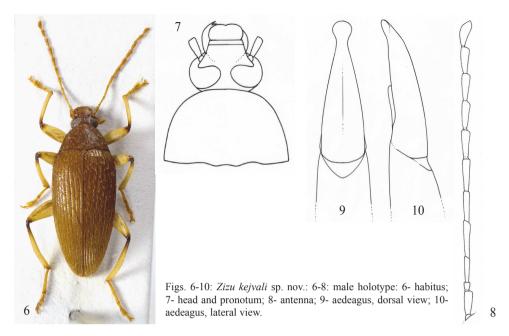
Head (Fig. 7) relatively small, approximately as wide as long, with microgranulation, very sparse and short ochre yellow setae and relatively dense punctuation, punctures medium sized and shallow. Posterior part reddish brown, slightly darker than pale reddish brown anterior part and clypeus. Clypeus with sparse, very small and shallow punctures, ochre yellow setation distinctly denser and longer than in head and distinct microgranulation and microrugosities, apex straight. Mandibles ochre yellow with dark sides, shiny. HW 1.28 mm; HW/PW 0.56. HL (visible part) 1.26 mm. Eyes large, transverse, excised, space between eyes very narrow, slightly wider than length of antennomere 2; OI equal to 17.14.

Antenna (Fig. 8). Long (AL 4.84 mm, slightly exceeding half body length AL/BL 0.58), filiform, narrow, unicolored ochre yellow, with very fine microgranulation, sparse, shallow punctures and recumbent, ochre yellow setation. Antennomeres 1 and 2 slightly shiny, antennomeres 3-11 rather matte. Antennomere 2 shortest, antennomere 4 longest, each of antennomeres 4-11 longer than or approximately as long as antennomere 3. Ultimate antennomere half drop shaped, widest near middle.

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RLA(1-11): 0.92 : 0.25 : 1.00 : 1.25 : 1.11 : 1.10 : 1.06 : 1.16 : 0.99 : 1.06 : 0.95.
RL/WA(1-11): 3.53 : 1.20 : 4.87 : 4.56 : 4.26 : 3.81 : 3.08 : 3.15 : 3.00 : 3.50 : 2.65.
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Maxillary palpus ochre yellow, rather matte, with short, ochre yellow setation and fine microgranulation. Ultimate palpomere widely triangular, palpomeres 2 and 3 distinctly dilated anteriorly.

Pronotum (Fig. 7). Reddish brown, transverse, with long, semierect, ochre yellow setation, relatively sparse punctuation, punctures very small and shallow, distinctly smaller than those in head, interspaces between punctures broad, shiny. Border lines distinct and complete. Lateral margins straight in basal half, in anterior part and anterior margin arcuate, posterior margin bisinuate, anterior angles indistinct, posterior angles rectangular. PL 1.30 mm; PW 2.30 mm; PI equal to 56.52.



Ventral side of body pale reddish brown with relatively sparse and short pale setae. Punctuation of meso- and metathorax distinct, punctures large, distinctly larger than those in prothorax. Abdomen brown, ventrites with a few pale setae, very small and shallow punctures, fine microgranulation, shiny. Ultimate ventrite with large, roundly triangular depression in middle.

Elytron pale reddish brown, elongate, slightly convex, shiny. Dorsal surface with ochre yellow, long, semierected setation. Elytral striae with distinct rows of small sized punctures, distinctly larger and coarser than those in pronotum, elytral interspaces with fine microgranulation and very small and shallow punctures. EL 5.82 mm; widest near half elytra length, EW 2.97 mm; EL/EW 1.96.

Scutellum. Pale reddish brown as elytron itself, with sides narrowly darker than elytron, pentagonally shaped, with microgranulation and long pale setae, slightly shiny.

Elytral epipleura well-developed, pale reddish brown as elytron itself, with pale setae and punctures, regularly narrowing to venrite 1 in basal half, then relatively narrow leads parallel.

Legs long and relatively narrow, with very fine microgranulation. Femora and tibiae yellow, shiny with ochre yellow setation, apex of femora and basal part of tibiae blackish brown or dark brown. Tibiae slightly dilated anteriorly, protibiae slightly bent, with short strong setae in inner side. Tarsi ochre yellow, pro- and mesotarsomeres 3, 4 and metatarsomere 3 widened and lobed. RLT: 1.00:0.45:0.65:0.66:1.19 (protarsus); 1.00:0.37:0.39:0.35:0.61 (mesotarsus); 1.00:0.33:0.28:0.45 (metatarsus).

Both anterior tarsal claws with 11 visible teeth.

Aedeagus (Figs. 9 and 10). Ochre yellow, slightly shiny. Basal piece slightly arcuate

laterally and in apical part distinctly narrowing dorsally. Apical piece elongate triangular with rounded top dorsally and beak-shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1: 3.70.

**Female** without distinct differences only body slightly broader, space between eyes wider (OI approximately 24), tibiae shorter than those in male. Anterior tarsal claws with 8 teeth.

**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 8.80 mm (8.38-9.22 mm); HL 1.33 mm (1.26-1.40 mm); HW 1.34 mm (1.28-1.39 mm); OI 15.53 (13.92-17.14); PL 1.29 mm (1.27-1.30 mm); PW 2.45 mm (2.30-2.60 mm); PI 52.69 (48.85-56.52); EL 6.19 mm (5.82-6.55 mm); EW 3.14 mm (2.97-3.31 mm). Females (n=12). BL 9.46 mm (8.65-10.56 mm); HL 1.44 mm (1.28-1.59 mm); HW 1.44 mm (1.32-1.58 mm); OI 24.31 (21.24-26.67); PL 1.41 mm (1.30-1.51 mm); PW 2.71 mm (2.48-2.96 mm); PI 51.95 (49.46-56.85); EL 6.62 mm (5.96-7.53 mm); EW 3.61 mm (3.35-3.90 mm).

**Differential diagnosis.** New species *Zizu kejvali* sp. nov. distinctly differs from similar species *Zizu tenebris* sp. nov. mainly by metatarsomeres 1 oval in cross section; while *Z. tenebris* has metatarsomeres 1 flat.

- *Z. kejvali* is clearly different from similar species *Z. viator* sp. nov. mainly by anterior part of head without transverse, rounded keel; while *Z. viator* has in anterior part of head transverse, rounded keel.
- *Z. kejvali* distinctly differs from similar species *Z. nepalensis* sp. nov. mainly by punctuation of pronotum sparse, punctures very small and interspaces between punctures distinctly wider than those in pronotum of *Z. nepalensis*.
- Z. kejvali is clearly different from similar species Z. novis sp. nov. mainly by legs bicolour (yellow with basal part of tibiae blackish brown and by distinctly larger punctures in rows of elytral striae than those in rows of elytral striae of Z. novis, which has legs unicolored pale reddish brown.
- *Z. kejvali* distinctly differs from similar species *Z. keralaensis* sp. nov. mainly by antennomeres 5-11 only 0.95-1.16 times longer than antennomere 3; while *Z. keralaensis* has antennomeres 5-11 1.26-1.37 times longer than antennomere 3.

**Etymology.** New species is dedicated to one of the collectors - Zbyněk Kejval (Domažlice, Czech Republic), my friend and expert in beetle family Anthicidae.

**Distribution.** India (Karanataka state).

## Zizu nepalensis sp. nov. (Figs. 11-15)

Type locality. Nepal, province Narayani, 27°34′29′′N, 84°29′55′′E, Sauraha, Rapti-Ufer, 150 m.

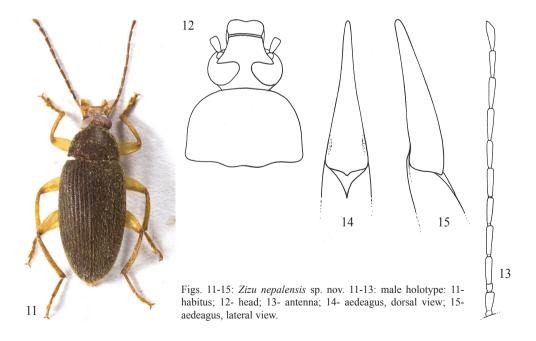
/ "Riverside" LF, N 27°34′ / 29′′, E 84°29′55′′, 160 m / 06-08.VII.2009, leg / J. Küßner #66, (NMEG); (2  $\Diamond \Diamond$ , 1  $\Diamond$ ): 548 NEPAL: Chitwan Distr. / Chitwan N. P.: Sauraha / 150 m, 31.V.-4.VI.1997 / leg. W. SCHAWALLER, (SMNS, VNPC); (1  $\Diamond$ ): NEPAL,P: Narayani / Chitawan, Gunganagar / 09.V.2005, LF / leg. D. Ahrens, (SMNS). The types are provided with a printed red label: 'Zizu / nepalensis sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2018′.

**Description of holotype.** Habitus as in Fig. 11, body elongate, slightly oval, slightly convex, dorsal surface from yellow to dark brown, with punctuation, microgranulation and ochre yellow setation, BL 7.22 mm. Widest near half elytra length; BL/EW 2.81.

Head (Fig. 12) relatively small, narrow, matte, as long as wide, with microgranulation, long, ochre yellow setation and dense punctuation, punctures shallow, medium-sized, interspaces between punctures very narrow. Posterior part dark reddish brown, slightly darker than pale reddish brown anterior part and clypeus. Clypeus with denser setation than those in head, apex slightly excised. HW 1.23 mm; HW/PW 0.63. HL (visible part) 1.23 mm. Eyes large, transverse, excised, space between eyes very narrow, slightly wider than length of antennomere 2; OI equal to 18.88.

Antenna (Fig. 13). Long (AL 4.37 mm, slightly exceeding half body length AL/BL 0.61), filiform, narrow, with fine microgranulation, sparse, shallow punctures and recumbent, ochre yellow setation. Antennomeres 1, 2 and basal half of antennomere 3 ochre yellow, slightly shiny, apical part of antennomere 3 pale brown, antennomeres 4-11 brown, rather matte. Antennomere 2 shortest, antennomere 4 longest, each of antennomeres 4-11 distinctly longer than antennomere 3. Ultimate antennomere narrowly half drop shaped, widest near apex.

RLA(1-11): 0.66 : 0.31 : 1.00 : 1.15 : 1.10 : 1.12 : 1.11 : 1.09 : 1.12 : 1.13 : 1.09. RL/WA(1-11): 1.95 : 1.12 : 4.13 : 4.44 : 3.78 : 4.14 : 4.60 : 4.35 : 4.22 : 3.33 : 3.36.



Maxillary palpus pale brown, rather matte, with ochre yellow setation and fine microgranulation. Ultimate palpomere widely triangular, palpomeres 2 and 3 distinctly dilated anteriorly.

Pronotum (Fig. 12). Dark brown, transverse, with long, erected, ochre yellow setation and dense punctuation, punctures medium-sized and coarse, slightly larger and coarser than those in head, interspaces between punctures narrow, distinctly narrower than diameter of punctures, with microgranulation, matte. Border lines narrow, distinct and complete only in the middle of anterior margin and base not clearly conspicuous. Lateral margins and anterior margin in middle arcuate, near base lateral margins slightly excised, posterior margin bisinuate, anterior angles indistinct, posterior angles roundly obtuse. PL 1.26 mm; PW 1.94 mm; PI equal to 64.95.

Ventral side of body reddish brown with pale setation and punctuation. Abdomen brown, with relatively dense small punctures, fine microgranulation and long, pale setation, shiny. Ultimate ventrite with large, shallow, pale brown, impunctate, triangular depression in middle.

Elytron dark brown, slightly oval, slightly convex, matte. Dorsal surface with dense and long, semierect, ochre yellow setation. Elytral striae with distinct rows of large punctures, slightly larger than those in pronotum. Elytral interspaces slightly convex, with microgranulation and sparse, small and shallow punctures. EL 4.73 mm; widest near middle, EW 2.57 mm; EL/EW 1.84.

Scutellum. Dark brown as elytron itself, triangular with microgranulation, punctures and long, ochre yellow setae, matte.

Elytral epipleura well-developed, dark brown as elytron itself, with pale setation, regularly narrowing to ventrite 1 in basal half, then relatively wide leads parallel.

Legs long and narrow, with relatively dense and long, ochre yellow setation. Femora yellow, tibiae ochre yellow slightly dilated anteriorly, tarsi pale brown. Tibiae and tarsi with very small punctures and fine microgranulation. Pro- and mesotarsomeres 3, 4 and metatarsomere 3 widened and lobed. RLT: 1.00: 0.62: 0.75: 0.71: 1.14 (protarsus); 1.00: 0.49: 0.27: 0.46: 0.84 (mesotarsus); 1.00: 0.37: 0.33: 0.44 (metatarsus).

Both anterior tarsal claws with 11 visible teeth.

Aedeagus (Figs. 14 and 15). Ochre yellow, shiny. Basal piece arcuate laterally and slightly narrowing dorsally. Apical piece narrow, elongate triangular dorsally and narrowly beak-shaped laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1: 2.52.

**Female** without distinct differences, only space between eyes distinctly wider than those in male (OI approximately 30). Anterior tarsal claws with 8 visible teeth.

**Variability.** The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n=10). BL 7.40 mm (7.02-7.69 mm); HL 1.23 mm (1.20-1.26 mm); HW 1.25 mm (1.23-1.27 mm); OI 17.85 (16.28-18.88); PL 1.28 mm (1.26-1.30 mm); PW 2.02 mm (1.94-2.10 mm); PI 63.16 (60.48-64.95); EL 4.73 mm (4.56-5.13 mm); EW 2.61 mm (2.57-2.67 mm). Females (n=15). BL 7.67 mm (7.45-8.04 mm); HL

1.30 mm (1.28-1.35 mm); HW 1.27 mm (1.24-1.33 mm); OI 30.47 (27.83-32.30); PL 1.31 mm (1.23-1.36 mm); PW 2.13 mm (2.00-2.31 mm); PI 61.58 (58.85-67.00); EL 5.06 mm (4.83-5.33 mm); EW 2.75 mm (2.68-2.88 mm).

**Differential diagnosis.** New species *Zizu nepalensis* sp. nov. distinctly differs from similar species *Zizu tenebris* sp. nov. mainly by metatarsomeres 1 oval in cross section; while *Z. tenebris* has metatarsomeres 1 flat.

*Z. nepalensis* is clearly different from similar species *Z. viator* sp. nov. mainly by anterior part of head without transverse, rounded keel; while *Z. viator* has in anterior part of head transverse, rounded keel.

*Z. nepalensis* distinctly differs from similar species *Z. keralaensis* sp. nov., *Z. kejvali* sp. nov. and *Z. novis* sp. nov. mainly by punctuation of pronotum dense, punctures larger and interspaces between punctures narrower than those in pronotum of *Z. keralaensis*, *Z. kejvali* and *Z. novis*.

**Etymology.** Named after the country of origin - Nepal.

**Distribution.** Nepal.

**Zizu novis sp. nov.** (Figs. 16-20)

Type locality. Northern Thailand, environ of Chiang Dao.

**Type material.** Holotype (♂): THAILAND bor. / CHIANG DAO env. / 21.5.-4.6.1995 / lg. M. Snížek, (VNPC). The types are provided with a printed red label: 'Zizu / novis sp. nov. / HOLOTYPUS / V. Novák det. 2018'.

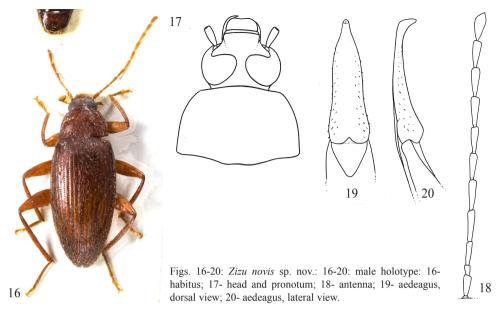
**Description of holotype.** Habitus as in Fig. 16, body relatively narrow, elongate, slightly oval, slightly convex, dorsal surface from pale reddish brown to dark reddish brown, with punctuation, microgranulation and ochre yellow setation, BL 7.44 mm. Widest near half elytra length; BL/EW 2.85.

Head (Fig. 17) relatively small, approximately as long as wide, with microgranulation and long, ochre yellow setation. Posterior part dark reddish brown, matte, distinctly darker than reddish brown anterior part and clypeus. Anterior part and clypeus shiny with shallow and small punctures, apex of clypeus straight. HW 1.18 mm; HW/PW 0.62. HL (visible part) 1.17 mm. Eyes large, transverse, excised, space between eyes very narrow, approximately as wide as antennomere 2 long; OI equal to 13.51.

Antenna (Fig. 18). Long (AL 4.20 mm, slightly exceeding half body length AL/BL 0.57), filiform, narrow, unicolored pale brown, with fine microgranulation, sparse, shallow punctures and pale setation. Antennomeres 1-4 slightly shiny, antennomeres 4-11 rather matte. Antennomere 2 shortest, antennomere 4 longest, each of antennomeres 4-11 distinctly longer than antennomere 3. Ultimate antennomere half drop shaped, widest near middle.

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RLA(1-11): 0.88: 0.46: 1.00: 1.26: 1.16: 1.18: 1.12: 1.21: 1.19: 1.07: 1.18. RL/WA(1-11): 2.38: 1.73: 3.56: 4.71: 3.88: 4.19: 4.27: 3.83: 3.78: 3.39: 3.35.
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Maxillary palpus pale reddish brown, rather matte, with ochre yellow setation and fine microgranulation. Ultimate palpomere widely triangular, palpomeres 2 and 3 distinctly dilated anteriorly.



Pronotum (Fig. 17). Reddish brown, transverse, with long, ochre yellow setation, fine microgranulation and sparse punctuation, punctures very small and shallow, matte. Border lines distinct and complete only in the middle of base not clearly conspicuous. Lateral margins straight in basal part, in apical half and anterior margin arcuate, posterior margin bisinuate, anterior and posterior angles obtuse. PL 1.17 mm; PW 1.91 mm; PI equal to 61.26.

Ventral side of body reddish brown with punctures and sparse and short pale setae. Abdomen shiny, with small, shallow punctuation, fine microgranulation and a few pale setae. Ventrites reddish brown, apex of ventrites 3, 4 and partly ultimate ventrite brown or dark brown. Reddish brown ultimate ventrite rather matte, with large, roundly triangular pale brown depression in middle.

Elytron reddish brown, elongate, slightly oval, slightly convex. Dorsal surface with dense, ochre yellow, semierected setation, rather matte. Elytral striae with distinct rows of small punctures, distinctly larger than those in pronotum. Elytral interspaces slightly convex, with fine microgranulation and very small, sparse and shallow punctures. EL 5.10 mm; widest near middle, EW 2.61 mm; EL/EW 1.95.

Scutellum. Reddish brown, triangular with ochre yellow setae.

Elytral epipleura well-developed, reddish brown as elytron itself, with pale setation regularly narrowing to ventrite 1 in basal half, then relatively wide leads parallel.

Legs long and narrow, pale reddish brown, with relatively dense and long, pale setation, very small and shallow punctures and fine microgranulation. Tibiae slightly dilated anteriorly, protibiae slightly bent, femora ochre yellow, strong. Pro- and mesotarsomeres 3, 4 and metatarsomere 3 widened and lobed. RLT: 1.00: 0.48: 0.50: 0.55: 1.26 (protarsus); 1.00: 0.19: 0.21: 0.27: 0.48 (mesotarsus); 1.00: 0.24: 0.21: 0.34 (metatarsus).

Both anterior tarsal claws with 8 visible teeth.

Aedeagus (Figs. 19 and 20). Ochre yellow, slightly shiny. Basal piece arcuate laterally and slightly narrowing dorsally. Apical piece elongate and beak-shaped laterally and dorsally. Ratio of length of apical piece to length of basal piece from dorsal view 1: 3.11.

Female. Unknown.

**Differential diagnosis.** New species *Zizu novis* sp. nov. distinctly differs from similar species *Zizu tenebris* sp. nov. by reddish brown dorsal surface of pronotum and elytra and mainly by metatarsomeres 1 oval in cross section; while *Z. tenebris* has dorsal surface of pronotum and elytra blackish brown and metatarsomeres 1 are flat.

*Z. novis* is clearly different from similar species *Z. viator* sp. nov. mainly by anterior part of head without transverse, rounded keel; while *Z. viator* has in anterior part of head transverse, rounded keel.

*Z. novis* is clearly different from similar species *Z. nepalensis* sp. nov. mainly by punctuation of pronotum sparse, punctures very small, interspaces between punctures wide, distinctly wider than diameter of punctures; while *Z. nepalensis* has punctuation of pronotum dense, punctures distinctly larger than those in *Z. novis* and interspaces between punctures are narrow.

*Z. novis* is clearly different from similar species *Z. keralaensis* sp. nov. and *Z. kejvali* sp. nov. mainly by legs unicolored pale reddish brown, punctures in rows of elytral striae very small; while *Z. keralaensis* and *Z. kejvali* have legs ochre yellow resp. yellow with basal part of tibiae blackish brown.

**Etymology.** From Latin *novis* (it means 'strange').

**Distribution.** Thailand.

# Zizu tenebris sp. nov. (Figs. 21-25)

Type locality. Pakistan, Punjab province, Changa Manga forest, 70 km South of Lahore.

**Type material.** Holotype ( $\circlearrowleft$ ): Pakistan, Punjab prov. / Changa Manga forest / 70 km S of Lahore, 18.-22.8. / L. Čížek lgt., 1998, (VNPC). Paratypes: (2  $\circlearrowleft$  $\circlearrowleft$ ): same data as holotype, (DHBC, VNPC); (2  $\circlearrowleft$  $\circlearrowleft$ ): PAKISTAN – Punjab / Changa Manga forest / 70km S from Lahore / 19.-21.8.98 / L. Černý lgt., (DHBC, VNPC). The types are provided with a printed red label: 'Zizu / tenebris sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2018'.

**Description of holotype.** Habitus as in Fig. 21, body relatively narrow, elongate, slightly oval, slightly convex, dorsal surface from ochre yellow to black, with punctuation, microgranulation and ochre yellow setation, BL 7.11 mm. Widest near half elytra length; BL/EW 2.71.

Head (Fig. 22) approximately as long as wide, slightly shiny, with microgranulation, long, pale setation and dense punctuation, punctures medium sized, interspaces between punctures very narrow. Posterior part with coarser and denser punctuation than in reddish brown anterior part, which has denser setation than posterior part. Clypeus pale brown with smaller punctures than those in head, apex slightly excised in middle. Mandibles pale brown

and shiny with dark sides. HW 1.24 mm; HW/PW 0.60. HL (visible part) 1.17 mm. Eyes large, transverse, excised, space between eyes very narrow, approximately as wide as length of antennomere; OI equal to 12.89.

Antenna (Fig. 23). Long (AL 4.42 mm, slightly exceeding half body length AL/BL 0.62), filiform, narrow, with fine microgranulation, shallow punctures and ochre yellow, recumbent setation. Antennomeres 1 and 2 slightly shiny, antennomeres 3-11 rather matte. Antennomeres 1-3, basal half of antennomere 4, base and apex of antennomeres 4-11 narrowly pale brown, rest of antennomeres brown. Antennomere 2 shortest, antennomere 4 longest, each of antennomeres 4-11 longer than or as long as antennomere 3. Ultimate antennomere half drop shaped, widest near middle.

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RLA(1-11): 0.66: 0.32 : 1.00 : 1.22 : 1.14 : 1.12 : 1.08 : 1.14 : 0.99 : 1.11 : 0.97.
RL/WA(1-11): 2.39 : 1.50 : 4.33 : 4.65 : 4.18 : 4.56 : 3.68 : 4.11 : 3.56 : 4.00 : 3.15.
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Maxillary palpus ochre yellow, slightly shiny, rather matte, with ochre yellow setation. Ultimate palpomere distinctly darker than penultimate, widely triangular with fine microgranulation, rather matte. Palpomeres 2 and 3 distinctly dilated anteriorly.

Pronotum (Fig. 22). Blackish brown, transverse, with long, semierected, ochre yellow setation and dense punctuation, punctures medium sized and shallow, distinctly larger than those in head, interspaces between punctures very narrow, with microrugosities, matte. Border lines distinct and complete. Lateral margins in basal half straight, in apical half arcuate. Anterior margin slightly arcuate, posterior margin bisinuate, anterior angles obtuse (not clearly distinct), posterior angles roundly obtuse. PL 1.21 mm; PW 2.08 mm; PI equal to 58.17.

Ventral side of body reddish brown with punctuation and relatively sparse and short pale setation. Abdomen with fine microgranulation and punctuation, punctures small and shallow. Ventrites 1 and 2 pale brown, shiny, sides brown with long pale setation, shiny. Ultimate ventrite with large, roundly triangular, pale brown depression in middle.

Elytron black or blackish brown, slightly oval, slightly convex. Dorsal surface with dense, ochre yellow, erected setation, rather matte. Elytral striae with distinct rows of medium sized punctures, slightly smaller than those in pronotum. Elytral interspaces slightly convex, with microgranulation and small and shallow punctures. EL 4.73 mm; widest near middle, EW 2.62 mm; EL/EW 1.81.

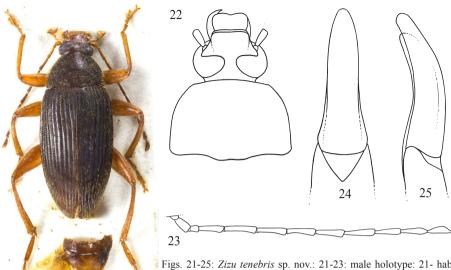
Scutellum. Brown, with blackish brown sides, distinctly paler than elytron, roundly pentagonal, with microrugosities and a few pale setae.

Elytral epipleura well-developed, reddish brown, with pale setae, regularly narrowing to metasternum in basal half, then leads parallel.

Legs long and narrow, with relatively dense and long, ochre yellow setation, very small and shallow punctures and fine microgranulation. Femora and tibiae pale reddish brown, tibiae slightly dilated anteriorly, with short strong setae in inner side. Tarsi pale brown, proand mesotarsomeres 3, 4 and metatarsomere 3 widened and lobed. Metatarsomeres 1 flat. RLT: 1.00: 0.52: 0.58: 0.85: 1.48 (protarsus); 1.00: 0.40: 0.40: 0.49: 0.84 (mesotarsus); 1.00: 0.31: 0.31: 0.51 (metatarsus).

Both anterior tarsal claws with 10 or 11 visible teeth.

Aedeagus (Figs. 24 and 25). Ochre yellow, relatively robust, shiny. Basal piece slightly



Figs. 21-25: Zizu tenebris sp. nov.: 21-23: male holotype: 21- habitus; 22-head and pronotum; 23- antenna; 24- aedeagus, dorsal view; 25- aedeagus, lateral view

rounded laterally and slightly narrowing dorsally in apical part. Apical piece beak-shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1: 2.53.

**Female** without distinct differences, only body slightly broader and space between eyes distinctly wider than those in male (OI approximately 30). Anterior tarsal claws with 9 teeth.

**Variability.** The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n=3). BL 7.79 mm (7.11-8.31 mm); HL 1.23 mm (1.17-1.26 mm); HW 1.32 mm (1.24-1.37 mm); OI 15.57 (12.89-17.67); PL 1.34 mm (1.21-1.48 mm); PW 2.25 mm (2.08-2.43mm); PI 59.55 (58.17-60.91); EL 5.22 mm (4.73-5.58 mm); EW 2.90 mm (2.62-3.12 mm). Females (n=2). BL 8.17 mm (8.09-8.24 mm); HL 0.84 mm (0.82-0.86 mm); HW 1.35 mm (1.34-1.36 mm); OI 30.50 (28.09-32.90); PL 1.44 mm; PW 2.41 mm (2.40-2.41 mm); PI 59.88 (59.75-60.00); EL 5.48 mm (5.43-5.53 mm); EW 3.14 mm (3.13-3.15 mm).

**Differential diagnosis.** New species *Zizu tenebris* sp. nov. distinctly differs from all similar species *Zizu keralaensis* sp. nov., *Zizu kejvali* sp. nov., *Zizu nepalensis* sp. nov., *Zizu novis* sp. nov. and *Zizu viator* sp. nov. mainly by metatarsomeres 1 flat; while the species *Z. keralaensis*, *Z. kejvali*, *Z. nepalensis*, *Z. novis* and *Z. viator* have metatarsomere 1 oval in cross section.

Etymology. From Latin tenebris (it means 'dark').

**Distribution.** Pakistan.

### Zizu viator sp. nov. (Figs. 26-30)

Type locality. Southern Laos, Champasak province, 10-50 km S of Pakse, 50-100 m.

**Type material.** Holotype (♂): Süd - LAOS, / Prov. Champasak, 10-50 km / S Pakse, 50-100m, / 23.-25.V.1996, leg. C.Holzschuh, (VNPC). The types are provided with a printed red label: 'Zizu / viator sp. nov. / HOLOTYPUS / V. Novák det. 2018'.

**Description of holotype.** Habitus as in Fig. 26, body relatively narrow, elongate, slightly oval, slightly convex, dorsal surface from ochre yellow to reddish brown, with punctuation, microgranulation and setation, BL 7.47 mm. Widest near half elytra length; BL/EW 2.67.

Head (Fig. 27) relatively small, slightly shiny, approximately as long as wide, with long, ochre yellow setation, very fine microgranulation and dense punctuation, punctures medium-sized, interspaces between punctures narrow. Posterior part dark reddish brown, distinctly darker than pale reddish brown anterior part and clypeus. Setation of anterior part and clypeus denser than in posterior part. Anterior part before eyes with narrow, rounded, dark keel from left to right side of head. Clypeus shiny with microrugosities and sparse, shallow punctures, apex straight. HW 1.17 mm; HW/PW 0.54. HL (visible part) 1.19 mm. Eyes large, transverse, excised, space between eyes distinctly narrower than diameter of one eye, slightly narrower than length of antennomere 1 and distinctly wider than length of antennomere 2; OI equal to 22.34.

Antenna (Fig. 28). Long (AL 4.40 mm, slightly exceeding half body length AL/BL 0.59), filiform, narrow, unicolored ochre yellow, with fine microgranulation, shallow punctures and ochre yellow, recumbent setation. Antennomere 2 shortest, antennomere 4 longest, each of antennomeres 4-11 distinctly longer than antennomere 3. Ultimate antennomere half drop shaped, widest near middle.

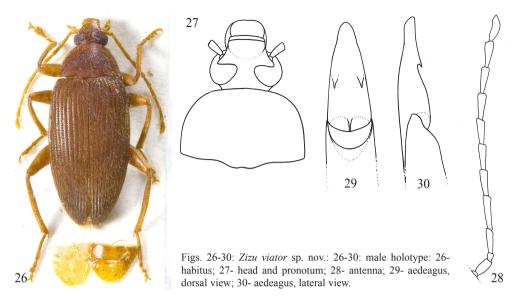
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RLA(1-11): 1.05 : 0.35 : 1.00 : 1.37 : 1.13 : 1.13 : 1.12 : 1.15 : 1.18 : 1.05 : 1.22.
RL/WA(1-11): 2.86 : 1.31 : 3.33 : 4.10 : 3.78 : 3.40 : 3.72 : 3.83 : 4.18 : 3.32 : 3.04.
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Maxillary palpus ochre yellow, slightly shiny, with long, ochre yellow setation and small punctures. Ultimate palpomere widely triangular, palpomeres 2 and 3 distinctly dilated anteriorly.

Pronotum (Fig. 27). Reddish brown, transverse, with long, semierected, ochre yellow setation and dense punctuation, punctures medium sized, approximately as large as those in head, interspaces between punctures narrow, distinctly narrower or as wide as diameter of punctures, with distinct microgranulation, slightly shiny. Border lines narrow but distinct. Lateral margins only in basal third straight, in apical two thirds lateral margins and anterior margin arcuate, posterior margin bisinuate, anterior angles indistinct, posterior angles obtuse. PL 1.22 mm; PW 2.17 mm; PI equal to 56.22.

Ventral side of body reddish brown with relatively sparse and short pale setation. Punctuation of meso- and metathorax distinctly larger than those in prothorax. Abdomen with pale setation, small, shallow punctures and fine microgranulation, slightly shiny. Ultimate ventrite with large, roundly triangular depression in middle.

Elytron brown, slightly oval, slightly convex. Dorsal surface with dense, ochre yellow setation, rather matte. Setation near scutellum dark. Elytral striae with distinct rows of



medium sized punctures, approximately as large as those in pronotum. Elytral interspaces slightly convex, with microgranulation and very small, very sparse and shallow punctures. EL 5.04 mm; widest near middle, EW 2.80 mm; EL/EW 1.80.

Scutellum. Brown as elytron itself, small, pentagonal, with microgranulation, a few very small punctures with ochre yellow setae.

Elytral epipleura well-developed, pale reddish brown, with pale setation, regularly narrowing to metasternum in basal half, then relatively wide leads parallel.

Legs long and narrow, pale reddish brown, with relatively dense and long, ochre yellow setation, very small and shallow punctures and fine microgranulation. Tibiae slightly dilated anteriorly with small, strong setae on inner side. Pro- and mesotarsomeres 3, 4 and metatarsomere 3 widened and lobed. RLT: 1.00:0.43:0.62:0.70:1.17 (protarsus); 1.00:0.37:0.23:0.32:0.61 (mesotarsus); 1.00:0.30:0.22:0.46 (metatarsus).

Both anterior tarsal claws with 12 visible teeth.

Aedeagus (Figs. 29 and 30). Ochre yellow, relatively robust, shiny. Basal piece slightly narrowing dorsally in apical part. Apical piece roundly, elongate triangular dorsally, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1: 5.19.

#### Female unknown.

**Differential diagnosis.** New species *Zizu viator* sp. nov. distinctly differs from all similar species *Zizu keralaensis* sp. nov., *Zizu kejvali* sp. nov., *Zizu nepalensis* sp. nov., *Zizu novis* sp. nov. and *Zizu tenebris* sp. nov. mainly by anterior part of head before eyes with narrow, rounded, transverse, dark keel from left to right side of head; while the species *Z. keralaensis*, *Z. kejvali*, *Z. nepalensis*, *Z. novis* and *Z. tenebris* have no keel in anterior part of head.

**Etymology.** From Latin *viator* (it means 'traveler'). **Distribution.** Laos.

#### KEY TO THE SPECIES OF ZIZU GEN. NOV.

1(2)	Metatarsomere 1 flat. Habitus as in Fig. 21, head and pronotum as in Fig. 22, antenna (Fig. 23), aedeagus (Figs. 24 and 25). Pakistan
2(1)	Metatarsomere normal, oval in cross section.
3(4)	Punctuation of pronotum dense, interspaces between punctures narrower than or as wide as diameter of punctures.
4(3)	Punctuation of pronotum sparse, punctures very small, interspaces between punctures wide, distinctly wider than diameter of punctures.
5(6)	Anterior part of head before eyes with narrow, rounded, transverse, dark keel from left to right side of head. Habitus as in Fig. 26, head and pronotum as in Fig. 27, antenna (Fig. 28), aedeagus (Figs. 29 and 30) Laos
6(5)	Space between eyes distinctly narrower than diameter of one eye, punctuation of pronotum coarse. Habitus as in Fig. 11, head and pronotum as in Fig. 12, antenna (Fig. 13), aedeagus (Figs. 14 and 15). Nepal
7(8)	Legs unicolored pale reddish brown, punctures in rows of elytral striae very small. Habitus as in Fig. 16, head and pronotum as in Fig. 17, antenna (Fig. 18), aedeagus (Figs. 19 and 20). Thailand Zizu novis sp. nov
8(7)	Legs yellow or ochre yellow with dark blackish brown basal part of tibiae, punctures in rows of elytral striae small.
9(10)	Antennomeres 5-11 1.26-1.37 times longer than antennomere 3. Habitus as in Fig. 1, head and pronotum as in Fig. 2 antenna (Fig. 3), aedeagus (Figs. 4 and 5). India
10(9)	Antennomeres 5-11 0.95-1.16 times longer than antennomere 3. Habitus as in Fig. 6, head and pronotum as in Fig. 7, antenna (Fig. 8), aedeagus (Figs. 9 and 10). India

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