

***Oracula* Novák, 2019 (Coleoptera: Tenebrionidae: Alleculinae: Alleculini) species from Malaysia**

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Taxonomy, new species, descriptions, Coleoptera, Tenebrionidae, Alleculinae, Alleculini, Alleculina, *Oracula*, Malaysia, Oriental Region

Abstract. A new species of the Alleculine genus *Oracula* Novák, 2019 from Malaysia are described as follows: *Oracula* (*Oracula*) *basorica* sp. nov., *Oracula* (*Oracula*) *media* sp. nov., *Oracula* (*Oracula*) *oliveri* sp. nov., *Oracula* (*Oracula*) *parvula* sp. nov., *Oracula* (*Oracula*) *pilosa* sp. nov., *Oracula* (*Oracula*) *puella* sp. nov. and *Oracula* (*Oracula*) *rufofemora* sp. nov. All new species are illustrated (including male genitalia) and keyed together. New distribution of the species *Oracula* (*Oracula*) *rutilipes* (Borchmann, 1925) is added (Western Malaysia).

INTRODUCTION

The genus *Oracula* was introduced by Novák (2019) with *Oracula bicolor* Novák, 2019 as a type species. Species of this genus living in southeastern Palaearctic Region (Novák 2020) and in the Oriental Region (Novák 2019a). In present we know four species from Nepal and Yunnan Province in China (Novák 2019a, 2020 and 2021) and further twenty four species are known from the Oriental Region (Novák 2019a, 2022a, b, 2023). Species of the genus *Oracula* have elongate *Leptura* shaped body, space between eyes is almost narrower than diameter of one eye, males have long and hollow tarsal claws with many teeth on both sides of hollow claw (subgenus *Duocula* Novák, 2019) or teeth only on one side of hollow claw (subgenus *Oracula* s. str.).

No species of *Oracula* is currently known from the territory of peninsular Malaysia. Only ten species were described in the genus *Allecula* Fabricius, 1801 (Pic 1915, 1934, 1936, 1939, 1944 and Borchmann 1932). *Allecula malacana* Pic, 1915 and *Allecula rufoposticalis* Pic, 1915 were transferred to the genera *Dioxycula* Fairmaire, 1896 (Novák 2021) and *Dorota* Novák, 2018 (Novák 2018). *Allecula atrolateralis* Pic, 1944, *Allecula cameronensis* Pic, 1944 and *Allecula pendleburyi* Pic, 1939 are very small species (body length less than 6 mm), *Allecula brevipubens* Pic, 1944, *Allecula fortiterpunctata* Pic, 1936, *Allecula luteimembris* Pic, 1944 and *Allecula pahangana* Pic, 1936 have after original description body elongate oval. Species *Allecula macer* Borchmann, 1932 has pro- and mesotibíae „masig gebogen“. These species clearly not belong to the genus *Oracula*.

Seven new species from Malaysia are described as follows: *Oracula* (*Oracula*) *basorica* sp. nov., *Oracula* (*Oracula*) *media* sp. nov., *Oracula* (*Oracula*) *oliveri* sp. nov., *Oracula* (*Oracula*) *parvula* sp. nov., *Oracula* (*Oracula*) *pilosa* sp. nov., *Oracula* (*Oracula*) *puella* sp. nov. and *Oracula* (*Oracula*) *rufofemora* sp. nov. All new species are illustrated (including male genitalia) and keyed together.

New distribution on the species *Oracula* (*Oracula*) *rutilipes* (Borchmann, 1925) known from Sumatra Island (Indonesia) is added (Western Malaysia).

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 material, a slash (/) separates data in separate rows, a double slash (//) separates different labels.

The following collection codes is used:

NMPC collection of National Museum, Praha, Czech Republic;

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. Snapshots were taken by using camera Canon EOS 550 D and Canon Macro Photo Lens MP-E and software Helicon Focus 7.7.5.

TAXONOMY

genus *Oracula* Novák, 2019

Type species: *Oracula (Oracula) bicolor* Novák, 2019.

Subgenus *Oracula* Novák, 2019

Type species: *Oracula (Oracula) bicolor* Novák, 2019.

Oracula (Oracula) basorica sp. nov.

(Figs. 1-4)

Type locality. Western Malaysia, Kelantan, Kampong Kubur Datu, Gunung Basor north of Gua Musang, 1700 m.

Type material. Holotype (♂): MALASIA W., KELANTAN / 90 km N of Gua Musang / Gunung Basor, 1700 m / Kampong Kubur Datu / 10.iv.-5.v.2016 / Petr Cechovsky lgt., (VNPC). Paratypes: (1 ♀): same data as holotype, (VNPC); (1 ♂): same data as holotype, but 1.iii.-21.iii.2015, (VNPC); (2 ♂♂, 4 ♀♀): MALAYSIA W., PAHANG / 50 km NE of Kuala / Rompin, Endau Rompin / Nat. P., 400 m, G. Keriuang / (Kg. Tebu Hitam); 9.-30.iv. / 2008; P. Čechovský lgt., (VNPC); (1 ♀): MALASIA., KELANTAN / road between Kampong Raja / and Gua Musang, 1400-1700 m, / (Ladang Pandrak), 1.-28. / iv.2006; 4°63-88'N; 101°45-95'E / Čechovský Petr lgt., (VNPC); (1 ♂, 4 ♀♀): MALASIA W, KELANTAN / 30 km NW of Gua Musang / Ulu Lalat Mt. 800-1000m / KAMPONG SUNGAI OM; 27. / v.-19.iv.2011; P.Čechovský lgt., (VNPC); (1 ♂, 1 ♀): MALAYSIA W. KELANTAN, / 70 km NW of Gua Musang / Mt. Chamah, 1900m / Kampong Perias 17.iv.-9.v. / 2014 Petr Cechovský lgt., (VNPC); (1 ♂): MALAYSIA W., KELANTAN / 30 km S of Jeli, Gunung Jual, / 800 m, Kampong Timor, 22.iv. / -18.v.2019; Petr Cechovsky lgt., (VNPC). The types are provided with a printed red label: 'Oracula / (Oracula) basorica sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2022'.

Description of holotype. Habitus as in Fig. 1, body small, narrow, elongate, parallel, *Leptura* shaped, semi-matte, from ochre yellow to blackish brown, dorsal surface with pale setae, punctuation and microgranulation, BL 7.96 mm. Widest near middle elytra length; BL/EW 3.52.

Head (Fig. 2) a little wider than long, through the eyes distinctly wider than anterior margin,

narrower than base of pronotum. Dorsal surface matte with long, pale setae, punctuation and microgranulation. Posterior part reddish brown, rather matte, anterior half pale reddish brown, slightly shiny. Clypeus wide, transverse, half heart shaped, pale reddish brown with apex excised in middle. Dorsal surface with punctures, long, pale setae and microgranulation, semi-matte. Mandibles pale brown with apex and margins darker, glabrous, shiny, with pale setae in sides. HW 1.21 mm; HW/PW 0.74; HL (visible part) 1.16 mm. Eyes large, transverse, excised, space between eyes very narrow, distinctly narrower than diameter of one eye; approximately as wide as length of antennomere 2; narrower than length of antennomere 1, OI equal to 17.19.

Antenna. Long and narrow, ochre yellow, rather matte (AL 6.07 mm, reaching three quarters body length AL/BL 0.76). Surface with long, pale setation, fine microgranulation and very small, shallow punctures. Antennomeres 3-10 slightly widened apically. Antennomere 2 shortest, antennomere 4 longest. Ultimate antennomere widest near middle.

RLA(1-11): 0.51 : 0.21 : 1.00 : 1.10 : 0.93 : 1.08 : 1.10 : 1.07 : 0.98 : 0.99 : 1.04.

RL/WA(1-11): 1.87 : 1.12 : 4.82 : 5.29 : 4.50 : 4.56 : 4.35 : 5.14 : 5.50 : 5.15 : 5.00.

Maxillary palpus ochre yellow, rather matte, with long, pale setae, fine microgranulation. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular.

Pronotum (Fig. 2) reddish brown, semi-matte, slightly convex, widest in base, distinctly narrower than elytra in humeri. Dorsal surface with pale setation denser near lateral margins, fine microgranulation and dense punctures. PL 1.26 mm; PW 1.60 mm; PI equal to 78.75. Border lines very narrow, margins not clearly conspicuous in the middle of anterior margin from dorsal view. Base finely bisinuate, lateral margins straight in basal part, very finely arcuate in apical half, anterior margin almost straight, anterior and posterior angles obtuse.

Elytra. Brown, narrow, elongate, parallel, slightly convex, slightly shiny, widest near middle. Dorsal surface with long and dense, pale setation. EL 5.54 mm; EW 2.26 mm; EL/EW 2.45. Elytral striae with rows of coarse punctures, interspaces between punctures in rows as large or narrower than diameter of punctures. Elytral intervals finely convex, with very fine microgranulation and sparse, very small, shallow punctures.

Scutellum. Brown with darker margins, roundly triangular, semi-matte, with small punctures, few long, pale setae and microgranulation.

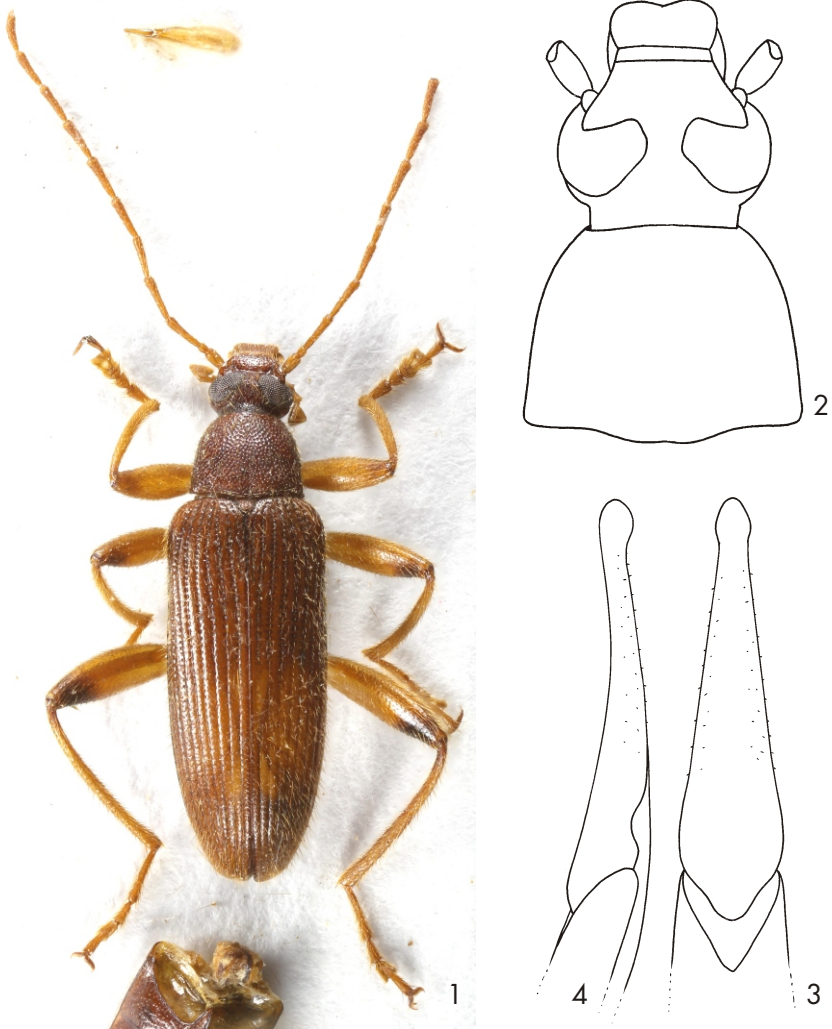
Elytral epipleura well-developed, brown, with punctures distinctly narrowing to ventrite 1 (here narrowest) in basal part, then ochre yellow, parallel with pale setae in apical part.

Legs. Long and narrow, ochre yellow, apex of meso- and metafemora dark brown. Dorsal surface with long, erect, pale setae and fine microgranulation. Apical part of pro- and mesotibiae slightly bent. Pro- and mesotarsomeres 3 and 4 and metatarsomere 3 widened and lobed. Ultimate tarsomeres widened apically. RLT: 1.00 : 0.54 : 0.53 : 0.84 : 1.62 (protarsus); 1.00 : 0.40 : 0.30 : 0.60 : 0.89 (mesotarsus); 1.00 : 0.39 : 0.34 : 0.54 (metatarsus).

Tarsal claws large with teeth only from one side of hollow claw, both upper protarsal claws with about 40 visible teeth.

Ventral side of body brown with pale setae and punctures. Abdomen brown, semi-matte, with sparse, pale setae, fine microgranulation, and small, shallow punctures. Ultimate and penultimate ventrites darker than ventrites 1-3.

Aedeagus (Figs. 3, 4) ochre yellow, semi-matte. Basal piece slightly rounded laterally and narrowing in dorsal view. Apical piece narrow, elongate triangular from dorsal view, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1:2.71.



Figs. 1-4. *Oracula* (*Oracula*) *basorica* sp. nov. (male holotype): 1- habitus; 2- head and pronotum; 3- apical piece of aedeagus, dorsal view; 4- apical piece of aedeagus, lateral view.

Female. Body wider, antenna shorter than in male. Protarsal claws smaller with 11-13 visible teeth.

Measurements of female body. BL 8.52 mm; HL 1.29 mm; HW 1.34 mm; OI 21.36; PL 1.40 mm; PW 1.77 mm; PI 79.10; EL 5.83 mm; EW 2.70 mm; AL(1-11) 5.99 mm; AL(1-11)/BL 0.70; HW/PW 0.76; BL/EW 3.16; EL/EW 2.16.

RLA(1-11): 0.58 : 0.38 : 1.00 : 1.11 : 1.05 : 1.11 : 1.11 : 1.12 : 1.11 : 1.05 : 1.22.

RL/WA(1-11): 1.89 : 1.52 : 4.05 : 4.27 : 3.87 : 3.92 : 3.76 : 4.75 : 5.22 : 5.93 : 8.00.

RLT: 1.00 : 0.56 : 0.66 : 0.70 : 1.49 (protarsus); — : — : — : — : — (mesotarsus); 1.00 : 0.47 : 0.23 : 0.70 (metatarsus).

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n= 7). BL 8.07 mm (7.79-8.37 mm); HL 1.16 mm (1.11-1.20 mm); HW 1.21 mm (1.16-1.25 mm); OI 17.45 (14.10-19.74); PL 1.27 mm (1.24-1.33 mm); PW 1.59 mm (1.51-1.62 mm); PI 79.68 (78.75-80.52); EL 5.63 mm (5.35-5.84 mm); EW 2.33 mm (2.26-2.43 mm). Females (n= 11). BL 8.74 mm (8.26-9.18 mm); HL 1.29 mm (1.25-1.35 mm); HW 1.34 mm (1.31-1.41 mm); OI 23.56 (21.36-24.81); PL 1.39 mm (1.27-1.43 mm); PW 1.75 mm (1.61-1.81 mm); PI 79.07 (77.53-80.46); EL 6.07 mm (5.61-6.40 mm); EW 2.68 mm (2.53-2.78 mm).

Differential diagnosis. (For details see the key below). Similar *Oracula* Novák, 2019 species with brown or pale dorsal surface of elytra, antenna and legs from Malaysia is *Oracula* (*Oracula*) *oliveri* sp. nov.

Oracula (*Oracula*) *basorica* sp. nov. clearly differs from similar species *O.* (*O.*) *oliveri* mainly by pronotum reddish brown and wider (PI approximately 78), by lateral margins narrowing in basal part and by apex of femora almost darker; while *O.* (*O.*) *oliveri* has pronotum dark brown, longer and narrower (PI 86), lateral margins of pronotum are parallel in basal half and femora are unicolored pale brown.

Etymology. Toponymic, named after the type locality Mount Basor in Kelantan state (Malaysia).

Distribution. Malaysia.

***Oracula* (*Oracula*) *media* sp. nov.**

(Figs. 5-8)

Type locality. Malaysia, Perak, Cameron Highlands, Batu, 04°22.2'N, 101°20.0'E, 590 m.

Type material. Holotype (♂): **Malaysia**, Perak / Cameron Highlands / **Batu** [= Mile] 19 vill. env. / 04°22.2'N, 101°20.0'E, 590 m, / Jiri Hájek leg. 22.-27.iv.2009, (NMPC). Paratypes: (2 ♀♀): Malaysia W, Kelantan / 30 km NW of Gua Musang / Ulu Lalat Mt. 800-1000m / KAMPONG SUNGAI OM; 27. v. / -19.vi.2011; P.Čechovský lgt., (VNPC); (1 ♀): Malaysia W, Kelantan / 90 km N of Gua Musang / Mt. Basor, 1700m. / Kampong Kubur Datu / 1.iii.-21. iii. 2015 / Petr Cechovsky lgt., (VNPC). The types are provided with a printed red label: '*Oracula* / (*Oracula*) *media* sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2022'.

Description of holotype. Habitus as in Fig. 5, body medium size, narrow, elongate, parallel, *Leptura* shaped, shiny, from ochre yellow to blackish brown, dorsal surface with long, pale setation, punctuation and very fine microgranulation, BL 9.63 mm. Widest near middle elytra length; BL/EW 3.29.

Head (Fig. 6) blackish brown, as long as wide, through the eyes distinctly wider than anterior margin, narrower than base of pronotum. Dorsal surface shiny with long, pale setae and punctuation denser in basal part than in apical half, microgranulation not clearly distinct everywhere. Clypeus wide, transverse, half heart shaped, blackish brown with ochre yellow apex excised in middle. Dorsal surface with shallow punctures, long, pale setae and microgranulation, semi-matte. Mandibles pale brown with apex and margins darker, glabrous, shiny. HW 1.62 mm; HW/PW 0.82; HL (visible part) 1.62 mm. Eyes large, transverse, excised, space between eyes very narrow, distinctly narrower than diameter of one eye; wider than length of antennomere 2; narrower than length of antennomere 1, OI equal to 15.95.

Antenna. Long and narrow, rather matte (AL 6.98 mm, reaching almost three quarters body

length AL/BL 0.73). Surface with pale setation, microgranulation and very small, shallow punctures. Antennomeres 1 and 2 ochre yellow, antennomeres 3-7 dark brown or blackish brown with base ochre yellow, antennomeres 8-11 brown with ochre yellow base, antennomeres 1-3 slightly shiny. Antennomere 2 shortest, antennomere 4 longest, antennomeres 4-11 distinctly longer than antennomere 3, antennomeres 3-10 slightly widened apically. Ultimate antennomere widest near middle.

RLA(1-11): 0.64 : 0.25 : 1.00 : 1.25 : 1.12 : 1.07 : 1.16 : 1.11 : 1.11 : 1.09 : 1.13.

RL/WA(1-11): 2.03 : 1.19 : 4.39 : 5.70 : 5.52 : 4.23 : 5.30 : 5.04 : 6.23 : 5.83 : 6.04.

Maxillary palpus rather matte, with pale setae and fine microgranulation. Palpomeres 2 and 3 distinctly brown or dark brown with pale brown apex, narrowest at base and widest at apex, ultimate palpomere pale brown, widely triangular.

Pronotum (Fig. 6) reddish brown, shiny, slightly convex, widest in base, distinctly narrower than elytra in humeri. Dorsal surface almost glabrous with very sparse pale setae near lateral margins, dense punctures and very fine microgranulation. PL 1.47 mm; PW 1.98 mm; PI equal to 74.24. Border lines very narrow, margins not clearly distinct in the middle of anterior margin from dorsal view. Base finely bisinuate, lateral margins finely excised in basal part, slightly arcuate in apical half, anterior margin very finely rounded, anterior and posterior angles obtuse.

Elytra. Pale reddish brown with narrowly brown suture, narrow, elongate, parallel, slightly convex, shiny, widest near middle. Dorsal surface with long, almost erect, pale setae. EL 6.54 mm; EW 2.90 mm; EL/EW 2.26. Elytral striae with rows of coarse punctures, interspaces between punctures in rows as large or narrower than diameter of punctures. Elytral intervals rather flat, with very fine microgranulation and sparse, small punctures.

Scutellum. Brown, roundly triangular, rather matte, with small, shallow punctures and microgranulation.

Elytral epipleura well-developed, pale reddish brown, with punctures distinctly narrowing to ventrite 1 in basal part, then ochre yellow, narrow and parallel in apical part.

Legs. Long and narrow, blackish brown, dorsal surface with long, erect pale setae, small punctures and very fine microgranulation. Protibiae finely bent near apex. Protarsomeres 3-5, ultimate and penultimate meso- and metatarsomeres ochre yellow. Pro- and mesotarsomeres 3 and 4 and metatarsomere 3 widened and lobed. Ultimate tarsomeres widened apically. RL: 1.00 : 0.56 : 0.78 : 0.95 : 1.17 (protarsus); 1.00 : 0.36 : 0.34 : 0.50 : 1.04 (mesotarsus); 1.00 : 0.31 : 0.41 : 0.82 (metatarsus).

Tarsal claws large with teeth only from one side of hollow claw, both upper protarsal claws with more than 30 visible teeth.

Ventral side of body with small punctures, prothorax reddish brown, meso- and metaventrite pale reddish brown. Abdomen dark brown, shiny, almost glabrous with very fine microgranulation and small and shallow punctures.

Aedeagus (Figs. 7, 8) ochre yellow. Basal piece rounded laterally and narrowing in dorsal view. Apical piece narrow, elongate triangular from dorsal view, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1 : 1.91.

Female. Body and space between eyes slightly wider than in male. Protarsal claws smaller with 13-15 visible teeth.

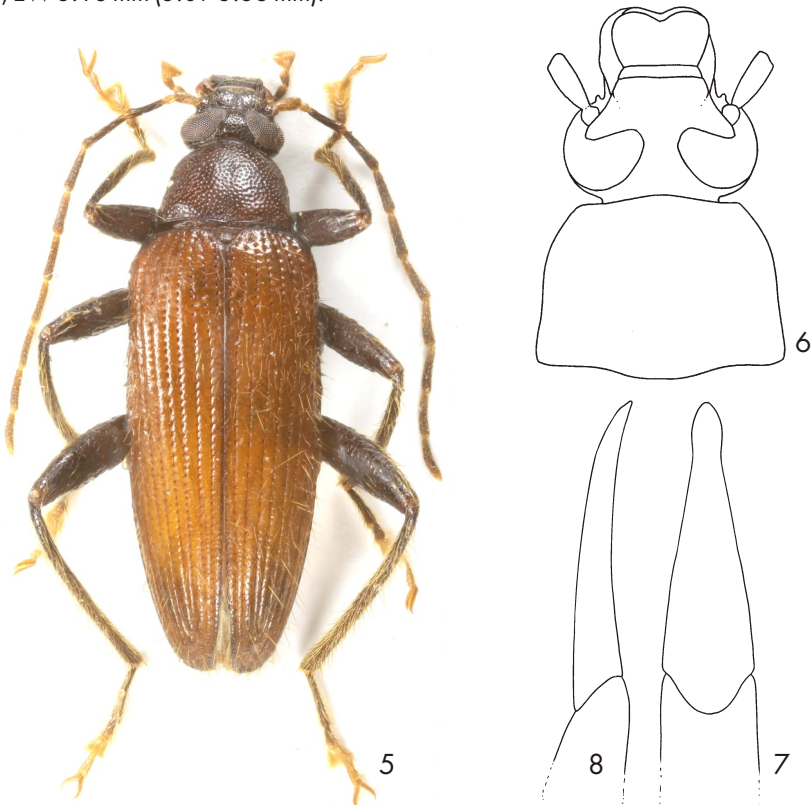
Measurements of female body. BL 9.94 mm; HL 1.55 mm; HW 1.65 mm; OI 22.62; PL 1.42 mm; PW 2.08 mm; PI 68.27; EL 6.79 mm; EW 3.09 mm; AL(1-11) 6.85 mm; AL(1-11)/BL 0.69; HW/PW 0.79; BL/EW 3.22; EL/EW 2.20.

RLA(1-11): 0.80 : 0.25 : 1.00 : 1.21 : 0.96 : 1.08 : 1.06 : 0.98 : 1.09 : 0.98 : 1.09.

RL/WA(1-11): 2.46 : 1.78 : 5.29 : 5.10 : 3.67 : 4.86 : 5.58 : 5.00 : 5.75 : 4.77 : 5.75.

RLT: 1.00 : 0.49 : 0.71 : 0.79 : 1.49 (protarsus); 1.00 : 0.47 : 0.37 : 0.43 : 0.71 (mesotarsus); 1.00 : 0.41 : 0.45 : 0.75 (metatarsus).

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Females (n= 3). BL 10.11 mm (9.86-10.53 mm); HL 1.55 mm (1.47-1.63 mm); HW 1.65 mm (1.56-1.73 mm); OI 22.78 (22.62-22.97); PL 1.46 mm (1.42-1.48 mm); PW 2.08 mm (1.98-2.18 mm); PI 70.15 (67.43-74.75); EL 7.04 mm (6.79-7.43 mm); EW 3.18 mm (3.09-3.36 mm).



Figs. 5-8. *Oracula (Oracula) media* sp. nov. (male holotype): 5- habitus; 6- head and pronotum; 7- apical piece of aedeagus, dorsal view; 8- apical piece of aedeagus, lateral view.

Differential diagnosis. (For details see the key below). Similar *Oracula* Novák, 2019 species with pale dorsal surface of elytra from Malaysia are *Oracula (Oracula) basorica* sp. nov. and *Oracula (Oracula) oliveri* sp. nov.

Oracula (Oracula) media sp. nov. clearly differs from similar species *O. (O.) basorica* and *O. (O.) oliveri* mainly by pronotum more transverse (PI 67-75) and femora and tibiae dark; while *O. (O.) basorica* and *O. (O.) oliveri* have pronotum longer and narrower (PI 78-86) and femora and tibiae are almost pale.

Etymology. From Latin *media* (meaning 'medium').

Distribution. Malaysia.

***Oracula (Oracula) oliveri* sp. nov.**
(Figs. 9-12)

Type locality. Malaysia, Perak, Cameron Highlands, Tanah Rata.

Type material. Holotype (♂): MALAYSIA - Perak / Cameron Highland / - Tanah Rata / 13.-16.iii.1997 / lgt Oliver Dulík, (VNPC). The type is provided with a printed red label: '*Oracula* / (*Oracula*) *oliveri* sp. nov. / HOLOTYPE / V. Novák det. 2022'.

Description of holotype. Habitus as in Fig. 9, body small, narrow, elongate, parallel, *Leptura* shaped, semi-matte, from ochre yellow to dark brown, dorsal surface with pale setation, punctuation and microgranulation, BL 8.29 mm. Widest near middle elytra length; BL/EW 3.47.

Head (Fig. 10) approximately as wide as long, through the eyes distinctly wider than anterior margin, narrower than base of pronotum. Dorsal surface with pale setae, punctuation and microgranulation. Posterior part dark brown, rather matte, anterior half pale brown, shiny. Clypeus wide, transverse, half heart shaped, ochre yellow, with apex excised in middle. Dorsal surface with shallow punctures, microgranulation and long, pale setae, slightly shiny. Mandibles ochre yellow with apex and margins darker, glabrous, shiny, with pale setae in sides. HW 1.23 mm; HW/PW 0.78; HL (visible part) 1.26 mm. Eyes large, transverse, excised, space between eyes very narrow, distinctly narrower than diameter of one eye; approximately as wide as length of antennomere 2; OI equal to 16.36.

Antenna. Long and narrow, ochre yellow, rather matte (AL 6.27 mm, reaching three quarters body length AL/BL 0.76). Surface with pale setation, microgranulation and very small, shallow punctures. Antennomeres 3-10 slightly widened apically. Antennomere 2 shortest, antennomeres 4-11 longer than antennomere 3, ultimate antennomere widest near middle, narrowing apically.

RLA(1-11): 0.59 : 0.30 : 1.00 : 1.14 : 1.05 : 1.12 : 1.15 : 1.13 : 1.12 : 1.05 : 1.16.

RL/WA(1-11): 2.05 : 1.44 : 4.64 : 5.10 : 4.69 : 4.83 : 4.55 : 4.20 : 5.04 : 5.91 : 6.57.

Maxillary palpus ochre yellow, rather matte, with long, pale setae and fine microgranulation. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular.

Pronotum (Fig. 10) dark brown, semi-matte, slightly convex, widest in base, distinctly narrower than elytra in humeri. Dorsal surface with pale setae denser near lateral margins, fine microgranulation and dense punctures. PL 1.36 mm; PW 1.58 mm; PI equal to 86.08. Border lines very narrow, not clearly conspicuous in the middle of anterior margin from dorsal view. Base finely bisinuate, lateral margins straight and parallel in basal part, with angle in middle, narrowing in apical half, anterior margin straight, anterior and posterior angles obtuse.

Elytra. Pale reddish brown, narrow, elongate, parallel, slightly convex, semi-matte, widest near middle elytra length. Dorsal surface with pale setae denser near lateral margins. EL 5.67 mm; EW 2.39 mm; EL/EW 2.47. Elytral striae with rows of coarse punctures, interspaces between punctures in rows approximately as wide as diameter of punctures. Elytral intervals very slightly convex, with fine microgranulation and small, shallow punctures.

Scutellum. Brown, semielliptical, shiny, with punctures and microgranulation.

Elytral epipleura well-developed, pale reddish brown with long, pale setae and large punctures

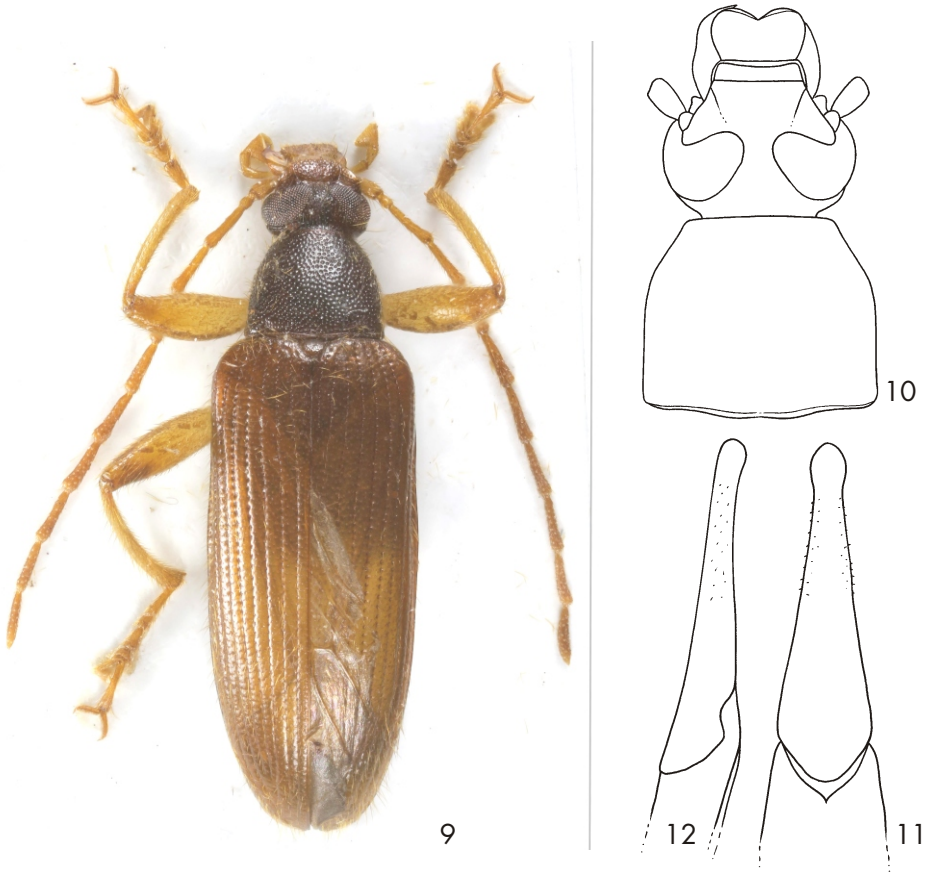
distinctly narrowing to ventrite 1 (here narrowest) in basal part, ochre yellow, relatively wide and parallel in apical part.

Legs. Long and narrow, ochre yellow, dorsal surface with pale setae, fine microgranulation and small, shallow punctures. Pro- and mesotarsomeres 3 and 4 and metatarsomere 3 widened and lobed. Ultimate tarsomeres slightly widened apically. RLT: 1.00 : 0.60 : 0.67 : 0.93 : 1.57 (protarsus); 1.00 : 0.44 : 0.19 : 0.50 : 1.03 (mesotarsus); — : — : — : — (metatarsus).

Tarsal claws large with teeth only from one side of hollow claw, both protarsal claws with about 40 visible teeth.

Ventral side of body pale reddish brown with pale setae and punctures. Abdomen brown, shiny, with sparse pale setae, very fine microgranulation, and small shallow punctures.

Aedeagus (Figs. 11, 12) ochre yellow, rather matte. Basal piece slightly narrowing in dorsal view. Apical piece elongate triangular from dorsal view, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1 : 2.01.



Figs. 9-12. *Oracula (Oracula) oliveri* sp. nov. (male holotype): 9- habitus; 10- head and pronotum; 11- apical piece of aedeagus, dorsal view; 12- apical piece of aedeagus, lateral view.

Female. Unknown.

Differential diagnosis. (For details see the key below). Similar *Oracula* Novák, 2019 species with pale dorsal surface of elytra and antenna, and almost pale legs from Malaysia is *Oracula* (*Oracula*) *basorica* sp. nov.

Oracula (*Oracula*) *oliveri* sp. nov. clearly differs from similar species *O.* (*O.*) *basorica* mainly by pronotum dark brown, longer and narrower (PI equal to 86) by lateral margins of pronotum parallel in basal half and by femora unicolor pale brown; while *O.* (*O.*) *basorica* has pronotum reddish brown, wider (PI is approximately 78), lateral margins are narrowing in basal part, apex of femora is almost darker.

Etymology. Named after the first name of the collector of holotype (Oliver Dulík).

Distribution. Malaysia.

***Oracula* (*Oracula*) *parvula* sp. nov.**
(Figs. 13-16)

Type locality. Western Malaysia, Pahang, Cameron Highlands, Tanah Rata, 1200-1500 m.

Type material. Holotype (♂): MALAYSIA West, PAHANG / Cameron Highlands, TANAH / RATA, 3.ii.-19.ii.2005 / P. Čechovský lgt., 1200-1500 m, (VNPC). Paratypes: (3 ♂♂, 4 ♀♀): same data as holotype, (VNPC); (2 ♂♂, 1 ♀): MALAYSIA-W, Perak, / 40km SE of IPOH, 900m, / Banjaran Titi Wangsa, / RINGLET, 25.iii.-3.iv. / 2002, P. Čechovský leg., (VNPC); (1 ♀): MALAYSIA-W, Perak, / 30 km SE of IPOH, 1200 m, / Cameron Highland, / RINGLET, 18.-22.i.1999, / P. Čechovský leg., (VNPC); (1 ♂, 1 ♀): Malaysia, Kelantan / road between Kampong Raja / and Gua Musang, 1400-1700m, / (Ladang Pandrak), 1.-28. / iv.2006; 4°63-88'N, 101°45-95'E, / Čechovský Petr lgt., (VNPC); (1 ♂, 1 ♀): MALAYSIA W Kelantan, / 60 km N of Tanah Rata, / TANAH KERAJAAN / 12.-30.iv.2007, 1000 m / Petr Čechovský lgt., 1200-1500 m, (VNPC); (1 ♀): MALAYSIA W. KELANTAN, / 70 km NW of Gua Musang / Mt. Chamah, 1900m / Kampong Perias 17.iv.-9.v. / 2014 Petr Čechovský lgt., (VNPC). The types are provided with a printed red label: '*Oracula* / (*Oracula*) *parvula* sp. nov. / HOLOTYPE [or PARATYPE] V. Novák det. 2022'.

Description of holotype. Habitus as in Fig. 13, body small, narrow, elongate, parallel, *Leptura* shaped, shiny, from ochre yellow to black, dorsal surface with pale setation, punctuation and microgranulation, BL 7.15 mm. Widest in humeri; BL/EW 3.30.

Head (Fig. 14) a little longer than wide, through the eyes distinctly wider than anterior margin, narrower than base of pronotum. Dorsal surface shiny with pale setae, long, dark setae behind eyes, punctuation and microgranulation. Posterior part black with dense punctures than those in brown anterior half. Clypeus wide, transverse, half heart shaped, pale brown, with apex excised in middle. Dorsal surface with shallow punctures, long, pale setae, microrugosities and microgranulation, slightly shiny. Mandibles pale reddish brown with apex and margins darker, glabrous, shiny, with pale setae in sides. HW 1.12 mm; HW/PW 0.78; HL (visible part) 1.18 mm. Eyes large, transverse, excised, space between eyes very narrow, distinctly narrower than diameter of one eye; approximately as wide as length of antennomere 2; OI equal to 13.99.

Antenna. Long and narrow, ochre yellow, rather matte (AL 5.22 mm, reaching almost three quarters body length AL/BL 0.73). Surface with long, pale setation, microgranulation and very small, shallow punctures. Antennomeres 3-10 distinctly widened apically. Antennomeres 4-11 longer than antennomere 3. Antennomere 2 shortest, ultimate antennomere longest and widest near middle, narrowing apically.

RLA(1-11): 0.65 : 0.29 : 1.00 : 1.21 : 1.07 : 1.13 : 1.33 : 1.14 : 1.16 : 1.17 : 1.33.

RL/WA(1-11): 2.00 : 1.17 : 4.26 : 5.67 : 4.57 : 4.44 : 5.42 : 5.33 : 4.75 : 6.23 : 7.22.

Maxillary palpus ochre yellow, with long, pale setae. Palpomeres 2 and 3 slightly shiny, distinctly

narrowest at base and widest at apex, ultimate palpomere rather matte, widely triangular.

Pronotum (Fig. 14) black, semi-matte, convex, widest in base, distinctly narrower than elytra in humeri. Dorsal surface with long and dense, semierect pale setation, fine microgranulation and dense punctures. PL 1.19 mm; PW 1.44 mm; PI equal to 82.64. Border lines very narrow, distinct from dorsal view. Base finely bisinuate, lateral margins straight and parallel in basal part, slightly arcuate in apical half, anterior margin straight, anterior angles obtuse, posterior angles almost rectangular.

Elytra. Brown, narrow, elongate, parallel, slightly convex, shiny, widest in humeri. Dorsal surface with long and dense, semierect pale setation. EL 4.78 mm; EW 2.17 mm; EL/EW 2.20. Elytral striae with rows of coarse and relatively large punctures, interspaces between punctures in rows narrower than diameter of punctures. Elytral intervals slightly convex, with fine microgranulation and sparse, small punctures.

Scutellum. Brown, roundly triangular, semi-matte, with shallow punctures, microgranulation and a few long, pale setae.

Elytral epipleura well-developed, brown with punctures distinctly narrowing to ventrite 1 in basal part, apical part narrow and parallel with long, pale setae.

Legs. Long and narrow, dark brown or blackish brown, tarsi, pro- and mesotibiae ochre yellow. Dorsal surface with long, pale setae, fine microgranulation and very small, shallow punctures. Pro- and mesotarsomeres 3 and 4 and metatarsomere 3 widened and lobed. Ultimate tarsomeres slightly widened apically. RLT: 1.00 : 0.40 : 0.71 : 0.78 : 1.48 (protarsus); 1.00 : 0.41 : 0.41 : 0.54 : 1.02 (mesotarsus); 1.00 : 0.47 : 0.42 : 0.81 (metatarsus).

Tarsal claws (large with teeth only from one side of hollow claw, both protarsal claws with more than 30 visible teeth).

Ventral side of body blackish brown with punctures. Abdomen dark brown, shiny, with sparse pale setae, very fine microgranulation and shallow punctures.

Aedeagus (Figs. 15, 16) ochre yellow, rather matte. Basal piece slightly narrowing in dorsal view. Apical piece elongate triangular from dorsal view, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1 : 2.54.

Female. Body and space between eyes slightly wider than in male. Protarsal claws smaller with 14 visible teeth.

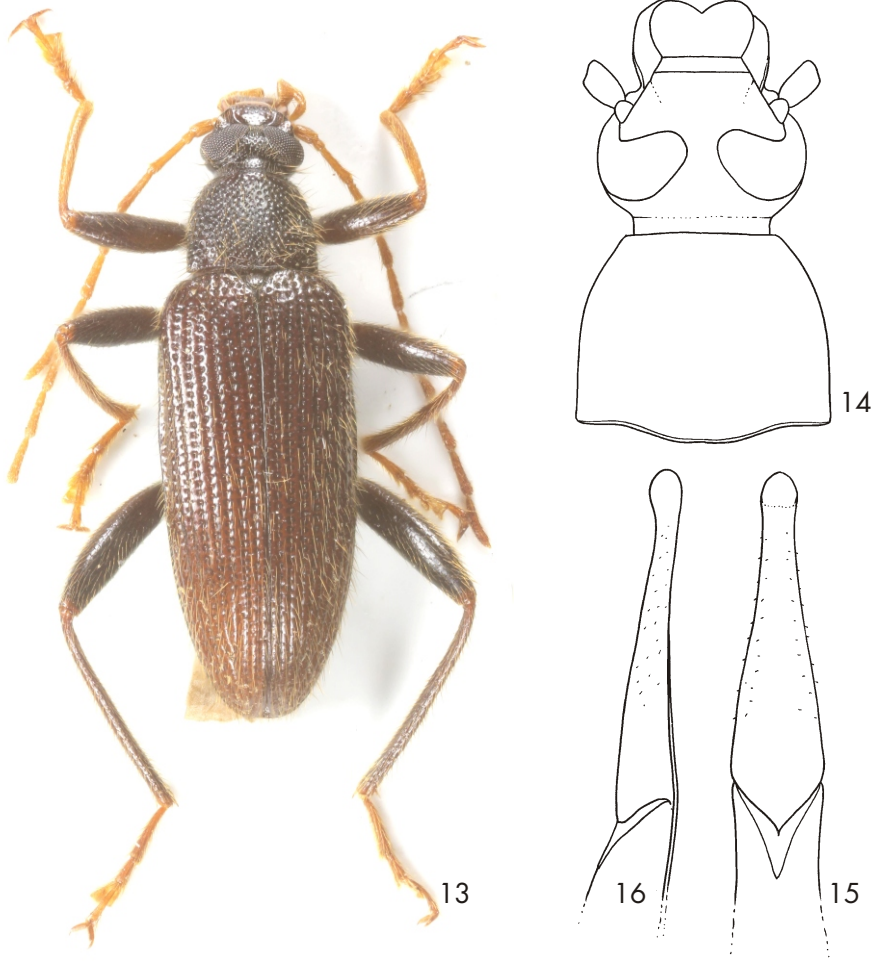
Measurements of female body. BL 7.72 mm; HL 1.24 mm; HW 1.26 mm; OI 22.14; PL 1.26 mm; PW 1.61 mm; PI 78.28; EL 5.22 mm; EW 2.45 mm; AL(1-11) 5.75 mm; AL(1-11)/BL 0.75; HW/PW 0.78; BL/EW 3.15; EL/EW 2.13.

RLA(1-11): 0.60 : 0.28 : 1.00 : 1.02 : 0.94 : 1.06 : 1.08 : 1.07 : 1.08 : 1.13 : 1.36.

RL/WA(1-11): 2.13 : 1.25 : 4.28 : 3.89 : 3.42 : 4.04 : 4.14 : 5.43 : 5.04 : 6.05 : 6.04.

RLT: 1.00 : 0.58 : 0.78 : 0.63 : 1.25 (protarsus); 1.00 : 0.59 : 0.33 : 0.34 : 0.89 (mesotarsus); 1.00 : 0.44 : 0.36 : 0.76 (metatarsus).

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n= 8). BL 7.54 mm (7.15-8.05 mm); HL 1.25 mm (1.12-1.31 mm); HW 1.21 mm (1.17-1.25 mm); OI 14.33 (12.68-16.23); PL 1.26 mm (1.19-1.29 mm); PW 1.53 mm (1.44-1.60 mm); PI 82.16 (80.00-83.77); EL 5.04 mm (4.78-5.46 mm); EW 2.26 mm (2.17-2.36 mm). Females (n= 9). BL 8.04 mm (7.72-8.46 mm); HL 1.28 mm (1.17-1.36 mm); HW 1.24 mm (1.11-1.32 mm); OI 22.92 (21.34-26.95); PL 1.27 mm (1.18-1.34 mm); PW 1.61 mm (1.52-1.68 mm); PI 78.65 (77.58-79.87); EL 5.51 mm (5.22-5.76 mm); EW 2.55 mm (2.42-2.69 mm).



Figs. 13-16. *Oracula (Oracula) parvula* sp. nov. (male holotype): 13- habitus; 14- head and pronotum; 15- apical piece of aedeagus, dorsal view; 16- apical piece of aedeagus, lateral view.

Differential diagnosis. (For details see the key below). Similar *Oracula* Novák, 2019 species with dark dorsal surface of elytra and unicolorous ochre yellow antenna from Malaysia is *Oracula (Oracula) puella* sp. nov.

Oracula (Oracula) parvula sp. nov. clearly differs from similar species *O. (O.) puella* mainly by smaller and wider body (BL from 7.15 to 8.46 mm; BL/EW approximately 3.3 in male) and by dark femora and metatibiae; while *O. (O.) puella* has body larger and narrower (BL from 11.06 to 13.54 mm; BL/EW approximately 3.85) and legs are completely ochre yellow.

Etymology. From Latin *parvula* (meaning 'little girl').

Distribution. Malaysia.

***Oracula (Oracula) pilosa* sp. nov.**

(Figs. 17-20)

Type locality. Malaysia, west of Kelantan state, 70 km northwest of Gua Musang, Mt. Chamah, 1900 m.**Type material.** Holotype (♂): Malaysia W., Kelantan 70 / km NW of Gua Musang / Mt. Chamah, 1900m, 17.iv. / 9.v.2014, P. Čechovský lgt., (VNPC). Paratypes: (4 ♂♂): same data as holotype, (VNPC); (1 ♂): Malaysia W Kelantan / 30 km NW of Gua Musang / Ulu Lalat Mt. 800-1000m / KAMPONG SUNGAI OM; 21. / vi.-14.vii.2010, P. Čechovský lgt., (VNPC); (1 ♀): same data as penultimate, but 22.v.-1.vi.2012, (VNPC); (1 ♀): Malaysia Kelantan / road between Kampong Raja / and Gua Musang, 1400-1700m, / (Ladang Pandrak), 1.-28. / iv.2006; 4°63-88'N, 101°45-95'E, / Čechovský Petr lgt., (VNPC). The types are provided with a printed red label: '*Oracula (Oracula) pilosa* sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2022'.**Description of holotype.** Habitus as in Fig. 17, body large, narrow, elongate, parallel, *Leptura* shaped, shiny, from ochre yellow to blackish brown, dorsal surface with long, pale setation, punctuation and microgranulation, BL 11.05 mm. Widest near humeri; BL/EW 3.58.

Head (Fig. 18) dark brown, a little wider than long, through the eyes distinctly wider than anterior margin, narrower than base of pronotum. Dorsal surface shiny with long, pale setae, dense punctuation and fine microgranulation. Clypeus wide, transverse, half heart shaped, blackish brown with apex excised in middle. Dorsal surface with small, shallow punctures, long, pale setae and fine microgranulation, slightly shiny. Mandibles pale brown with apex and margins darker, glabrous, shiny, with pale setae in sides. HW 1.73 mm; HW/PW 0.80; HL (visible part) 1.52 mm. Eyes large, transverse, excised, space between eyes very narrow, distinctly narrower than diameter of one eye; wider than length of antennomere 2; narrower than length of antennomere 1, OI equal to 17.01.

Antenna. Long and narrow, rather matte (AL 8.42 mm, reaching three quarters body length AL/BL 0.76). Surface with long, pale setation, microgranulation and very small, shallow punctures. Antennomeres 1 and 2 pale reddish brown, slightly shiny, antennomeres 3-5 pale reddish brown with blackish brown apical part, antennomeres 6-11 brown, antennomeres 3-10 widened apically. Antennomere 2 shortest, antennomere 4 longest, antennomeres 4-11 distinctly longer than antennomere 3. Ultimate antennomere widest near middle.

RLA(1-11): 0.60 : 0.24 : 1.00 : 1.42 : 1.02 : 1.34 : 1.16 : 1.20 : 1.10 : 1.16 : 1.10.

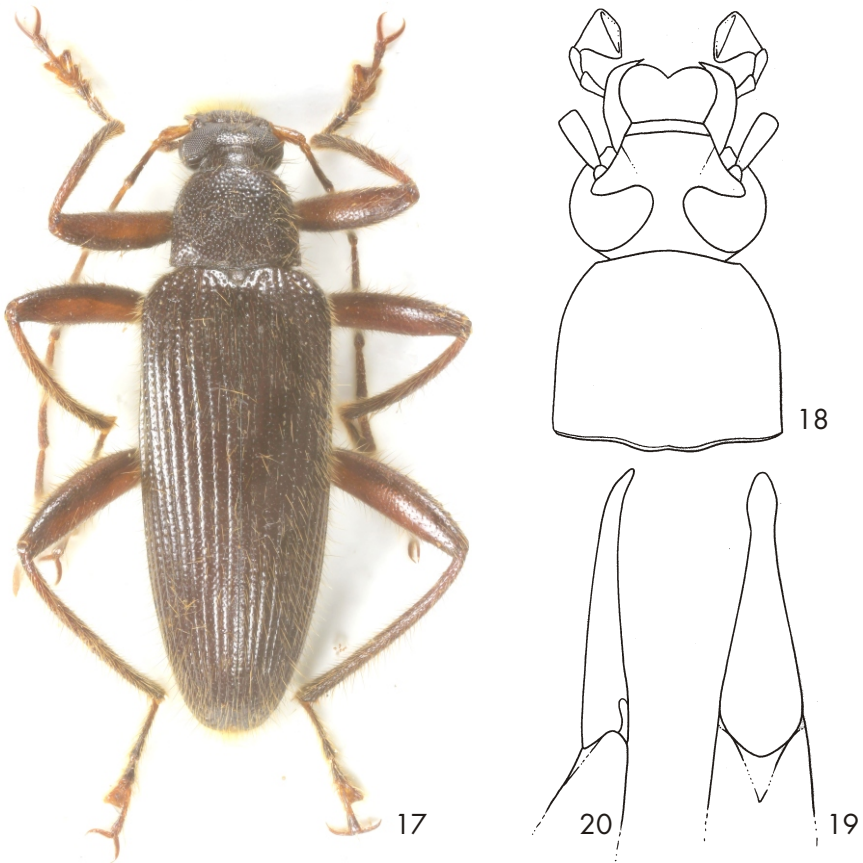
RL/WA(1-11): 2.64 : 1.61 : 4.92 : 7.91 : 5.68 : 7.17 : 5.96 : 6.13 : 5.13 : 6.22 : 6.14.

Maxillary palpus brown, rather matte, with long, pale setae, fine microgranulation and small, shallow punctures. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular.

Pronotum (Fig. 18) blackish brown, shiny, slightly convex, widest in base, distinctly narrower than elytra in humeri. Dorsal surface with long, pale setation, fine microgranulation, dense and coarse punctures. PL 1.88 mm; PW 2.17 mm; PI equal to 86.64. Border lines very narrow, margins conspicuous everywhere from dorsal view. Base finely bisinuate, lateral margins straight in basal part, slightly arcuate in apical half, anterior margin arcuate, anterior and posterior angles obtuse.

Elytra. Dark brown, narrow, elongate, parallel, slightly convex, shiny, widest near humeri. Dorsal surface with long and dense, pale setation. EL 7.65 mm; EW 3.09 mm; EL/EW 2.48. Elytral striae with rows of coarse punctures, interspaces between punctures in rows as large as or narrower than diameter of punctures. Elytral intervals finely convex, with sparse and very fine microgranulation and small punctures.

Scutellum. Brown, semielliptical, semi-matte, with small, shallow punctures, microgranulation and a few long, pale setae.



Figs. 17-20. *Oracula (Oracula) pilosa* sp. nov. (male holotype): 17- habitus; 18- head and pronotum; 19- apical piece of aedeagus, dorsal view; 20- apical piece of aedeagus, lateral view.

Elytral epipleura well-developed, dark brown, with punctures distinctly narrowing to ventrite 1 in basal part, then with denser setae in apical part leads parallel.

Legs. Long and narrow, reddish brown, apex of tibiae and tarsi darker, dorsal surface with long, erect, pale setae, fine microgranulation and small, shallow punctures. Pro- and mesotarsomeres 3 and 4 and metatarsomere 3 widened and lobed. Ultimate tarsomeres widened apically, apex of pro- and mesotibiae slightly bent. RLT: 1.00 : 0.50 : 0.58 : 0.61 : 1.19 (protarsus); 1.00 : 0.44 : 0.40 : 0.66 : 0.79 (mesotarsus); 1.00 : 0.33 : 0.41 : 0.80 (metatarsus).

Tarsal claws large with teeth only from one side of hollow claw, both upper protarsal claws with more than 30 visible teeth.

Ventral side of body blackish brown with long, pale setae and small punctures. Abdomen blackish brown, shiny, with sparse, long, pale setae, fine microgranulation, and small, shallow punctures.

Aedeagus (Figs. 19, 20) ochre yellow. Basal piece rounded laterally and narrowing in dorsal view. Apical piece narrow, elongate triangular from dorsal view, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1 : 2.48.

Female. Body wider, antenna slightly shorter than in male. Protarsal claws smaller with 15 and 16 visible teeth.

Measurements of female body. BL 11.25 mm; HL 1.53 mm; HW 1.74 mm; OI 22.04; PL 1.85 mm; PW 2.23 mm; PI 82.96; EL 7.87 mm; EW 3.44 mm; AL(1-11) 7.93 mm; AL(1-11)/BL 0.71; HW/PW 0.78; BL/EW 3.27; EL/EW 2.29.

RLA(1-11): 0.54 : 0.17 : 1.00 : 1.16 : 1.16 : 1.14 : 1.11 : 1.11 : 1.03 : 1.09.

RL/WA(1-11): 2.18 : 1.10 : 4.96 : 6.00 : 6.20 : 6.78 : 5.46 : 4.93 : 5.48 : 6.27 : 6.64.

RLT: 1.00 : 0.41 : 0.43 : 0.59 : 1.33 (protarsus); 1.00 : 0.40 : 0.39 : 0.64 : 1.27 (mesotarsus); 1.00 : 0.50 : 0.41 : 0.87 (metatarsus).

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n= 6). BL 10.68 mm (10.38-11.05 mm); HL 1.49 mm (1.43-1.53 mm); HW 1.66 mm (1.59-1.73 mm); OI 15.59 (14.29-17.01); PL 1.79 mm (1.60-1.94 mm); PW 2.10 mm (1.93-2.28 mm); PI 85.16 (82.91-86.64); EL 7.40 mm (7.23-7.65 mm); EW 3.07 mm (2.94-3.17 mm). Females (n= 2). BL 11.85 mm (11.25-12.44 mm); HL 1.59 mm (1.53-1.64 mm); HW 1.80 mm (1.74-1.86 mm); OI 20.99 (19.94-22.04); PL 1.92 mm (1.85-1.99 mm); PW 2.39 mm (2.23-2.55 mm); PI 80.50 (78.04-82.96); EL 8.38 mm (7.87-8.89 mm); EW 3.67 mm (3.44-3.89 mm).

Differential diagnosis. (For details see the key below). Similar *Oracula* Novák, 2019 species with dark dorsal surface from Malaysia are *Oracula (Oracula) parvula* sp. nov. and *Oracula (Oracula) puella* sp. nov.

Oracula (Oracula) pilosa sp. nov. clearly differs from similar species *O. (O.) parvula* and *O. (O.) puella* mainly by antenna bicolor and by maxillary palpus and legs dark; while *O. (O.) parvula* and *O. (O.) puella* have antenna, maxillary palpus and legs at least pale.

Etymology. From Latin *pilosa* (meaning 'hairy').

Distribution. Malaysia.

***Oracula (Oracula) puella* sp. nov.**

(Figs. 21-24)

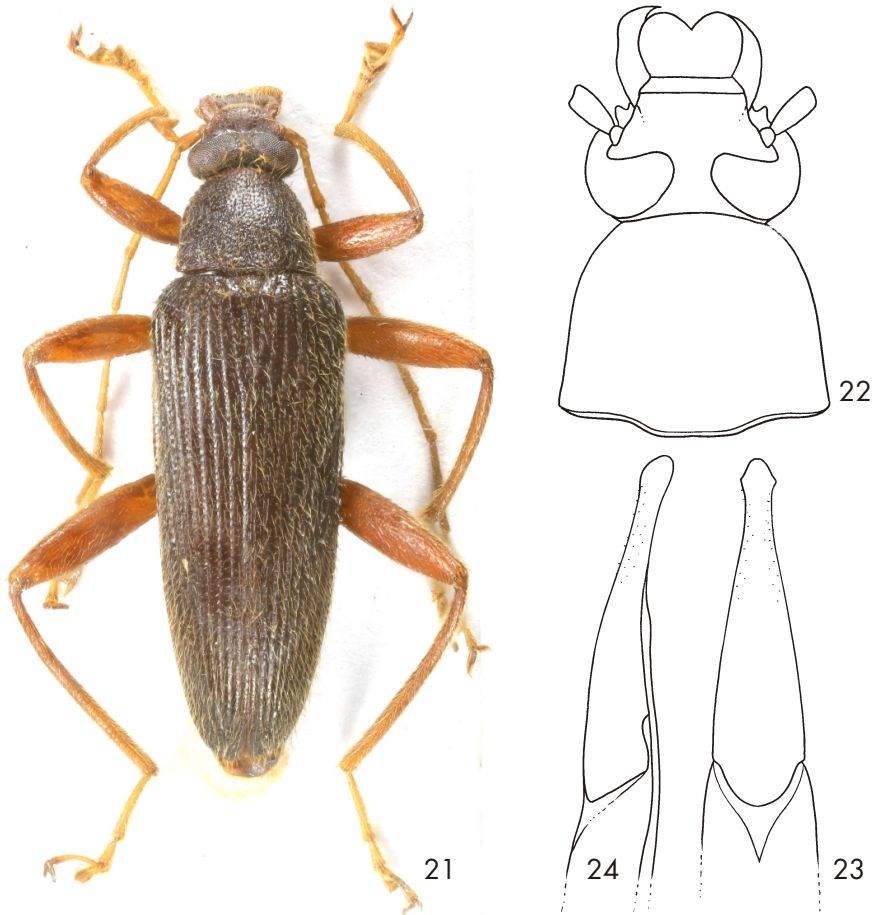
Type locality. Western Malaysia, Kelantan, environ of Gua Musang.

Type material. Holotype (♂): MALAYSIA W., KELANTAN 70 / km NW of Gua Musang / Mt. Chamah 1900m, 17.iv. / 9.v.2014; P. Čechovský lgt., (VNPC). Paratypes: (1 ♂, 1 ♀): same data as holotype, (VNPC); (1 ♂): MALASIA W KELANTAN / 30 km NW of Gua Musang / Ulu Lalat Mt. 800-1000m / KAMPONG SUNGAI OM; 21. / vi.-14.vii.2010; P.Čechovský lgt., (VNPC); (1 ♀): same data as penultimate, but 27.v.-19.vi.2011, (VNPC); (3 ♀♀): same data as penultimate, but 22.v.-14.vi. 2012, (VNPC); (1 ♂): MALASIA W.,KELANTAN / 90 km N of Gua Musang. / Gunung Basor, 1700 m. / Kampong Kubur Datu / 10.iv.-5.v.2016 / Petr Cechovsky lgt., (VNPC); (1 ♂): MALAYSIA West, PAHANG / Cameron Highlands, TANAH / RATA, 3.ii.-19.ii.2005 / P. Čechovský lgt., 1200-1500 m, (VNPC). The types are provided with a printed red label: 'Oracula / (Oracula) puella sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2022'.

Description of holotype. Habitus as in Fig. 21, body large, narrow, elongate, parallel, *Leptura* shaped, semi-matte, from ochre yellow to dark brown, dorsal surface with pale setation, punctuation and microgranulation, BL 12.17 mm. Widest in humeri; BL/EW 3.69.

Head (Fig. 22) wider than long, through the eyes distinctly wider than anterior margin, narrower than base of pronotum. Dorsal surface semi-matte with pale setae, punctuation and

microgranulation. Clypeus wide, transverse, half heart shaped, brown, with apex excised in middle. Dorsal surface with shallow punctures, long, pale setae and microgranulation, slightly shiny. Mandibles pale brown with apex and margins darker, glabrous, shiny, with pale setae in sides. HW 1.86 mm; HW/PW 0.77; HL (visible part) 1.58 mm. Eyes large, transverse, excised, space between eyes very narrow, distinctly narrower than diameter of one eye; approximately as wide as length of antennomere 2; OI equal to 15.58.



Figs. 21-24. *Oracula* [*Oracula*] *puella* sp. nov. (male holotype): 21- habitus; 22- head and pronotum; 23- apical piece of aedeagus, dorsal view; 24- apical piece of aedeagus, lateral view.

Antenna. Long and narrow, ochre yellow, rather matte (AL 8.61 mm, exceeding two thirds body length AL/BL 0.69). Surface with pale setation, microgranulation and very small, shallow punctures. Antennomeres 3-10 slightly widened apically. Antennomere 2 shortest, antennomere 4 longest, ultimate antennomere widest near middle, narrowing apically.

RLA(1-11): 0.56 : 0.22 : 1.00 : 1.13 : 0.97 : 1.01 : 1.04 : 1.06 : 0.93 : 0.88 : 0.99.

RL/WA(1-11): 2.21 : 1.45 : 4.62 : 6.08 : 4.48 : 5.19 : 5.56 : 5.07 : 4.63 : 4.37 : 6.05.

Maxillary palpus ochre yellow, rather matte, with long, pale setae and fine microgranulation. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular.

Pronotum (Fig. 22) dark brown, slightly shiny, slightly convex, widest in base, distinctly narrower than elytra in humeri. Dorsal surface with long and dense, semierect pale setation, fine microgranulation and dense punctures. PL 2.00 mm; PW 2.41 mm; PI equal to 82.99. Border lines very narrow, not clearly conspicuous in the middle of anterior margin from dorsal view. Base finely bisinuate, lateral margins straight and parallel in basal part, slightly arcuate in apical half, anterior margin finely arcuate, anterior angles indistinct, posterior angles obtuse.

Elytra. Dark brown, narrow, elongate, parallel, slightly convex, semi-matte, widest in humeri. Dorsal surface with long and dense, semierect pale setation. EL 8.59 mm; EW 3.30 mm; EL/EW 2.60. Elytral striae with rows of relatively coarse punctures, interspaces between punctures in rows narrower than diameter of punctures. Elytral intervals slightly convex, with fine microgranulation and sparse, small punctures.

Scutellum. Brown, semielliptical, semi-matte, with punctures, microgranulation and a few long, pale setae.

Elytral epipleura well-developed, dark brown with long, pale setae, with punctures and microgranulation distinctly narrowing to ventrite 1 in basal part, with reddish brown margins, relatively wide and parallel in apical part.

Legs. Long and narrow, ochre yellow, femora pale reddish brown, dorsal surface with pale setae, fine microgranulation and small, shallow punctures. Pro- and mesotarsomeres 3 and 4 and metatarsomere 3 widened and lobed. Ultimate tarsomeres slightly widened apically. RLT: 1.00 : 0.52 : 0.51 : 0.81 : 1.26 (protarsus); 1.00 : 0.44 : 0.44 : 0.66 : 1.12 (mesotarsus); 1.00 : 0.45 : 0.38 : 0.79 (metatarsus).

Tarsal claws large with teeth only from one side of hollow claw, both protarsal claws with almost 40 visible teeth.

Ventral side of body reddish brown with pale setae and punctures. Abdomen brown, shiny, almost glabrous, with very fine microgranulation, and small and shallow punctures.

Aedeagus (Figs. 23, 24) ochre yellow, shiny. Basal piece slightly narrowing in dorsal view. Apical piece elongate triangular from dorsal view, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1 : 2.36.

Female. Protarsal claws smaller than in male, with 15 and 16 visible teeth.

Measurements of female body. BL 13.41 mm; HL 1.73 mm; HW 2.04 mm; OI 15.87; PL 1.92 mm; PW 2.23 mm; PI 72.45; EL 9.76 mm; EW 3.69 mm; AL(1-11) 8.83 mm; AL(1-11)/BL 0.66; HW/PW 0.77; BL/EW 3.63; EL/EW 2.65.

RLA(1-11): 0.60 : 0.25 : 1.00 : 1.07 : 1.01 : 1.02 : 1.02 : 0.99 : 0.97 : 0.86 : 1.09.

RL/WA(1-11): 2.43 : 1.31 : 4.93 : 5.65 : 5.52 : 5.22 : 5.22 : 5.23 : 5.36 : 4.92 : 6.57.

RLT: 1.00 : 0.49 : 0.62 : 0.79 : 1.42 (protarsus); 1.00 : 0.37 : 0.41 : 0.35 : 0.80 (mesotarsus); 1.00 : 0.46 : 0.37 : 0.66 (metatarsus).

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n= 5). BL 11.97 mm (11.06-12.54 mm); HL 1.55 mm (1.51-1.60 mm); HW 1.82 mm (1.77-1.88 mm); OI 15.31 (13.87-16.45); PL 1.93 mm (1.70-2.07 mm); PW 2.30 mm (2.15-2.41 mm); PI 84.09 (79.07-88.09); EL 8.49 mm (7.85-9.01 mm); EW 3.11 mm (2.48-3.33 mm). Females (n= 5). BL 13.28 mm (12.96-13.54 mm); HL 1.68 mm

(1.60-1.74 mm); HW 1.97 mm (1.88-2.05 mm); OI 17.55 (14.00-20.47); PL 1.99 mm (1.92-2.10 mm); PW 2.63 mm (2.53-2.68 mm); PI 75.70 (72.45-79.85); EL 9.61 mm (9.29-9.79 mm); EW 3.77 mm (3.69-3.82 mm).

Differential diagnosis. (For details see the key below). Similar *Oracula* Novák, 2019 species with dark dorsal surface of elytra and unicolored ochre yellow antenna from Malaysia is *Oracula (Oracula) parvula* sp. nov.

Oracula (Oracula) puella sp. nov. clearly differs from similar species *O. (O.) parvula* mainly by body larger and narrower (BL from 11.06 to 13.54 mm; BL/EW approximately 3.85 in male) and by legs completely ochre yellow; while *O. (O.) parvula* has smaller and wider body (BL from 7.15 to 8.46 mm; BL/EW approximately 3.3 in male), femora and metatibiae are dark.

Etymology. From Latin *puella* (meaning 'girl').

Distribution. Malaysia.

***Oracula (Oracula) rufofemora* sp. nov.**

(Figs. 25-28)

Type locality. Western Malaysia, Pahang, Endau Rompin Natural Preserve, 400-600 m.

Type material. Holotype (♂): MALAYSIA WEST, PAHANG, 70 km SW / of Kuala Rompin, Endau Rompin N. P. / 600m, G. Beremban (Kg. Tebu Hitam) / 13.iv.3.v. / 2009; P. Čechovský lgt., (VNPC). Paratypes: (2 ♂♂, 1 ♀): same data as holotype, (VNPC); (8 ♂♂, 6 ♀♀): MALAYSIA W., PAHANG / 50 km NE of Kuala / Rompin, Endau Rompin / Nat. P., 400 m, G. Keriung / (Kg. Tebu Hitam); 9.-30.iv. / 2008; P. Čechovský lgt., (VNPC). The types are provided with a printed red label: 'Oracula / (Oracula) rufofemora sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2022'.

Description of holotype. Habitus as in Fig. 25, body large, narrow, elongate, parallel, *Leptura* shaped, slightly shiny, from pale brown to dark brown, dorsal surface with pale setation, punctuation and microgranulation, BL 11.28 mm. Widest near humeri; BL/EW 3.54.

Head (Fig. 26) a little longer than wide, through the eyes distinctly wider than anterior margin, slightly narrower than base of pronotum. Dorsal surface semi-matte with pale setae, smaller punctures and microgranulation. Posterior part reddish brown, anterior half pale reddish brown. Clypeus wide, transverse, half heart shaped, pale brown with apex excised in middle. Dorsal surface with very small punctures, long, pale setae and microgranulation, rather matte. Mandibles pale brown with apex and margins darker, glabrous, shiny, with pale setae on sides. HW 1.67 mm; HW/PW 0.72; HL (visible part) 1.79 mm. Eyes large, transverse, excised, space between eyes very narrow, distinctly narrower than diameter of one eye; wider than length of antennomere 2; narrower than length of antennomere 1, OI equal to 15.68.

Antenna. Long and narrow (AL 8.65 mm, AL/BL 0.77 exceeding three quarters body length). Surface with pale setae, microgranulation and very small, shallow punctures. Antennomeres 1 and 2 ochre yellow, shiny, antennomeres 3 and 4 semi-matte, antennomere 3-11 bicolor, antennomeres 5-11 matte (basal part ochre yellow, apical half dark brown), antennomeres 3-10 slightly widened apically. Antennomere 2 shortest, antennomere 4 longest, antennomeres 4-8 distinctly longer than antennomere 3. Ultimate antennomeres widest near middle.

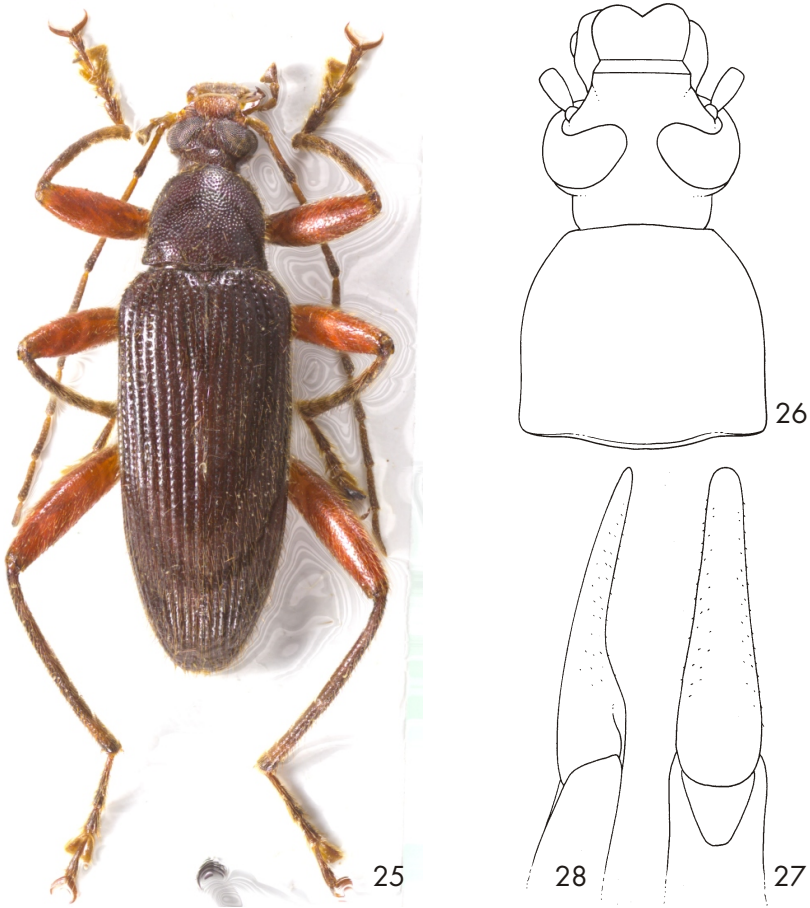
RLA(1-11): 0.47 : 0.38 : 1.00 : 1.22 : 1.06 : 1.02 : 1.02 : 1.04 : 0.98 : 0.94 : 1.02.

RL/WA(1-11): 2.07 : 1.15 : 5.52 : 6.87 : 5.87 : 5.65 : 6.05 : 5.50 : 5.68 : 6.00 : 6.50.

Maxillary palpus pale brown, rather matte, with long, pale setae, fine microgranulation and

very small, shallow punctures. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular.

Pronotum (Fig. 26) dark brown, shiny, slightly convex, widest in base, distinctly narrower than elytra in humeri. Dorsal surface with pale setae denser near lateral margins, fine microgranulation and dense punctures, interspaces between punctures almost smaller than diameter of punctures. PL 2.09 mm; PW 2.31 mm; PI equal to 90.48. Border lines very narrow, margins conspicuous from dorsal view. Base finely bisinuate, lateral margins straight in basal part, arcuate in apical half, anterior margin almost straight, slightly arcuate in middle, anterior and posterior angles obtuse.



Figs. 25-28. *Oracula (Oracula) rufofemora* sp. nov. (male holotype): 25- habitus; 26- head and pronotum; 27- apical piece of aedeagus, dorsal view; 28- apical piece of aedeagus, lateral view.

Elytra. Dark brown, shiny, narrow, elongate, parallel, slightly convex, widest near humeri. Dorsal surface with long and dense, pale setation. EL 7.40 mm; EW 3.19 mm; EL/EW 2.32. Elytral striae with rows of coarse punctures, interspaces between punctures in rows narrower than diameter of punctures. Elytral intervals finely convex, with fine microgranulation and sparse, small punctures.

Scutellum. Reddish brown with darker margins, semielliptical, semi-matte, with small, shallow punctures, microgranulation and a few long, pale setae.

Elytral epipleura well-developed, dark brown, with punctures distinctly narrowing to ventrite 1 in basal part, then pale brown, narrow and parallel with pale setae in apical part.

Legs. Long and narrow, dorsal surface with pale setae, fine microgranulation and small, shallow punctures. Femora reddish, tibiae and tarsi brown or dark brown, tibiae with pale brown apex, pro- and mesotibiae bent in apical part. Pro- and mesotarsomeres 3 and 4 and metatarsomere 3 widened and lobed. Ultimate tarsomeres widened apically. RLT: 1.00 : 0.59 : 0.62 : 0.76 : 1.42 (protarsus); 1.00 : 0.52 : 0.60 : 0.70 : 1.08 (mesotarsus); 1.00 : 0.44 : 0.42 : 0.84 (metatarsus).

Tarsal claws large with teeth only from one side of hollow claw, both upper protarsal claws with about 40 visible teeth.

Ventral side of body dark brown with pale setae and small punctures. Abdomen pale brown, shiny, with sparse, pale setae, very fine microgranulation, and small and shallow punctures.

Aedeagus (Figs. 27, 28) ochre yellow, shiny. Basal piece slightly rounded laterally and narrowing in dorsal view. Apical piece narrow, elongate triangular from dorsal view, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1 : 3.09.

Female. Body and space between eyes wider, antenna slightly shorter than in male. Protarsal claws smaller with 14 and 15 visible teeth.

Measurements of female body. BL 12.95 mm; HL 2.07 mm; HW 1.97 mm; OI 23.46; PL 2.19 mm; PW 2.71 mm; PI 80.81; EL 8.69 mm; EW 4.21 mm; AL(1-11) 8.80 mm; AL(1-11)/BL 0.68; HW/PW 0.73; BL/EW 3.08; EL/EW 2.06.

RLA(1-11): 0.44 : 0.18 : 1.00 : 1.07 : 0.98 : 0.94 : 0.99 : 0.99 : 0.91 : 0.87 : 0.92.

RL/WA(1-11): 2.00 : 1.21 : 4.94 : 5.83 : 5.17 : 5.17 : 5.38 : 5.07 : 5.72 : 5.75 : 5.70.

RLT: 1.00 : 0.55 : 0.64 : 0.83 : 1.69 (protarsus); — : — : — : — : — (mesotarsus); 1.00 : 0.39 : 0.48 : 0.54 (metatarsus).

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n= 11). BL 11.71 mm (11.28-12.17 mm); HL 1.83 mm (1.78-1.88 mm); HW 1.73 mm (1.67-1.79 mm); OI 16.70 (14.18-19.29); PL 2.12 mm (2.05-2.19 mm); PW 2.26 mm (2.19-2.48 mm); PI 89.89 (87.29-93.60); EL 7.77 mm (7.40-8.23 mm); EW 3.38 mm (3.19-3.53 mm). Females (n= 7). BL 11.67 mm (11.01-12.95 mm); HL 1.91 mm (1.83-2.07 mm); HW 1.82 mm (1.74-1.97 mm); OI 24.01 (20.07-24.67); PL 2.05 mm (1.97-2.19 mm); PW 2.47 mm (2.37-2.71 mm); PI 82.75 (80.08-86.92); EL 7.72 mm (7.19-8.69 mm); EW 3.74 mm (3.55-4.21 mm).

Differential diagnosis. (For details see the key below). Similar *Oracula* Novák, 2019 species with reddish femora are *Oracula* (*O.*) *domina* Novák, 2019 and *Oracula* (*O.*) *rejseki* Novák, 2023 both from Thailand, *Oracula* (*O.*) *rutilipes* (Borchmann, 1925) from Indonesia (Sumatra Island).

Oracula (*Oracula*) *rufofemora* sp. nov. clearly differs from similar species *O.* (*O.*) *rejseki* mainly by dorsal surface of pronotum and elytra dark, while *O.* (*O.*) *rejseki* has dorsal surface of pronotum and elytra reddish.

O. (*O.*) *rufofemora* is distinctly different from similar species *O.* (*O.*) *domina* mainly by larger body (BL approximately 11.71 mm), by antennomere 4 distinctly longer than antennomere 3 (1.22 times), by tibiae distinctly darker than reddish femora; while *O.* (*O.*) *domina* is smaller (BL

approximately 9.5 mm), antennomere 4 is as long as antennomere 3 and tibiae are as reddish as femora.

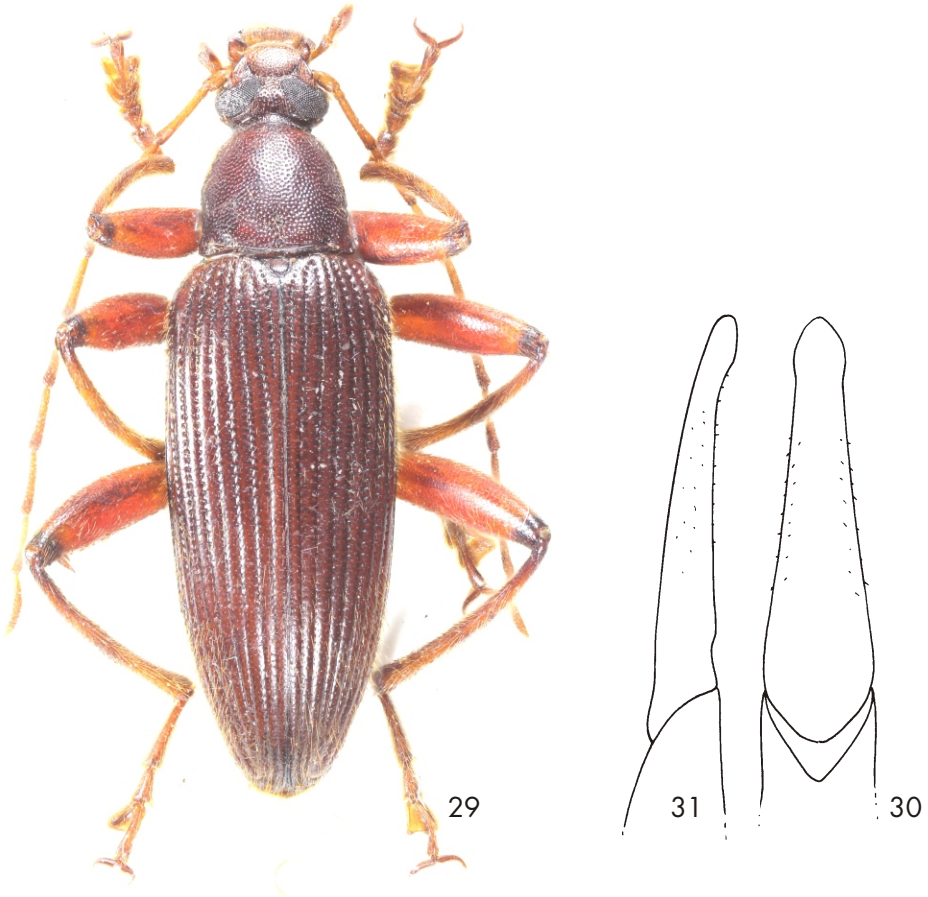
O. (O.) rufofemora clearly differs from similar species *O. (O.) rutilipes* mainly by pronotum narrower and longer (PI in male approximately 90), by antennomere 4 distinctly longer than antennomere 3 (1.22 times), by tibiae dark or distinctly darker than reddish femora; while *O. (O.) rutilipes* has pronotum wider (PI approximately 80), antennomere 4 is approximately as long as antennomere 3 and tibiae are pale or as reddish as femora.

Etymology. Named after its main character reddish femora.

Distribution. Malaysia.

***Oracula (Oracula) rutilipes* (Borchmann, 1925)**

(Figs. 29-31)



Figs. 29-31. *Oracula (Oracula) rutilipes* (Borchmann, 1925): 29- habitus of male; 30- apical piece of aedeagus, dorsal view; 31- apical piece of aedeagus, lateral view.

Type locality. Indonesia: Sumatra, Wai Lima, Lampongs.

Material examined. (1 ♂): MALAYSIA West, PERAK / 40 km SE of IPOH, 900 m / Banjaran Titi Wangsu / RINGLET, 25.iii.-3.iv.2002 / P. Čechovský lgt., (VNPC); (1 ♂): same data as penultimate, but 23.iii.-15.iv.2004, (VNPC).

Remarks. Habitus of male from Western Malaysia (Perak) is as in Fig. 29, measurements of body (see: Novák 2019a: 82). Apical piece of aedeagus (Figs. 30 and 31) clearly differs from aedeagus of *O. (O.) rufofemora* sp. nov. as in Figs. 27 and 28.

Distribution. Indonesia (Sumatra Island), **new for peninsular Malaysia.**

KEY TO THE MALAYAN ORACULA SPECIES

- 1 (2) Femora reddish. 3
- 2 (1) Femora dark or pale. 5
- 3 (4) Pronotum narrower and longer (PI in male approximately 90), antennomere 4 distinctly longer than antennomere 3 (1.22 times), tibiae dark or distinctly darker than reddish femora. Habitus as in Fig. 25, head and pronotum (Fig. 26); aedeagus as in Figs. 27 and 28.
..... *Oracula (Oracula) rufofemora* sp. nov.
- 4 (3) Pronotum wider (PI approximately 80), antennomere 4 approximately as long as antennomere 3, tibiae pale or as reddish as femora. Habitus as in Fig. 23, aedeagus Figs. 30 and 31.
..... *Oracula (Oracula) rutilipes* (Borchmann, 1925)
- 5 (6) Dorsal surface of elytra pale. 7
- 6 (5) Dorsal surface of elytra dark. 11
- 7 (8) Pronotum more transverse (PI 67-75), femora and tibiae dark. Habitus as in Fig. 5, head and pronotum (Fig. 6); aedeagus as in Figs. 7 and 8. *Oracula (Oracula) media* sp. nov.
- 8 (7) Pronotum longer and narrower (PI 78-86), femora and tibiae almost pale. 9
- 9 (10) Pronotum dark brown, longer and narrower (PI 86), lateral margins of pronotum parallel in basal half, femora unicolorous pale brown. Habitus as in Fig. 9, head and pronotum (Fig. 10); aedeagus as in Figs. 11 and 12. *Oracula (Oracula) oliveri* sp. nov.
- 10 (9) Pronotum reddish brown, wider (PI approximately 78), lateral margins narrowing in basal part, apex of femora almost darker. Habitus as in Fig. 1, head and pronotum (Fig. 2); aedeagus as in Figs. 3 and 4.
..... *Oracula (Oracula) basorica* sp. nov.
- 11 (12) Antenna bicolor, maxillary palpus and legs dark. Habitus as in Fig. 17, head and pronotum (Fig. 18); aedeagus as in Figs. 19 and 20. *Oracula (Oracula) pilosa* sp. nov.
- 12 (11) Antenna, maxillary palpus ochre yellow, legs almost partly ochre yellow. 13
- 13 (14) Body smaller, wider (BL from 7.15 to 8.46 mm; BL/EW approximately 3.3 in males), femora and metatibiae dark. Habitus as in Fig. 13, head and pronotum (Fig. 14); aedeagus as in Figs. 15 and 16.
..... *Oracula (Oracula) parvula* sp. nov.
- 14 (13) Body larger, narrower (BL from 11.06 to 13.54 mm; BL/EW approximately 3.85 in males), legs completely ochre yellow. Habitus as in Fig. 21, head and pronotum (Fig. 22); aedeagus as in Figs. 23 and 24. *Oracula (Oracula) puella* sp. nov.

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