

## A Contribution to knowledge of the genus *Cteisodes* Borchmann, 1932 (Coleoptera: Tenebrionidae: Alleculinae: Alleculini) with description of a new species and *Cteisodella* gen. nov.

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### Taxonomy, new genus, new species, descriptions, Coleoptera, Tenebrionidae, Alleculinae, Alleculina, *Cteisodes*, *Cteisodella*, Oriental and Palaearctic Regions

**Abstract.** A new genus, *Cteisodella* gen. nov., with the type species *Cteisodella assamica* sp. nov. from India (Assam) is described. New species of the genus *Cteisodes* Borchmann, 1932 are described as follows: *Cteisodes nilgiriensis* sp. nov. from India (Nilgiri Hills), *Cteisodes pahangensis* sp. nov. from Malaysia (Pahang), and *Cteisodes siamensis* sp. nov. from Thailand (Chiang Mai). The new species are compared with the species *Cteisodes sericea* Borchmann, 1932 and *Cteisodes cteisa* (Borchmann, 1928).

### INTRODUCTION

The genus *Cteisodes* was introduced by Borchmann (1932) for *Cteisodes sericea* Borchmann, 1932 as a type species from the Philippines (the Island Sibuyan). Before this, Borchmann (1928) described the species *Allecula cteisa* Borchmann, 1928 from Indonesia (the Island Sumatra) - this species was transferred by Borchmann (1932) to the genus *Cteisodes* as *Cteisodes cteisa* (Borchmann, 1928). New species of the genus *Cteisodes* are described as follows: *Cteisodes nilgiriensis* sp. nov. from India (Nilgiri Hills), *Cteisodes pahangensis* sp. nov. from Malaysia (Pahang), and *Cteisodes siamensis* sp. nov. from Thailand (Chiang Mai). The new species are illustrated, keyed and compared one with another.

The new genus *Cteisodella* gen. nov. with *Cteisodella assamica* sp. nov. from India (Assam) as a type species is described and illustrated. It is compared with the genus *Cteisodes* Borchmann.

### 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:

BMNH Natural History Museum, London, United Kingdom;

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

ZMUH Zoologisches Institut und Museums der Universität Hamburg, Germany.

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 ( $1=1.00$ ).

Other abbreviations are used: bf= black frame; bl= beige label; hb= handwritten black; pb= printed black; pl= pink label; wl= white label.

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

### genus *Cteisodes* Borchmann, 1932

**Type species.** *Cteisodes sericea* Borchmann, 1932.

#### KEY TO THE SPECIES OF THE GENUS *CTEISODES* BORCHMANN

- 1 (2) Antenna, maxillary palpus and legs pale brown or pale reddish brown. Habitus of male as in Fig. 6, head and pronotum (Fig. 7), antenna (Fig. 8) and aedeagus as in Figs. 9 and 10. India, Nilgiri Hills. .... *Cteisodes nilgiriensis* sp. nov.
- 2 (1) Antenna, maxillary palpus and legs at least partly dark. .... 3
- 3 (4) Body slightly larger, narrower and longer (BL/EW 2.7). Habitus as in Fig. 17, head and pronotum (Fig. 18) and antenna as in Fig. 19. Thailand. .... *Cteisodes siamensis* sp. nov.
- 4 (3) Body smaller, wider and shorter (BL/EW less than 2.5). .... 5
- 5 (6) Scutellum triangular, punctuation of pronotum very fine, but distinct. Habitus as in Fig. 14, head and pronotum (Fig. 15) and antenna as in Fig. 16. The Philippines (Island Sibuyan). .... *Cteisodes sericea* Borchmann, 1932
- 6 (5) Scutellum pentagonal, punctuation of pronotum almost indistinct. .... 7
- 7 (8) Lateral margins of pronotum regularly rounded, dorsal surface very slightly shiny. Habitus of male as in Fig. 1, head and pronotum (Fig. 2), antenna (Fig. 3) and aedeagus as in Figs. 4 and 5. Indonesia, Island Sumatra. .... *Cteisodes cteisa* (Borchmann, 1928)
- 8 (7) Lateral margins of pronotum in posterior part more straight and parallel, dorsal surface matte. Habitus of female as in Fig. 11, head and pronotum (Fig. 12) and antenna (Fig. 13). Malaysia, Pahang. .... *Cteisodes pahangensis* sp. nov.

### *Cteisodes cteisa* (Borchmann, 1928)

(Figs. 1-5)

*Allecula cteisa* Borchmann, 1928: 411.

*Cteisodes cteisa* (Borchmann, 1928): Borchmann 1932: 308.

**Type locality.** Indonesia, Island Sumatra, Fort de Kock, 920 m.

**Material examined.** (1 ♂): bl: Fort de Kock / (Sumatra) 920 M. / 1926 / leg. E. Jacobson. [pb], (VNPC).

**Remarks.** Species was described as *Allecula cteisa* by Borchmann (1928), the same author described the genus *Cteisodes* Borchmann, 1932 (Borchmann 1932) and transferred the species to the genus *Cteisodes* as *Cteisodes cteisa* (Borchmann, 1928). Habitus of male as in Fig. 1, head and pronotum (Fig. 2), antenna (Fig. 3) and aedeagus as in Figs. 4 and 5.

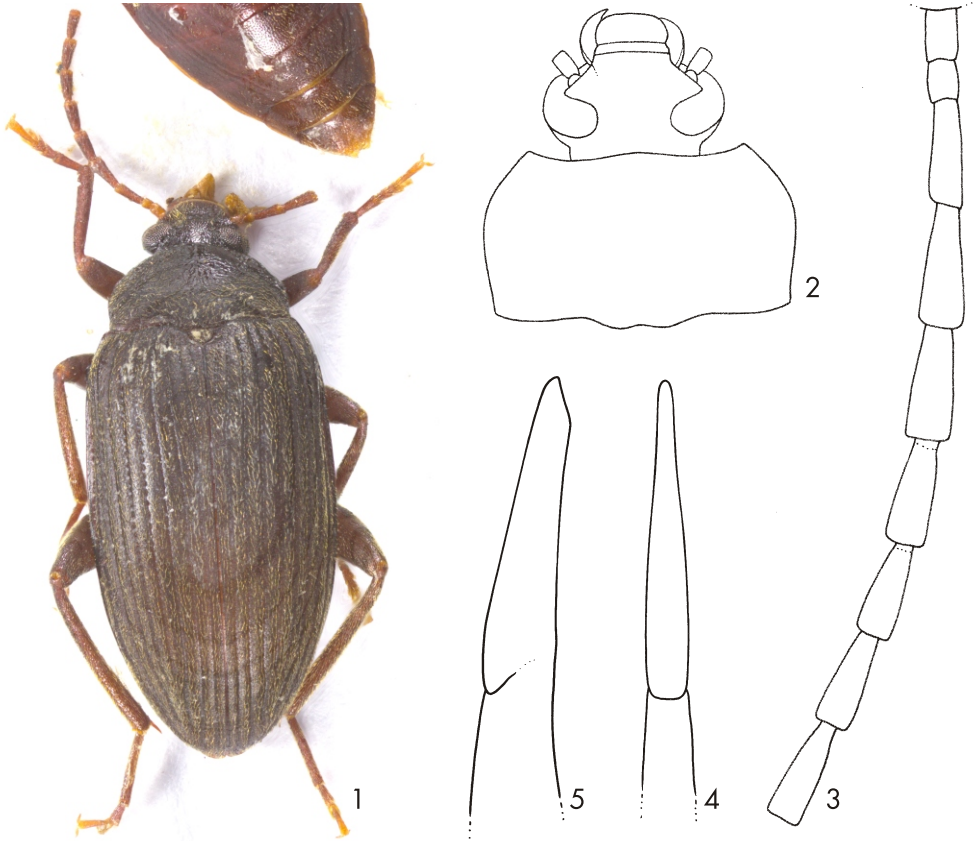
**Measurements of male body.** BL 5.94 mm; HL 0.93 mm; HW 1.17 mm; OI 39.61; PL 0.99 mm; PW 1.93 mm; PI 51.30; EL 4.02 mm; EW 2.56 mm; AL (1-11) 3.44 mm; AL(1-11)/BL 0.58; HW/PW 0.61; BL/EW 2.32; EL/EW 1.57.

RLA(1-11): 0.61 : 0.43 : 1.00 : 1.08 : 0.93 : 1.02 : 1.12 : 1.07 : 1.06 : 1.06 : 1.06.

RL/WA(1-11): 1.61 : 1.45 : 3.35 : 3.36 : 2.89 : 3.56 : 3.88 : 3.58 : 3.68 : 3.83 : 3.83.

RLT: 1.00 : 0.57 : 0.60 : 0.59 : 1.31 (protarsus), 1.00 : 0.66 : 0.29 : 0.39 : 0.78 (mesotarsus), 1.00 : 0.25 : 0.18 : 0.47 (metatarsus).

**Distribution.** Indonesia (Sumatra Island).



Figs. 1-5. *Cteisodes cteis* (Borchmann, 1928) (male): 1- Habitus; 2- head and pronotum; 3- antenna; 4- aedeagus, dorsal view; 5- aedeagus, lateral view.

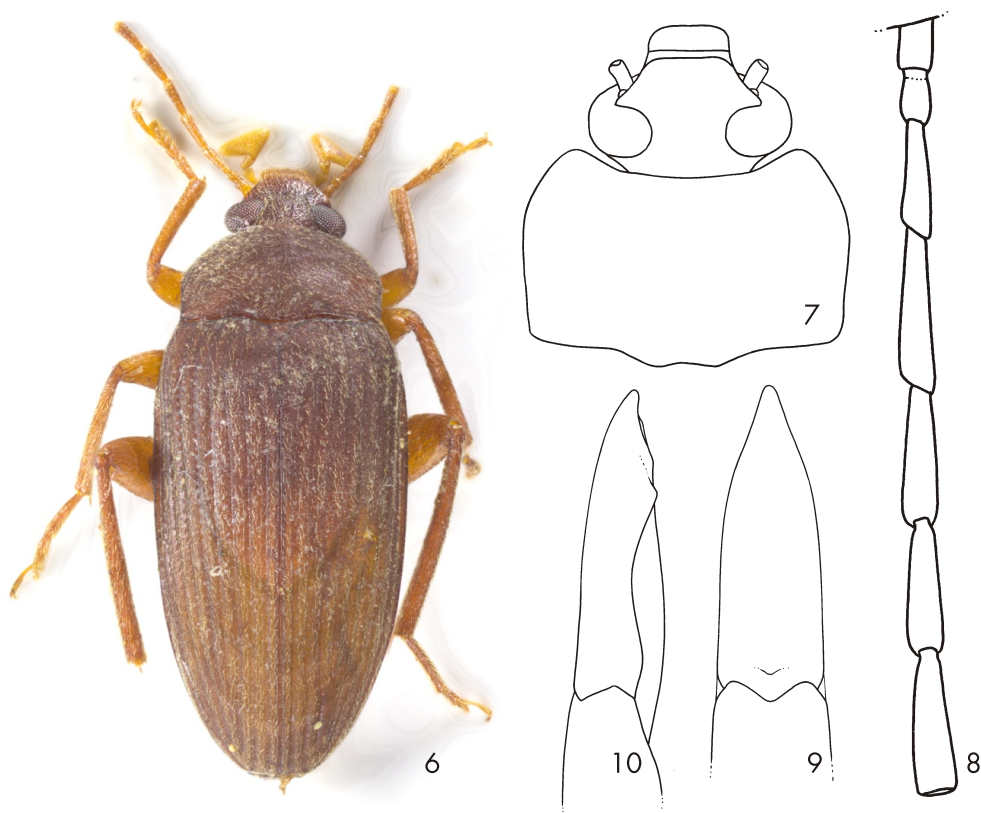
***Cteisodes nilgiriensis* sp. nov.**

(Figs. 6-10)

**Type locality.** India, Nilgiri Hills.

**Type material.** Holotype (♂): wl: Nilgiri Hills [pb] // wl: 5-12 [hb] // wl: Andrewes / Bequest. / B.M.1922-221. [pb], (BMNH). Paratypes: (1 ♀, 2 spec.): same data as holotype, (BMNH); (1 spec.): wl: H. L. Andrewes / Nilgiri Hills [pb] // wl

with bf: Allecula / ellipsoides / Frm [hb] // wl: Nilgiri ex ? / not ellipsodes [hb], (VNPC). The types are provided with a printed red label: '*Cteisodes* / nilgiriensis sp. nov. / HOLOTYPE [or PARATYPE] / V. Novák det. 2020'.



Figs. 6-10. *Cteisodes nilgiriensis* sp. nov. (male holotype): 6-Habitus; 7-head and pronotum; 8-antenna; 9-aedeagus, dorsal view; 10-aedeagus, lateral view.

**Description of holotype.** Habitus as in Fig. 6, body small, elongate oval, convex, dorsal surface brown, matte, with pale setation, microgranulation, punctuation not distinct on whole surface, BL 6.76 mm. Widest near humeri; BL/EW 2.89.

Head (Fig. 7) distinctly wider than long, through the eyes slightly narrower than anterior margin of pronotum. Dorsal surface with recumbent, pale setation, dense and coarse punctuation, punctures smaller, intervals between punctures very narrow, shiny, narrower than diameter of punctures. Posterior part slightly darker than anterior part. Clypeus ochre yellow. HW 1.11 mm; HW/PW 0.60; HL (visible part) 0.85 mm. Eyes large, transverse, distinctly excised, space between eyes wide, slightly wider than diameter of one eye; approximately as wide as length of antennomere 4; OI equal to 37.86.

Antenna (Fig. 8). Narrow, filiform, antennomeres with pale setation, microgranulation and sparse punctures. Antennomeres 1-3 ochre yellow, antennomeres 4-7 slightly darker, pale brown, antennomeres 1-4 slightly shiny, rest rather matte, antennomere 2 shortest, antennomeres 4-7 distinctly longer than antennomere 3.

RLA(1-7): 0.47 : 0.39 : 1.00 : 1.22 : 1.18 : 1.12 : 1.17.

RL/WA(1-7): 1.32 : 1.25 : 3.39 : 3.57 : 4.18 : 3.63 : 3.25.

Maxillary palpus ochre yellow, slightly shiny, with pale setation and fine microgranulation. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere longly triangular, shoe-shaped.

Pronotum (Fig. 7) dark reddish brown, wide, transverse, almost rectangular, matte, approximately as wide as elytra in humeri. Dorsal surface with pale, recumbent setation, microgranulation, punctuation almost indistinct. PL 0.92 mm; PW 1.86 mm; PI equal to 49.46. Border lines narrow, indistinct in the middle of anterior and posterior margins. Posterior angles obtuse, anterior angles almost rectangular. Lateral margins straight in basal half, narrowing in apical part, anterior margin excised.

Elytra. Dark reddish brown, elongate oval, widest near humeri, matte. EL 4.99 mm; EW 2.34 mm; EL/EW 2.13. Elytral interspaces slightly convex, with microgranulation and relatively short and dense, recumbent setation. Elytral striae with distinct rows of very small punctures.

Scutellum. Dark reddish brown, roundly triangular, with microgranulation, few punctures and few pale setae, matte.

Elytral epipleura well-developed, reddish brown, with pale setation and few punctures, widest near base, regularly narrowing to metaventricle, then relatively wide leading parallel.

Legs. Pale reddish brown, with pale setation, microgranulation and small punctures. Femora strong, tibiae widened apically. Tarsomeres narrow, penultimate tarsomeres widened and lobed. Metatarsomere 1 distinctly longer than metatarsomeres 2-4 together.

RLT: 1.00 : 0.47 : 0.39 : 0.72 : 1.29 (protarsus), 1.00 : 0.42 : 0.30 : 0.30 : 0.62 (mesotarsus), 1.00 : 0.25 : 0.22 : 0.44 (metatarsus).

Both anterior tarsal claws with 4 or 5 visible teeth.

Ventral side of body reddish brown with sparse, pale setae and punctuation. Abdomen slightly shiny, with dense, recumbent, pale setation and dense punctuation, punctures very small.

Aedeagus (Figs. 9, 10) ochre yellow, shiny. Basal piece rounded laterally and very slightly narrowing in dorsal view. Apical piece widely triangular in dorsal view, beak-shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1 : 3.52.

**Female** without distinct differences, only body slightly wider than in male.

BL 6.83 mm; HL 0.98 mm; HW 1.31 mm; OI 44.10; PL 1.10 mm; PW 2.24 mm; PI 49.10; EL 5.20 mm; EW 2.73 mm.

**Variability.** The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Specimens (n= 5). BL 6.87 mm (6.76-7.03 mm); HL 0.90 mm (0.86-0.98 mm); HW 1.15 mm (1.11-1.31 mm); OI 39.94 (37.86-44.10); PL 1.00 mm (0.93-1.10 mm); PW 2.09 mm (1.82-2.24 mm); PI 49.28 (47.32-52.38); EL 5.06 mm (4.92-5.20 mm); EW 2.75 mm (2.34-3.07 mm).

**Differential diagnosis.** The new species *Cteisodes nilgiriensis* sp. nov. distinctly differs from all other species of the genus by pale antenna, legs and maxillary palpus; while all other species have antenna, maxillary palpus and legs at least partly dark.

**Etymology.** Named after the type locality - Nilgiri Hills in India.

**Distribution.** India.

***Cteisodes pahangensis* sp. nov.**

(Figs. 11-13)

**Type locality.** Malaysia - Pahang, Banjaran Benom Lata Jarom.

**Type material.** Holotype (♀): wl: Malaysia - Pahang / Banjaran Benom / Lata Jarom / 6-8.iii.1997 / lgt. Oliver Dulik, (VNPC). The type is provided with a printed red label: 'Cteisodes / pahangensis sp. nov. / HOLOTYPUS / V. Novák det. 2020'.

**Description of female holotype.** Habitus as in Fig. 11, body small, elongate oval, convex, dorsal surface dark blackish brown, matte, with pale setation and punctuation, BL 5.74 mm. Widest near two thirds elytra length; BL/EW 2.44.

Head (Fig. 12) distinctly wider than long, more distinctly matte, through the eyes slightly narrower than anterior margin of pronotum. Dorsal surface with pale setation and punctuation. Posterior part dark brown with dense and coarse punctuation, intervals between punctures very narrow and shiny, anterior part with shallow punctures, surface matte, with apex reddish brown. Clypeus pale reddish brown, apex straight, surface with very small and sparse punctures and microgranulation. HW 1.10 mm; HW/PW 0.63; HL (visible part) 0.77 mm. Eyes relatively large, transverse, distinctly excised, space between eyes wide, distinctly wider than diameter of one eye; distinctly wider than length of each antennomere; OI equal to 50.00.

Antenna (Fig. 13). Relatively short (slightly exceeding half body length, AL(1-10) 2.75 mm; AL/BL(1-10) 0.48), matte, antennomeres narrow, filiform, with short, pale setation, microgranulation and sparse punctures. Antennomeres 1 and 2 pale brown, 3-5 reddish brown, 6-10 slightly darker, brown. Antennomere 2 shortest, antennomere 4 and 6 longest, antennomeres 7-10 distinctly shorter than antennomere 3.

RLA(1-10): 0.72 : 0.42 : 1.00 : 1.28 : 1.19 : 1.16 : 0.94 : 0.86 : 0.80 : 0.72.

RL/WA(1-11): 2.41 : 1.50 : 3.00 : 3.32 : 2.72 : 2.88 : 2.58 : 2.48 : 2.37 : 2.19.

Maxillary palpus pale brown, rather matte with pale setation and microgranulation. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular, shoe-shaped.

Pronotum (Fig. 12) dark brown, wide, transverse, rectangular, matte, approximately as wide as elytra in humeri. Dorsal surface with sparse, pale, recumbent setation, very small and very sparse punctures and fine microgranulation. PL 0.77 mm; PW 1.76 mm; PI equal to 43.75. Border lines narrow, distinct. Posterior and anterior angles obtuse. Lateral margins straight in basal half, narrowing in apical part, anterior margin slightly excised, base bisinuate, on ante scutellar area straight.

Elytra. Dark brown, suture and side margins reddish brown, elongate oval, widest near half elytra length, matte. EL 4.20 mm; EW 2.35 mm; EL/EW 1.79. Elytral interspaces slightly convex, with microgranulation and short, sparse, pale setation near sides distinctly denser. Elytral striae with distinct rows of very small punctures.

Scutellum. Reddish brown, distinctly paler than elytron itself, pentagonal, with microgranulation, matte.

Elytral epipleura well-developed, dark reddish brown, with a few pale setae and row of punctures in basal part, widest near base, regularly narrowing to ventrite 1, then relatively wide leading parallel.

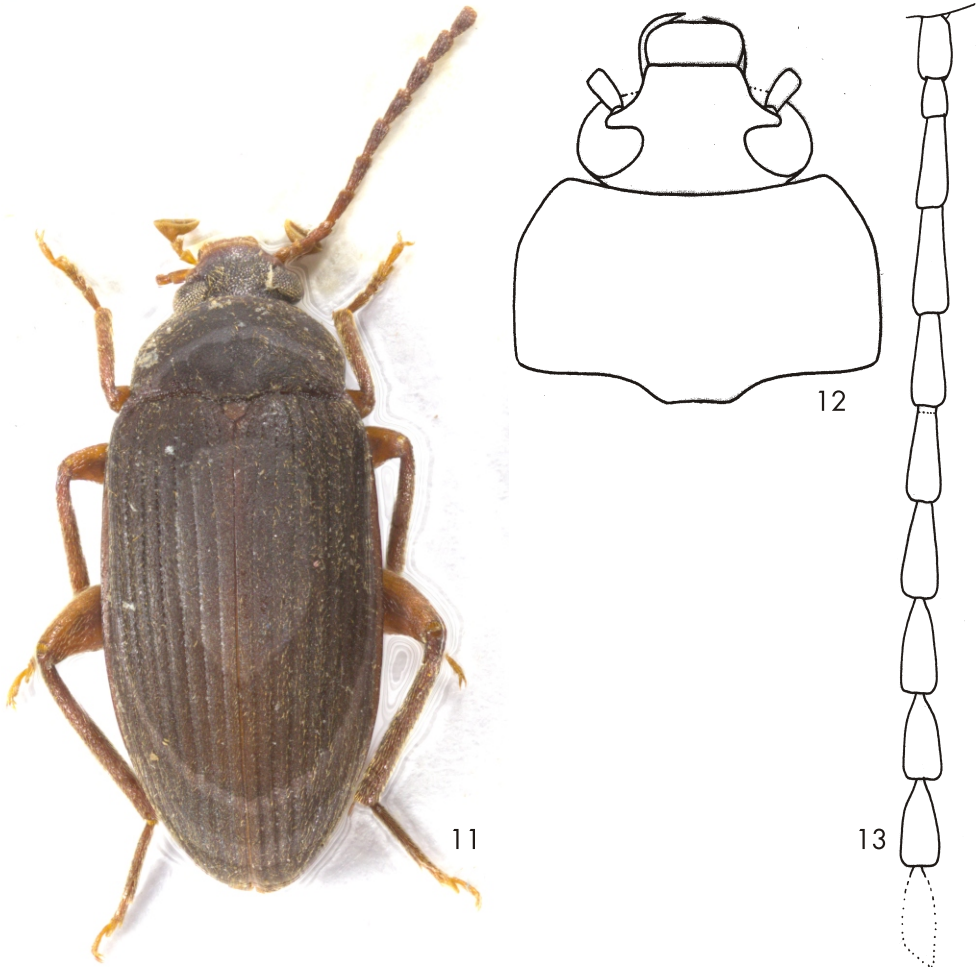
Legs. Reddish brown, narrow, with pale setation, microgranulation and small punctures. Femora slightly stronger, tibiae dilated anteriorly. Tarsomeres narrow, penultimate tarsomeres widened and lobed. Metatarsomere 1 distinctly longer than metatarsomeres 2-4 together.

RLT: 1.00 : 0.59 : 0.49 : 0.53 : 1.28 (protarsus), 1.00 : 0.34 : 0.19 : 0.40 (metatarsus).

Anterior tarsal claws with 4 and 5 visible teeth.

Ventral side of body dark reddish brown with very sparse, pale setae and punctuation. Abdomen reddish brown, shiny, in sides with sparse, pale setation and dense punctuation, punctures very small.

**Male** unknown.



Figs. 11-13. *Cteisodes pahangensis* sp. nov. (female holotype): 11-Habitus; 12-head and pronotum; 13-antenna.

**Differential diagnosis.** The new species *Cteisodes pahangensis* sp. nov. distinctly differs from a similar species *Cteisodes nilgiriensis* sp. nov. mainly by antenna, maxillary palpus and legs at least partly dark; while *C. nilgiriensis* has antenna, maxillary palpus and legs pale.

*C. pahangensis* is clearly different from a similar species *Cteisodes siamensis* sp. nov. mainly by shorter and wider body (BL/EW 2.44); while *C. siamensis* has longer and narrower body (BL/EW 2.7).

*C. pahangensis* distinctly differs from a similar species *Cteisodes sericea* (Borchmann, 1928) mainly by scutellum pentagonal, punctuation of pronotum almost indistinct; while *C. sericea* has scutellum triangular, punctuation of pronotum is very fine, but distinct.

*C. pahangensis* is clearly different from similar species *Cteisodes cteisa* Borchmann, 1932 mainly by lateral margins of pronotum in posterior part straighter and parallel and by dorsal surface matte; while *C. cteisa* has lateral margins of pronotum regularly rounded and dorsal surface is very finely shiny.

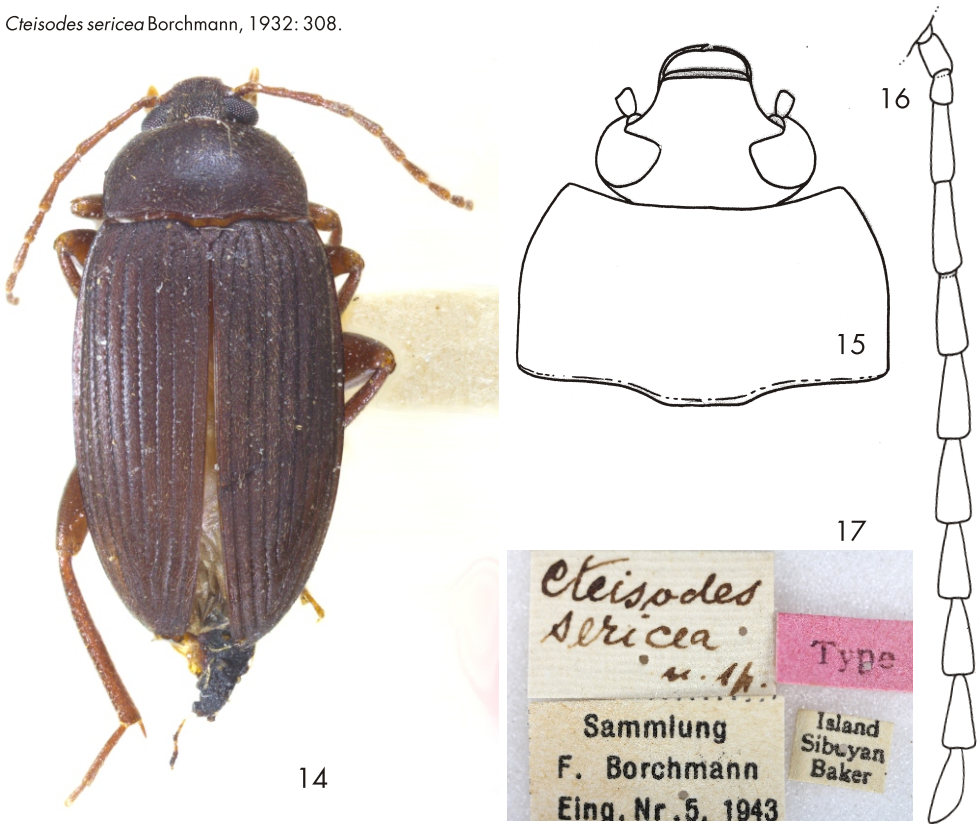
**Etymology.** Named after the type locality Pahang in Malaysia.

**Distribution.** Malaysia (Pahang).

***Cteisodes sericea* Borchmann, 1932**

(Figs. 14-17)

*Cteisodes sericea* Borchmann, 1932: 308.



Figs. 14-16. *Cteisodes sericea* sp. nov. (female holotype): 14-Habitus; 15-head and pronotum; 16-antenna; 17-labels.



**Type locality.** The Philippines, Island Sibuyan.

**Type material.** Holotype (♀): wl: Island / Sibuyan / Baker [pb] // pl: Type [pb] // wl: Cteisodes / sericea / n. sp. [hb] // wl: Sammlung / F. Borchmann / Eing. Nr.5, 1943 [pb], (ZMUH).

**Remark.** Habitus of female holotype as in Fig. 14, head and pronotum (Fig. 15) and antenna (Fig. 16).

**Measurements of female body.** BL 5.47 mm; HL 0.68 mm; HW 1.08 mm; OI 43.46; PL 0.94 mm; PW 1.83 mm; PI 51.37; EL 3.85 mm; EW 2.38 mm; AL (1-9) 2.20 mm; AL(1-9)/BL 0.32; HW/PW 0.59; BL/EW 2.30; EL/EW 1.62.

RLA(1-9): 0.61 : 0.43 : 1.00 : 1.47 : 1.43 : 1.43 : 1.35 : 1.18 : 1.18.

RL/WA(1-9): 1.82 : 1.29 : 2.43 : 3.13 : 3.32 : 3.17 : 3.63 : 2.71 : 3.00.

**Distribution.** Philippines, Island Sibuyan.

### ***Cteisodes siamensis* sp. nov.**

(Figs. 18-20)

**Type locality.** Thailand, Chiang Mai prov., environ of Doi Chiang Dao, 19°24'45''N, 98°51'30''E, 1200+ 50 m.

**Type material.** Holotype (♀): wl: THAILAND, CHIANG MAI / Prov.; Doi Chiang Dao env., / 1200±50m, 19°24'45''N / 98°51'30''E, 9.-13.v.2009 / L. Dembický leg., (VNPC). Paratypes: (3 ♀♀): same data as holotype, (VNPC). The types are provided with a printed red label: 'Cteisodes / siamensis sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák def. 2020'.

**Description of female holotype.** Habitus as in Fig. 18, body small, elongate oval, convex, dorsal surface from dark brown to black, matte, with short, pale setation and microgranulation, BL 7.00 mm. Widest near half elytra length; BL/EW 2.70.

Head (Fig. 19) distinctly wider than long, through the eyes slightly narrower than anterior margin of pronotum. Dorsal surface matte, with microgranulation, pale setation and punctuation, punctures small, intervals between punctures very narrow, slightly shiny. Posterior part black with coarser punctures than those in anterior half, anterior part dark brown with reddish brown apex, clypeus ochre yellow with microgranulation, apex slightly rounded. HW 1.22 mm; HW/PW 0.58; HL (visible part) 1.07 mm. Eyes large, transverse, distinctly excised, space between eyes wide, distinctly wider than diameter of one eye; distinctly wider than length of each antennomere; OI equal to 44.11.

Antenna (Fig. 20). Relatively short (slightly exceeding half body length, AL 3.75 mm; AL/BL 0.54), antennomeres narrow, filiform, with recumbent, pale setation, microgranulation and punctuation. Antennomeres 1 and 2 pale brown, slightly shiny, antennomere 3 reddish brown rather matte, antennomeres 4-11 black or blackish brown, matte. Ultimate antennomere with pale apex. Antennomere 2 shortest, antennomere 4-11 each distinctly shorter than antennomere 3.

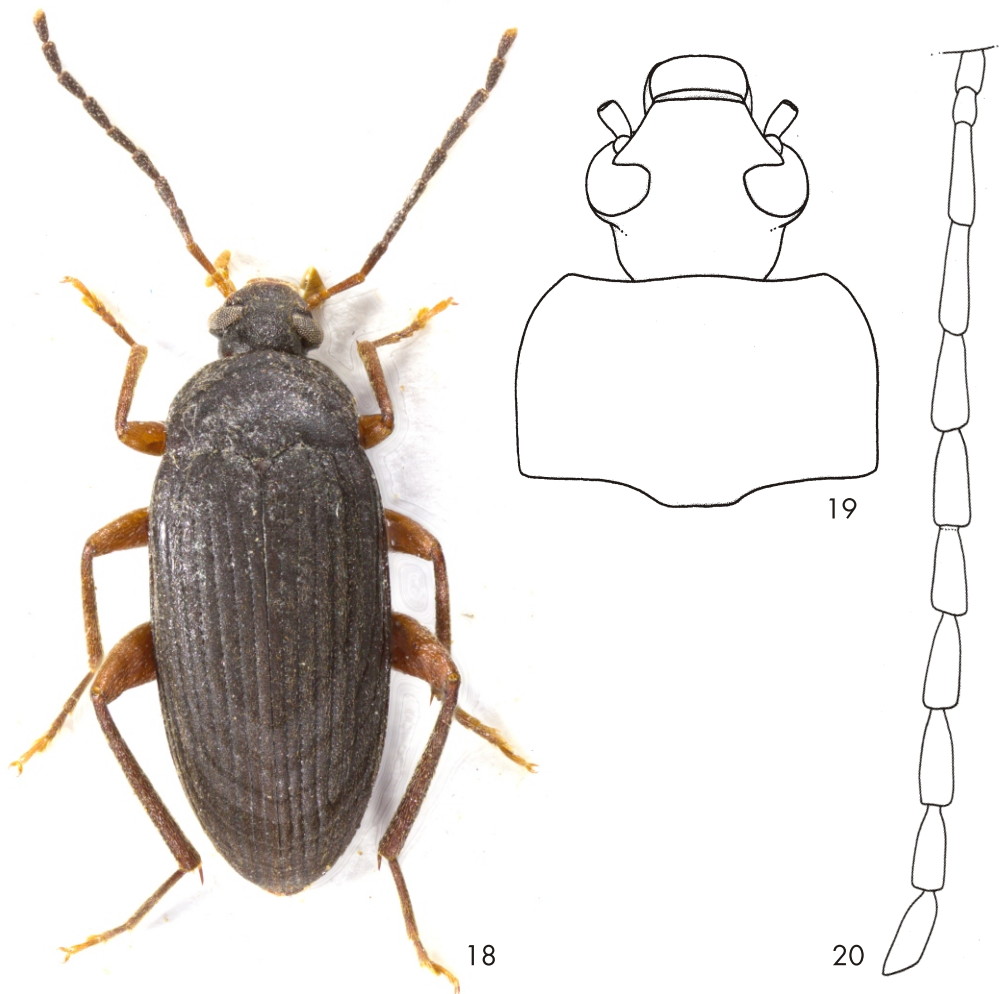
RLA(1-11): 0.43 : 0.34 : 1.00 : 0.94 : 0.84 : 0.89 : 0.90 : 0.94 : 0.93 : 0.91 : 0.84.

RL/WA(1-11): 1.63 : 1.48 : 3.75 : 3.15 : 2.53 : 3.08 : 3.52 : 3.27 : 4.20 : 3.91 : 3.62.

Maxillary palpus pale brown, matte, with short, pale setation and very fine microgranulation. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular, shoe-shaped.

Pronotum (Fig. 19) black, wide, transverse, rectangular, matte, approximately as wide as elytra in humeri. Dorsal surface with sparse, pale setae, and fine microgranulation. PL 1.03 mm; PW

2.09 mm; PI equal to 49.28. Border lines narrow, not clearly distinct. Posterior angles almost rectangular, anterior angles obtuse. Lateral margins straight in basal half, arcuate in apical part, anterior margin almost straight, base bisinuate.



Figs. 18-20. *Cteisodes siamensis* sp. nov. (female holotype): 18-Habitus; 19-head and pronotum; 20-antenna.

Elytra. Black, elongate oval, convex, sides parallel in middle, widest near half elytra length, matte. EL 4.90 mm; EW 2.59 mm; EL/EW 1.89. Elytral interspaces slightly convex, with sparse and short, pale setation and fine microgranulation. Elytral striae with distinct rows of small punctures.

Scutellum. Black as elytron itself, pentagonal, matte, with microgranulation.

Elytral epipleura well-developed, black, slightly shiny, widest near base, regularly narrowing to ventrite 1, then leading wide and parallel.

Legs. Ochre yellow, narrow, with pale setation, fine microgranulation and very small, shallow

punctures. Tarsomeres narrow, penultimate tarsomeres widened and lobed. Tibiae slightly dilated anteriorly, femora stronger. Metatarsomere 1 distinctly longer than metatarsomeres 2-4 together.

RLT: 1.00 : 0.48 : 0.45 : 0.50 : 1.02 (protarsus), 1.00 : 0.37 : 0.31 : 0.28 : 0.69 (mesotarsus), 1.00 : 0.30 : 0.19 : 0.31 (metatarsus).

Both anterior tarsal claws with 3 visible teeth.

Ventral side of body black or blackish brown, with sparse, pale setae. Abdomen slightly shiny, with sparse, short, pale setation near sides denser, and very dense punctation, punctures very small. Ventrites 1 and 2 black, ventrite 3 dark reddish brown, penultimate and ultimate ventrites paler than ventrite 3, reddish brown respectively pale reddish brown.

**Male** unknown.

**Variability.** The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Specimens (n= 4). BL 6.78 mm (6.43-7.00 mm); HL 1.06 mm (1.02-1.11 mm); HW 1.21 mm (1.16-1.26 mm); OI 39.60 (37.19-44.11); PL 1.05 mm (1.00-1.11 mm); PW 1.96 mm (1.88-2.09 mm); PI 53.34 (49.28-57.81); EL 4.68 mm (4.41-4.90 mm); EW 2.45 mm (2.37-2.59 mm).

**Differential diagnosis.** The new species *Cteisodes siamensis* sp. nov. distinctly differs from similar species *Cteisodes nilgiriensis* sp. nov. mainly by antennomeres 4-11 dark; while *C. nilgiriensis* has antennomeres pale.

*C. siamensis* is clearly different from all other similar species *Cteisodes cteisa* (Borchmann, 1928), *Cteisodes pahangensis* sp. nov. and *Cteisodes sericea* Borchmann, 1932 mainly by longer and narrower body (BL/EW 2.7); while similar species *C. cteisa*, *C. pahangensis* and *C. sericea* have body wider and shorter (BL/EW less than 2.5).

**Etymology.** The name is taken from old name of Thailand (Siam).

**Distribution.** Thailand.

### ***Cteisodella* gen. nov.**

(Figs. 21-26)

**Type species.** *Cteisodella assamica* sp. nov.

**Description.** Habitus as in Fig. 21, body outline (Fig. 22), body small, elongate, slightly oval, dorsal surface shiny, with sparse, pale setae, microgranulation and punctation. Widest near elytral humeri. Head (Fig. 23) distinctly wider than long, shiny, through the eyes wider than anterior margin of pronotum. Dorsal surface with punctation, punctures smaller than those in pronotum. Posterior half with a few, long, pale setae and indistinct microgranulation, anterior part reddish brown with denser setation and denser punctation, fine microgranulation distinct. Mandibles with dark apex, glabrous dorsally, clypeus with pale setation. Eyes large, transverse, distinctly excised, space between eyes narrow, distinctly narrower than diameter of one eye; slightly wider than length of antennomere 2, approximately as wide as length of antennomere 3. Antenna (Fig. 24) long, distinctly exceeding three quarters body length, antennomeres with recumbent, pale setation, microgranulation and small punctures. Antennomeres 1-3 slightly shiny, rest rather matte, antennomere 2 shortest, antennomeres 4-11 longer than antennomere 3,

antennomeres 4-10 slightly serrate. Maxillary palpus slightly shiny, with pale setation and very small punctures. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular, slightly shoe-shaped. Pronotum (Fig. 23) wide, transverse, rectangular, slightly narrower than elytra in humeri. Dorsal surface with sparse, pale setae, dense punctuation, punctures large, intervals between punctures very narrow. Border lines narrow, distinct. Posterior angles slightly obtuse, anterior angles indistinct, arcuate. Lateral margins straight and parallel in basal half, arcuate in apical part, anterior margin almost straight, base bisinuate. Elytra shiny, elongate oval, widest near humeri, dorsal surface with sparse, long, pale setae. Elytral interspaces with dense punctuation. Elytral striae with distinct rows of punctures approximately as large as those in elytral interspaces. Scutellum pentagonal, with coarse punctures, matte. Elytral epipleura well-developed with a few pale setae and punctures, widest near base, regularly narrowing to ventrite 1, then relatively wide leading parallel. Legs with pale setation, microgranulation and small punctures, femora strong. Tarsomeres narrow, protibiae with distinct row of short and strong setae in outer edge, meso- and metatibiae distinctly bent, penultimate tarsomeres widened and lobed. Both anterior tarsal claws with more than 20 visible teeth. Ventral side of body dark with very sparse, pale setae and small punctures. Abdomen shiny, with sparse, long, pale, setation, microgranulation and sparse punctuation, punctures small. Ventrites 1-3 darker than penultimate and ultimate ventrites. Ultimate ventrite with triangular impression in middle. Aedeagus (Figs. 25, 26) slightly shiny. Basal piece slightly rounded laterally and narrowing in dorsal view. Apical piece beak-shaped dorsally and laterally.

**Female.** Meso- and metatibiae are not bent, space between eyes is wider than in male (OI 30-38). Anterior tarsal claws have 9 teeth.

**Differential diagnosis.** Species of the genus *Cteisodella* gen. nov. are similar to the species of the genus *Cteisodes* Borchmann, 1932.

Species of the new genus *Cteisodella* gen. nov. differs from the species of the genus *Cteisodes* mainly by dorsal surface of elytra shiny, by dorsal surface of pronotum with dense and coarse punctuation, by space between eyes narrow (in male distinctly narrower than diameter of one eye (OI approximately 17)), by ultimate palpomere triangular, by meso- and metatibiae of male distinctly bent, by antennomere 4 almost twice longer in male and distinctly longer in female than antennomere 3; while species of *Cteisodes* have dorsal surface of elytra rather matte, punctuation of pronotum is indistinct or punctures are very small and shallow, space between eyes is wide, distinctly wider than diameter of one eye, ultimate palpomere is shoe-shaped, meso- and metatibiae are straight, antennomere 4 is as long or slightly longer than antennomere 3.

**Etymology.** Compound name from *Cteisod-* resembling similarity with genus *Cteisodes* and feminine ending *-ella*. Gender: feminine.

**Distribution.** India (Assam).

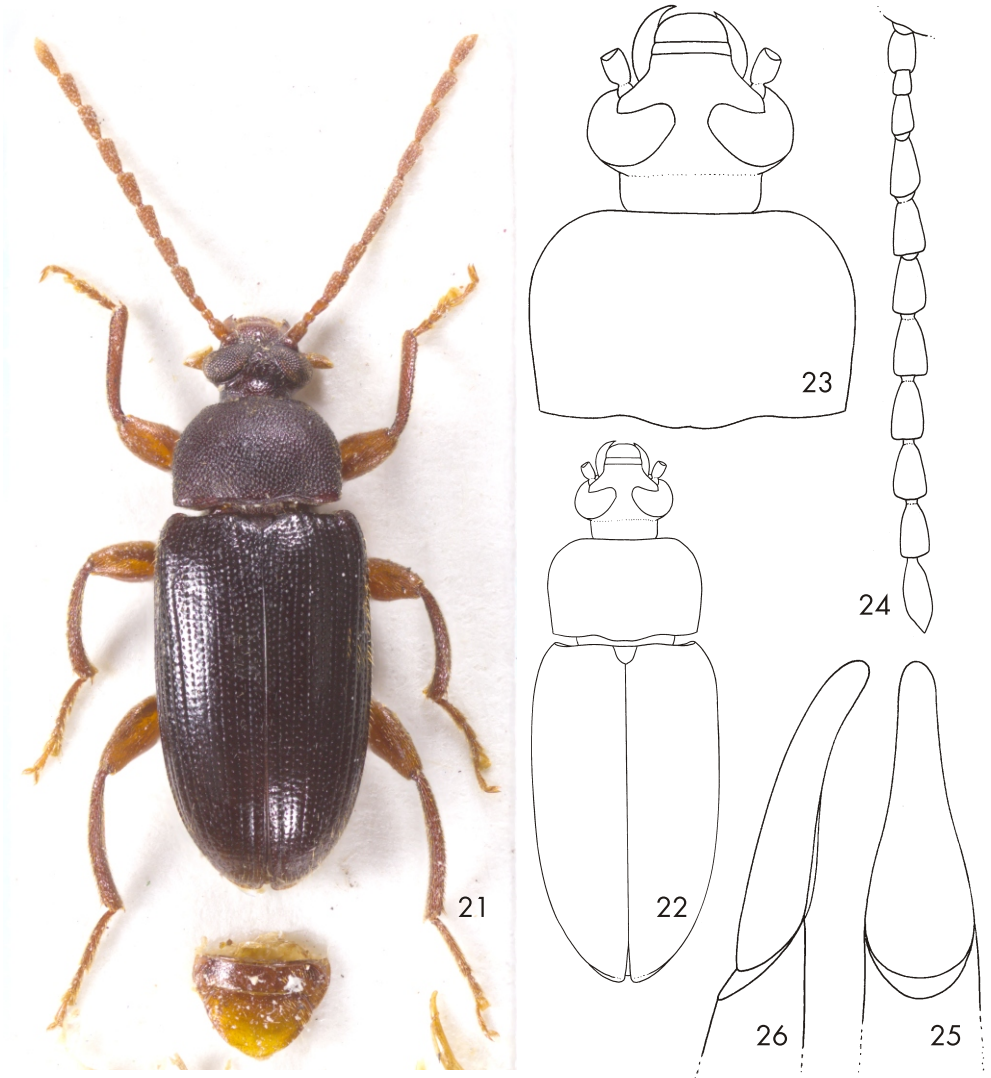
***Cteisodella assamica* sp. nov.**

(Figs. 21-26)

**Type locality.** Northeastern India, Assam province, 5 km north of Umrangsa, 25°27'N 92°43'E, 700 m.

**Type material.** Holotype (♂): wl: NE INDIA; ASSAM; / 5km N of Umrangsa; 700m / 25°27'N 92°43'E; 21.v.1999 /

Dembický & Pacholátka leg., (VNPC). Paratypes: (3 ♀♀): same data as holotype, (VNPC). The types are provided with a printed red label: '*Cteisodella / assamica* sp. nov. / HOLOTYPE [or PARATYPE] / V. Novák det. 2020'.



Figs. 21-26. *Cteisodella assamica* sp. nov. (male holotype): 21- Habitus; 22- outline of body; 23- head and pronotum; 24- antenna; 25- aedeagus, dorsal view; 26- aedeagus, lateral view.

**Description of holotype.** Habitus as in Fig. 21, body outline as in Fig. 22, body small, elongate, slightly oval, dorsal surface from brown to black, shiny, with sparse, pale setae, microgranulation and punctuation, BL 6.42 mm. Widest near elytral humeri; BL/EW 2.64.

Head (Fig. 23) distinctly wider than long, shiny, through the eyes wider than anterior margin of pronotum. Dorsal surface with punctuation, punctures smaller than those on pronotum. Posterior part blackish brown with a few, long, pale setae, microgranulation indistinct, anterior part

reddish brown with denser setation and denser punctuation, fine microgranulation distinct. Clypeus and mandibles reddish brown, dorsal surface with fine microgranulation, mandibles with dark apex, glabrous dorsally, clypeus with pale setation. HW 1.23 mm; HW/PW 0.67; HL (visible part) 0.98 mm. Eyes large, transverse, distinctly excised, space between eyes narrow, distinctly narrower than diameter of one eye; slightly wider than length of antennomere 2, approximately as wide as length of antennomere 3; OI equal to 17.38.

Antenna (Fig. 24). Long, reddish brown (distinctly exceeding three quarters body length, AL 5.41 mm; AL/BL 0.84), antennomeres with recumbent, pale setation, microgranulation and small punctures. Antennomeres 1-3 slightly shiny, rest rather matte, antennomere 2 shortest, antennomeres 4-11 longer than antennomere 3, antennomeres 4-10 slightly serrate.

RLA(1-11): 1.33 : 0.74 : 1.00 : 1.88 : 1.81 : 1.98 : 2.14 : 2.17 : 2.19 : 2.10 : 2.62.

RL/WA(1-11): 1.93 : 1.35 : 1.83 : 2.39 : 2.11 : 2.68 : 3.33 : 2.84 : 2.63 : 2.75 : 3.55.

Maxillary palpus pale brown, slightly shiny, with pale setation and very small punctures. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular, slightly shoe-shaped.

Pronotum (Fig. 23) dark brown, wide, transverse, rectangular, slightly narrower than elytra in humeri. Dorsal surface with sparse, pale setae, dense punctuation, punctures large, intervals between punctures very narrow. PL 1.28 mm; PW 1.84 mm; PI equal to 69.17. Border lines narrow, distinct. Posterior angles slightly obtuse, anterior angles indistinct, arcuate. Lateral margins straight and parallel in basal half, arcuate in apical part, anterior margin almost straight, base bisinuate.

Elytra black, shiny, elongate oval, widest near humeri, dorsal surface with sparse, long, pale setae. EL 4.16 mm; EW 2.43 mm; EL/EW 1.71. Elytral interspaces with dense punctuation. Elytral striae with distinct rows of punctures approximately as large as those in elytral interspaces.

Scutellum. Blackish brown, pentagonal, with coarse punctures, matte.

Elytral epipleura well-developed, brown, with a few pale setae and punctures, widest near base, regularly narrowing to ventrite 1, then relatively wide leading parallel.

Legs. Reddish brown, femora strong, pale reddish brown, with pale setation, microgranulation and small punctures. Tarsomeres narrow, protibiae with distinct row of short and strong setae in outer edge, meso- and metatibiae distinctly bent, penultimate tarsomeres widened and lobed.

RLT: 1.00 : 0.69 : 0.71 : 0.65 : 1.55 (protarsus), 1.00 : 0.47 : 0.37 : 0.54 : 1.01 (mesotarsus), 1.00 : 0.32 : 0.27 : 0.47 (metatarsus).

Both anterior tarsal claws with more than 20 visible teeth.

Ventral side of body black with very sparse, pale setae and small punctures. Abdomen shiny, with sparse, long, pale, setation, microgranulation and sparse punctuation, punctures small. Ventrites 1-3 blackish brown, penultimate ventrite reddish brown. Ultimate ventrite pale reddish brown with triangular impression in middle.

Aedeagus (Figs. 25, 26) ochre yellow, slightly shiny. Basal piece slightly rounded laterally and narrowing in dorsal view. Apical piece beak-shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1 : 2.63.

**Female.** Meso- and metatibiae not bent, space between eyes is wider than in male (OI 30-38). Anterior tarsal claws have 9 teeth.

**Measurements of female body.** BL 6.11 mm; HL 0.89 mm; HW 1.15 mm; OI 38.41; PL 1.18 mm; PW 1.82 mm; PI 64.84; EL 4.07 mm; EW 2.33 mm; AL 3.35 mm; AL/BL 0.55; HW/PW 0.63; BL/EW 2.62; EL/EW 1.75.

RLA(1-11): 0.86 : 0.53 : 1.00 : 1.31 : 1.31 : 1.42 : 1.36 : 1.44 : 1.41 : 1.32 : 1.64.  
RL/WA(1-11): 1.42 : 1.35 : 2.57 : 2.33 : 2.21 : 2.78 : 2.76 : 2.07 : 2.08 : 2.17 : 3.03.  
RLT: 1.00 : 0.56 : 0.65 : 0.42 : 1.93 (protarsus), 1.00 : 0.46 : 0.42 : 0.44 : 0.99 (mesotarsus),  
1.00 : 0.37 : 0.27 : 0.61 (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 6.14 mm (6.11-6.18 mm); HL 0.88 mm (0.86-0.89 mm); HW 1.16 mm (1.15-1.18 mm); OI 35.52 (30.82-38.41); PL 1.15 mm (1.09-1.19 mm); PW 1.87 mm (1.87-1.89 mm); PI 61.82 (57.67-64.84); EL 4.12 mm (4.07-4.15 mm); EW 2.36 mm (2.30-2.44 mm).

**Differential diagnosis.** See Differential diagnoses in description of *Cteisodella* gen. nov.

**Etymology.** Named after the type locality Assam state in India.

**Distribution.** India (Assam).

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