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New species of *Chitwania* Novák, 2015 (Coleoptera: Tenebrionidae: Alleculinae: Alleculini) from Malaysia and Indonesia

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Abstract. New species of the alleculine genus *Chitwania* Novák, 2015 are described as follows: *Chitwania acehica* sp. nov. from Indonesia (Sumatra Island), *Chitwania siberutica* sp. nov. from Indonesia (Mentawai Islands), *Chitwania amoena* sp. nov., *Chitwania castanea* sp. nov., *Chitwania inferna* sp. nov., *Chitwania juelica* sp. nov., *Chitwania pusilla* sp. nov., *Chitwania secreta* sp. nov. and *Chitwania vicina* sp. nov. from Malaysia. The species *Chitwania suturalis* (Borchmann, 1925) comb. nov. is transferred from the genus *Allecula* Fabricius, 1801. New species are described, illustrated and compared with similar species. A key to the presently described species from Indonesia and Malaysia is added.

INTRODUCTION

Novák (2015) described *Chitwania* Novák, 2015 as a new genus of Alleculinae with the type species *Chitwania kejvali* Novák, 2015 from Nepal and north India. Further species were described from the Palaearctic Region (one from Nepal), six species from the Oriental Region (India, Laos, Myanmar, Vietnam and Thailand) and two species were transferred from the genus *Allecula* Fabricius, 1801 by Novák (2021).

Species of this genus distinctly differs from similar genera near genus Allecula Fabricius, 1801 mainly by body elongate oval, protibia of male are slightly bent or excised, mesotibia of male are distinctly bent, claws are large (distinctly larger than those in females) with many teeth on one side of the hollow claw and procoxae are separated by prosternal process.

A new species of alleculine genus *Chitwania* Novák, 2015 from Indonesia and Malaysia are described as follows: *Chitwania acehica* sp. nov., *Chitwania amoena* sp. nov., *Chitwania castanea* sp. nov., *Chitwania inferna* sp. nov., *Chitwania juelica* sp. nov., *Chitwania pusilla* sp. nov., *Chitwania secreta* sp. nov., *Chitwania siberutica* sp. nov. and *Chitwania vicina* sp. nov. The species *Chitwania suturalis* (Borchmann, 1925) comb. nov. is transferred from the genus *Allecula* Fabricius, 1801. New species are compared with similar species. Key to the species from Indonesia and Malaysia and list of all known species are added.

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 × minimum dorsal distance between eyes) / (maximum width of head across eyes). The pronotal index is calculated as (100 × length of pronotum along midline) / (width across basal angles of pronotum). In the list of type or examined material, a slash (/) separates data in separate rows.

The following collection code is used:

HNHM collection of Hungarian Natural History Museum, Budapest, Hungary;
VNPC private collection of Vladimír Novák, Praha, Czech Republic;
ZMUH collection of Zoologisches Institut und Zoologisches Museum der Universität Hamburg, Germany.

Measurements of body parts and corresponding abbreviations used in the 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 in text: bf= black frame, hb= handwritten black, pb= printed black, rl= red 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

tribe Alleculini Laporte, 1840

subtribe Alleculina Laporte, 1840

genus *Chitwania* Novák, 2015

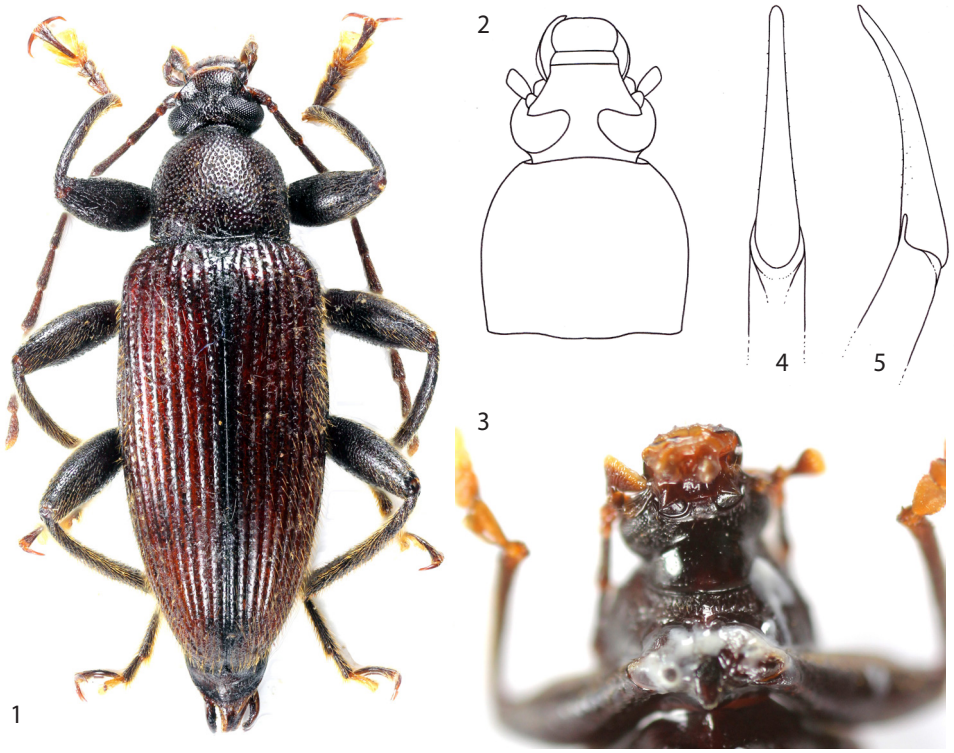
Chitwania Novák, 2015: 91; type species: *Chitwania kejvali* Novák, 2015: 93.

Chitwania acehica sp. nov.

Type locality. Indonesia, Sumatra Island, Aceh-Selatan Province, Babahrot, 100 m.

Type material. Holotype (♂): Indonesia / Sumatera // Aceh-Selatan Prov. / Babahrot, 100 m [pb] // 28.7. [hb] 1983. [pb] / leg. J. Klapperich, (HNHM). Paratypes: (1 ♂, 2 ♀♀): same data as holotype, (HNHM, VNPC).

Description of holotype. Habitus as in Fig. 1, body elongate, slightly oval, slightly convex,



Figs. 1-5: *Chitwania acehica* sp. nov. (male holotype): 1- habitus; 2- head and pronotum; 3- prosternal process between procoxae; 4- apical piece of aedeagus, dorsal view; 5- apical piece of aedeagus, lateral view.

from reddish brown to blackish brown, dorsal surface shiny with setation, punctuation and fine microgranulation, BL 10.76 mm. Widest near half elytra length; BL/EW 3.26.

Head (Fig. 2) little wider than long, through the eyes wider than anterior margin of pronotum, distinctly narrower than base of pronotum. Dorsal surface with punctures. Posterior part with sparse pale setae, few dark setae behind eyes and glabrous, shiny places between eyes, anterior part with denser setation, setae pale and long, microgranulation distinct. Clypeus dark reddish brown, wide and transverse, lateral margins rounded, surface with small and shallow punctures, long, pale setae and microgranulation. Mandibles reddish brown, glabrous, shiny, sides darker. HW 1.54 mm; HW/PW 0.70; HL (visible part) 1.46 mm. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; slightly narrower than length of antennomere 1; OI equal to 19.77.

Antenna. Long, narrow, matte (AL 5.98 mm, exceeding half body length - AL/BL 0.56). Antennomeres blackish brown. Apex of antennomere 2 reddish brown, apical part of ultimate antennomere distinctly paler. Surface with pale setation, microgranulation and small punctures. Antennomere 2 shortest, antennomeres 4-9 as long or longer than antennomere 3. Ultimate and penultimate antennomeres little shorter than antennomere 3. Antennomeres 3-10 slightly widened apically, ultimate antennomere widest before apex, half drop shaped.

RLA(1-11): 0.61 : 0.30 : 1.00 : 1.23: 1.00 : 1.05 : 1.05 : 1.07 : 1.00 : 0.96 : 0.94.
RL/WA(1-11): 2.52 : 1.52 : 4.74 : 5.27 : 4.57 : 5.36 : 4.47 : 4.03 : 3.56 : 4.28 : 4.62.

Maxillary palpus dark brown, slightly shiny, with pale setae and microgranulation. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular, slightly shoe shaped.

Pronotum (Fig. 2) blackish brown, shiny, convex, slightly wider than long, distinctly narrower than elytra at humeri, widest near middle of lateral margins. Dorsal surface with setation, dense and coarse punctuation, punctures relatively large, intervals between punctures almost narrower than diameter of punctures, surface between punctures with sparse and very fine microgranulation. PL 2.05 mm; PW 2.20 mm; PI equal to 93.18. Border lines very narrow, margins conspicuous from dorsal view, only in the middle of anterior margin not clearly conspicuous. Lateral margins straight and parallel in basal part, arcuate in apical half, base finely bisinuate, anterior margin finely rounded. Posterior angles obtuse.

Elytra. Reddish brown, suture darker, elongate, slightly oval, slightly convex, shiny. Dorsal surface with semierect, pale setae. EL 7.10 mm; EW 3.30 mm; EL/EW 2.15. Elytral striae with rows of large and coarse punctures (slightly larger than those in pronotum) in basal half, intervals between punctures in rows narrower than diameter of punctures. Punctures in apical part distinctly smaller and shallower than in basal half. Elytral intervals slightly convex with microgranulation.

Scutellum. Blackish brown, pentagonal, slightly shiny, with microgranulation and two longitudinal elevations.

Elytral epipleura well-developed, blackish brown, with pale setae and large punctures in basal part, widest in base, distinctly narrowing to ventrite 1, then narrow and parallel with denser and longer setation in apical part.

Legs. Long, blackish brown, dorsal surface with fine microgranulation, pale setation and small, shallow punctures. Protibiae slightly bent, mesotibiae distinctly bent. Femora strong. Pro- and mesotarsomeres 3, 4 and metatarsomere 3 ochre yellow, widened and lobed. Metatarsomere 1 three times longer than metatarsomere 2. RLT: 1.00 : 0.47 : 0.85 : 1.18 : 1.66 (protarsus); 1.00 : 0.40 : 0.53 : 0.81 : 0.95 (mesotarsus); 1.00 : 0.33 : 0.29 : 0.67 (metatarsus).

Tarsal claws long and bent, with teeth only in one side of hollow claw, protarsal claws with more than 40 visible teeth.

Ventral side of body blackish brown, with relatively large punctures. Metaventrite with pale setae. Procoxae separated by prosternal process (Fig. 3). Abdomen blackish brown, shiny, with sparse, pale setae, sparse, small and shallow punctures and very fine microgranulation.

Aedeagus (Figs. 4, 5) pale brown, shiny. Basal piece slightly narrowing in dorsal view and slightly rounded laterally. Apical piece very narrow, elongate triangular dorsally, beak shaped from dorsal and lateral views. Ratio of length of apical piece to length of basal piece from dorsal view 1: 3.16.

Female has body slightly wider and more oval than in male. Pro- and mesotibiae normally shaped (not bent), protarsal claws short with 13 teeth.

Measurements of female body. BL 9.49 mm; HL 1.40 mm; HW 1.45 mm; OI 23.20; PL 1.72 mm; PW 2.08 mm; PI 82.69 EL 6.37 mm; EW 3.26 mm; AL(1-11) 5.31 mm; AL(1-11)/BL 0.56; HW/PW 0.70; BL/EW 2.91; EL/EW 1.95.
RLA(1-11): 0.66 : 0.30 : 1.00 : 1.16: 1.03 : 1.13 : 1.13 : 1.22 : 1.16 : 1.08 : 1.06.
RL/WA(1-11): 2.15 : 1.14 : 3.33 : 3.88 : 3.90 : 3.65 : 3.35 : 3.72 : 3.66 : 3.50 : 3.44.
RLT: 1.00 : 0.54 : 0.74 : 1.01 : 1.45 (protarsus); 1.00 : 0.36 : 0.34 : 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= 2). BL 10.30 mm (9.83-10.76 mm); HL 1.45 mm (1.44-1.46 mm); HW 1.54 mm (1.53-1.54 mm); OI 21.14 (19.77-22.50); PL 2.00 mm (1.95-2.05 mm); PW 2.15 mm (2.10-2.20 mm); PI 93.02 (92.86-93.18); EL 6.77 mm (6.44-7.10 mm); EW 3.22 mm (3.14-3.30 mm). Females (n= 2). BL 9.81 mm (9.49-10.13 mm); HL 1.45 mm (1.40-1.50 mm); HW 1.51 mm (1.45-1.56 mm); OI 23.91 (23.20-24.62); PL 1.91 mm (1.90-1.92 mm); PW 2.16 mm (2.08-2.24 mm); PI 83.76 (82.69-84.82); EL 6.55 mm (6.37-6.73 mm); EW 3.42 mm (3.26-3.57 mm).

Differential diagnosis (for more information see the key below). Similar species with darker elytral suture are *Chitwania castanea* sp. nov., *Chitwania suturalis* (Borchmann, 1925) comb. nov. and *Chitwania vicina* sp. nov.
Chitwania acehica sp. nov. clearly differs from similar species *Ch. suturalis* and *Ch. vicina* mainly by antenna and maxillary palpus almost completely dark; while *Ch. suturalis* has antenna and maxillary palpus pale and *Ch. vicina* has maxillary palpus and antennomere 1 pale. *Ch. acehica* is clearly different from similar species *Ch. castanea* mainly by antennomeres 5-9 as long as or longer than antennomere 3, by pronotum widest near middle and by metatarsomere 1 approximately three times longer than metatarsomere 2; while *Ch. castanea* has antennomeres 5-9 shorter than antennomere 3, pronotum is widest in two thirds from base to apex and metatarsomere 1 is only two times longer than metatarsomere 2.

Etymology. Toponymic, named after the type locality - Province Aceh-Selatan in Sumatra Island (after its first word).

Distribution. Indonesia (Sumatra Island).

Chitwania amoena sp. nov.
(Figs. 6-10)

Type locality. Western Malaysia, Pahang, 50 km northeast of Kuala Rompin, Endau Rompin Natural Preserve.

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

Description of holotype. Habitus as in Fig. 6, body elongate oval, convex, from pale reddish brown to blackish brown, dorsal surface shiny with setation, punctuation and fine microgranulation, BL 9.58 mm. Widest near half elytra length; BL/EW 3.06.

Head (Fig. 7) approximately as wide as long, through the eyes distinctly wider than anterior margin of pronotum, distinctly narrower than base of pronotum. Dorsal surface with punctures and long, pale setae. Posterior part blackish brown with sparser setae and larger punctures than those in dark reddish brown anterior part with distinct microgranulation. A few dark setae behind eyes and glabrous, shiny places between punctures (larger than diameter of punctures) without microgranulation are present. Clypeus dark reddish brown, wide and transverse, half heart shaped, lateral margins rounded, shiny, with small and shallow punctures, long, pale setation and microgranulation. Mandibles glabrous, shiny, with a few pale setae in sides. HW 1.48 mm; HW/PW 0.72; HL (visible part) 1.45 mm. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; slightly narrower than length of antennomere 1; OI equal to 21.47.

Antenna. Long, narrow, slightly shiny (AL 6.19 mm, almost reaching two thirds body length - AL/BL 0.65). Antennomeres 1-4 blackish brown, antennomeres 5-11 reddish brown with blackish brown apex, insertion of antennae pale reddish brown. Surface with recumbent pale setation, microgranulation and small punctures. Antennomere 2 shortest, antennomeres 7-11 longer than antennomere 3. Antennomeres 3-10 slightly widened apically, ultimate antennomere widest before apex, half drop shaped.

RLA(1-11): 0.56 : 0.27 : 1.00 : 1.10: 0.90 : 0.98 : 1.03 : 1.12 : 1.04 : 1.03 : 1.05.

RL/WA(1-11): 1.78 : 1.35 : 4.18 : 5.44 : 4.34 : 4.00 : 3.79 : 3.42 : 3.47 : 3.51 : 4.00.

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

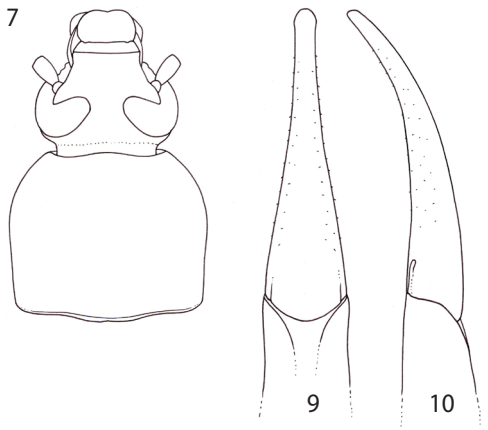
Pronotum (Fig. 7) dark reddish brown, shiny, convex, slightly wider than long, distinctly narrower than elytra at humeri, widest in two thirds from base to apex. Dorsal surface with a few pale and dark setae, fine microgranulation and dense, coarse punctuation, punctures relatively large, intervals between punctures almost narrower than diameter of punctures. PL 1.86 mm; PW 2.06 mm; PI equal to 90.51. Border lines very narrow, margins conspicuous from dorsal view. Lateral margins straight and parallel in basal part, arcuate in apical third, base finely bisinuate. Posterior angles obtuse.

Elytra. Reddish brown, elongate oval, convex, shiny. Dorsal surface with semierect, pale setae. EL 6.27 mm; EW 3.13 mm; EL/EW 2.00. Elytral striae with rows of large and coarse punctures (slightly larger than those in pronotum), intervals between punctures in rows narrower than diameter of punctures. Elytral intervals slightly convex, with microgranulation and very sparse, small and shallow punctures.

Scutellum. Blackish brown, pentagonal, slightly shiny, with a few shallow punctures, microgranulation and a few setae.

Elytral epipleura well-developed, reddish brown, with pale setae and large punctures in basal part, widest at base, distinctly narrowing to ventrite 1, then relatively narrow and parallel with denser and longer setation in apical part.

Legs. Long, blackish brown, dorsal surface with fine microgranulation, pale setation



Figs. 6-10: *Chitwania amoena* sp. nov. (male holotype): 6- habitus; 7- head and pronotum; 8- prosternal process between procoxae; 9- apical piece of aedeagus, dorsal view; 10- apical piece of aedeagus, lateral view.

and small, shallow punctures. Protibiae slightly bent, excised in apical half of inner side, mesotibiae distinctly bent. Femora strong, shiny, ochre yellow with narrowly dark brown apex. Pro- and mesotarsomeres 3, 4 and metatarsomere 3 pale brown, widened and lobed. RLT: 1.00 : 0.49 : 0.65 : 0.87 : 1.64 (protarsus); 1.00 : 0.43 : 0.42 : 0.71 (metatarsus).

Tarsal claws long and bent, with teeth only in one side of hollow claw, protarsal claws with about 40 visible teeth.

Ventral side of body dark brown, shiny, with fine microgranulation, sparse, short, pale setae and small punctures. Procoxae separated by prosternal process (Fig. 8). Abdomen dark brown, shiny, with sparse, pale setae, small and shallow punctures and very fine microgranulation. Ultimate and penultimate ventrites darker, blackish brown.

Aedeagus (Figs. 9, 10) pale brown, shiny. Basal piece slightly narrowing in dorsal view and slightly rounded laterally. Apical piece slightly darker, narrow, elongate triangular

dorsally, beak shaped in dorsal and lateral views. Ratio of length of apical piece to length of basal piece in dorsal view 1: 3.23.

Female has body slightly wider than male. Pro- and mesotibiae normally shaped, not bent, protarsal claws short with 14 teeth.
Measurements of female body. BL 10.27 mm; HL 1.60 mm; HW 1.66 mm; OI 25.46; PL 1.90 mm; PW 2.28 mm; PI 83.33; EL 6.77 mm; EW 3.39 mm; AL(1-11) 6.65 mm; AL(1-11)/BL 0.65; HW/PW 0.73; BL/EW 3.03; EL/EW 2.00.
RLA(1-11): 0.59 : 0.26 : 1.00 : 1.13: 1.00 : 1.00 : 1.09 : 1.07 : 1.09 : 1.06 : 1.12.
RL/WA(1-11): 1.82 : 1.08 : 3.79 : 4.00 : 3.79 : 4.08 : 3.59 : 3.23 : 3.84 : 3.50 : 3.84.
RLT: 1.00 : 0.48 : 0.63 : 0.74 : 1.23 (protarsus); 1.00 : 0.47 : 0.36 : 0.67 : 1.11 (mesotarsus); 1.00 : 0.39 : 0.36 : 0.65 (metatarsus).

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n= 3). BL 10.18 mm (9.58-10.65 mm); HL 1.57 mm (1.43-1.66 mm); HW 1.61 mm (1.48-1.71 mm); OI 21.68 (20.96-22.62); PL 1.98 mm (1.86-2.08 mm); PW 2.19 mm (2.06-2.33 mm); PI 90.50 (89.27-91.71); EL 6.64 mm (6.27-6.91 mm); EW 3.35 mm (3.13-3.51 mm). Females (n= 4). BL 10.38 mm (9.81-10.73 mm); HL 1.60 mm (1.45-1.70 mm); HW 1.65 mm (1.50-1.74 mm); OI 25.64 (22.84-27.76); PL 1.93 mm (1.82-2.01 mm); PW 2.35 mm (2.17-2.48 mm); PI 82.47 (81.05-83.87); EL 6.84 mm (6.54-7.09 mm); EW 3.51 mm (3.29-3.69 mm).

Differential diagnosis (for more information see the key below). Most similar species is *Chitwania secreta* sp. nov. from Malaysia.
Chitwania amoena sp. nov. distinctly differs from similar species *Ch. secreta* mainly by antennomere 1 and maxillary palpus dark brown and antennomeres 5-10 reddish brown; while *Ch. secreta* has antennomere 1 and maxillary palpus mostly pale reddish brown and antennomeres 5-10 are blackish brown.

Etymology. The name *amoena* is taken from Latin (pleasant).

Distribution. Malaysia (Pahang).

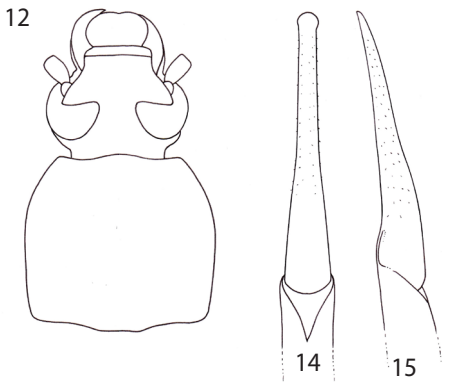
Chitwania castanea sp. nov.
(Figs. 11-15)

Type locality. Western Malaysia, Pahang, 50 km northeast of Kuala Rompin, Endau Rompin Natural Preserve.

Type material. Holotype (♂): 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). Paratypes: (2 ♂♂, 1 ♀): same data as holotype, (VNPC); (2 ♀♀): MALAYSIA WEST, PAHANG, 70 km SW / of Kuala Rompin, Endau Rompin N. P. / 600 m G. Beremban (Kg. Tebu Hitam) / 13.iv.-3.v.2009, P. Čechovský lgt., (VNPC); (1 ♂): MALAYSIA-W, Pahang, / 30km SE of IPOH, 1500 m, / Banjaran Titi Wangsa / TANAF RATA, 14-15.iii. / 2002, P. Čechovský leg., (VNPC). The types are provided with a printed red label: 'Chitwania / castanea sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2022'.

Description of holotype. Habitus as in Fig. 11, body elongate oval, convex, from reddish brown to blackish brown, dorsal surface shiny with pale setation, punctuation and very fine microgranulation, BL 10.07 mm. Widest near half elytra length; BL/EW 3.24.

Head (Fig. 12) approximately as wide as long, through the eyes distinctly wider than anterior margin of pronotum, slightly narrower than base of pronotum. Dorsal surface shiny with punctures and long, pale setae, microgranulation indistinct. Posterior part blackish brown with sparser setae and larger and coarser punctures than those in reddish brown anterior part. A few dark setae behind eyes and glabrous, shiny places between punctures (larger than diameter of punctures) without microgranulation are present. Clypeus pale brown or pale reddish brown, wide and transverse, lateral margins rounded, shiny, with small and shallow punctures, long, pale setation and microgranulation. Mandibles pale brown, glabrous, shiny, with a few pale setae in sides, lateral margins and apex darker. HW 1.50 mm; HW/PW 0.76; HL (visible part) 1.49 mm. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; slightly wider than length of antennomere 1; OI equal to 25.97.



Figs. 11-15: *Chitwania castanea* sp. nov. (male holotype): 11- habitus; 12- head and pronotum; 13- prosternal process between procoxae; 14- apical piece of aedeagus, dorsal view; 15- apical piece of aedeagus, lateral view.

Antenna. Long, narrow, slightly shiny (AL 5.74 mm, exceeding half body length - AL/BL 0.57). Antennomeres 1 and 2 blackish brown with pale reddish brown apex, antennomeres 3-10 brown with blackish brown apex, insertion of antennae pale reddish brown. Surface with recumbent pale setation, microgranulation and small punctures. Antennomere 2 shortest, antennomere 4 longest, antennomeres 5-11 shorter or almost as long as antennomere 3. Antennomeres 3-10 slightly widened apically, ultimate antennomere brown, widest before apex, half drop shaped.

RLA(1-11): 0.53 : 0.25 : 1.00 : 1.08: 0.96 : 0.96 : 0.95 : 0.98 : 0.98 : 0.92 : 0.99.

RL/WA(1-11): 2.09 : 1.15 : 4.23 : 4.17 : 4.40 : 4.14 : 4.03 : 3.21 : 3.35 : 3.25 : 3.73.

Maxillary palpus slightly shiny, with pale setae, microgranulation and small, shallow punctures. Palpomeres 2 and 3 brown with pale brown apex, distinctly narrowest at base and widest at apex, ultimate palpomere dark brown with pale brown apex, widely triangular, slightly shoe shaped.

Pronotum (Fig. 12) dark brown, shiny, convex, approximately as long as wide, distinctly narrower than elytra at humeri, widest in two thirds from base to apex. Dorsal surface with a few pale and dark setae, dense, coarse punctuation, punctures relatively large, intervals between punctures almost narrower than diameter of punctures, microgranulation indistinct. PL 2.02 mm; PW 2.07 mm; PI equal to 99.02. Border lines very narrow, margins conspicuous in dorsal view, only in the middle of anterior margin not clearly conspicuous. Lateral margins straight and parallel in basal part, arcuate in apical part, base finely bisinuate. Posterior and anterior angles obtuse.

Elytra. Reddish brown with suture darker, elongate oval, convex, shiny. Dorsal surface with erect, pale setae. EL 6.56 mm; EW 3.11 mm; EL/EW 2.11. Elytral striae with rows of large and coarse punctures (slightly larger than those in pronotum), intervals between punctures in rows narrower than diameter of punctures. Elytral intervals slightly convex, with fine microgranulation and very sparse, small and shallow punctures.

Scutellum. Blackish brown, semi elliptical, slightly shiny, with a few shallow punctures, microgranulation and a few setae.

Elytral epipleura well-developed, in base and in apical part blackish brown, in middle reddish brown, with pale setae and large punctures in basal part, widest in base, distinctly narrowing to ventrite 1, then relatively narrow and parallel in apical part.

Legs. Long, blackish brown, dorsal surface with fine microgranulation, pale setation and small, shallow punctures. Protibiae distinctly bent, excised in apical half of inner side, mesotibiae distinctly bent. Femora strong, pro- and mesotarsomeres 3, 4 and metatarsomere 3 pale brown, widened and lobed.

RLT: 1.00 : 0.63 : 0.87 : 0.83 : 1.58 (protarsus); 1.00 : 0.47 : 0.41 : 0.83 (metatarsus).

Tarsal claws long and bent, with teeth only in one side of hollow claw, protarsal claws with more than 40 visible teeth.

Ventral side of body and abdomen dark brown with sparse, short, pale setae and punctures. Procoxae separated by prosternal process (Fig. 13).

Aedeagus (Figs. 14, 15) large, pale brown, shiny. Basal piece slightly narrowing in dorsal view and slightly rounded laterally. Apical piece very narrow, beak shaped from dorsal and lateral views. Ratio of length of apical piece to length of basal piece from dorsal view 1: 3.60.

Female has body slightly wider than in male. Pro- and mesotibiae normally shaped, not bent, protarsal claws short with 13 teeth.
Measurements of female body. BL 10.45 mm; HL 1.56 mm; HW 1.60 mm; OI 26.69; PL 1.98 mm; PW 2.19 mm; PI 90.41; EL 6.91 mm; EW 3.43 mm; AL(1-11) 5.83 mm; AL(1-11)/BL 0.56; HW/PW 0.73; BL/EW 3.05; EL/EW 2.02.
RLA(1-11): 0.61 : 0.28 : 1.00 : 1.04: 0.94 : 0.91 : 0.95 : 1.13 : 0.97 : 0.94 : 1.00.
RL/WA(1-11): 2.47 : 1.41 : 3.84 : 3.94 : 3.46 : 3.49 : 3.50 : 3.33 : 3.28 : 3.16 : 3.86.
RLT: 1.00 : 0.73 : 0.75 : 1.00 : 1.75 (protarsus); 1.00 : 0.56 : 0.50 : 0.61 : 1.07 (mesotarsus); 1.00 : 0.45 : 0.37 : 0.69 (metatarsus).

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n= 4). BL 9.87 mm (9.15-10.24 mm); HL 1.47 mm (1.39-1.50 mm); HW 1.49 mm (1.41-1.52 mm); OI 24.60 (22.62-26.50); PL 2.01 mm (1.82-2.12 mm); PW 2.07 mm (1.92-2.18 mm); PI 97.18 (94.79-99.02); EL 6.39 mm (5.94-6.63 mm); EW 3.16 mm (2.91-3.45 mm). Females (n= 3). BL 10.09 mm (9.68-10.45 mm); HL 1.53 mm (1.48-1.56 mm); HW 1.57 mm (1.51-1.60 mm); OI 28.90 (26.69-30.95); PL 1.90 mm (1.83-1.98 mm); PW 2.09 mm (1.98-2.19 mm); PI 90.92 (89.23-91.33); EL 6.60 mm (5.68-7.20 mm); EW 2.64 mm (2.37-2.86 mm).

Differential diagnosis (for more information see the key below). Similar species with darker elytral suture are *Chitwania acehica* sp. nov., *Chitwania suturalis* (Borchmann, 1925) comb. nov. and *Chitwania vicina* sp. nov.
Chitwania castanea sp. nov. clearly differs from similar species *Ch. suturalis* and *Ch. vicina* mainly by antenna and maxillary palpus almost completely dark; while *Ch. suturalis* has antenna and maxillary palpus pale and *Ch. vicina* has maxillary palpus and antennomere 1 pale.
Ch. castanea is clearly different from similar species *Ch. acehica* mainly by antennomeres 5-9 shorter than antennomere 3, by pronotum widest in two thirds from base to apex and by metatarsomere 1 two times longer than metatarsomere 2; while *Ch. acehica* has antennomeres 5-9 as long or longer than antennomere 3, pronotum is widest near middle and metatarsomere 1 is three times longer than metatarsomere 2.

Etymology. The name is taken from Latin *castanea* (chestnut) resembling colour of dorsal surface.

Distribution. Malaysia (Pahang).

Chitwania inferna **sp. nov.**
(Figs. 16-20)

Type locality. Western Malaysia, Pahang, 70 km southwest of Kuala Rompin, Endau Rompin Natural Preserve.

Type material. Holotype (♂): MALAYSIA WEST, PAHANG, 70 km SW / of Kuala Rompin, Endau Rompin N. P. / 600 m G. Beremban (Kg. Tebu Hitam) / 13.iv.-3.v.2009, P. Čechovský lgt., (VNPC). Paratypes: (2 ♂♂, 2 ♀♀):

same data as holotype, (VNPC); (1 ♂): 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: 'Chitwania / inferna sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2022'.

Description of holotype. Habitus as in Fig. 16, body elongate oval, convex, from reddish brown to blackish brown, dorsal surface shiny with pale setation, punctuation and fine microgranulation, BL 11.39 mm. Widest near half elytra length; BL/EW 3.24.

Head (Fig. 17) approximately as long as wide, through the eyes slightly wider than anterior margin of pronotum, distinctly narrower than base of pronotum. Dorsal surface with punctures and long, pale setae. Posterior part blackish brown with sparser setae, larger and coarser punctures than those in reddish brown anterior part with distinct microgranulation. A few dark setae behind eyes and glabrous, shiny places between punctures (larger than diameter of punctures) without microgranulation. Clypeus rounded, wide and transverse, reddish brown with pale reddish brown apex, surface with long, pale setation and microgranulation. Mandibles reddish brown, glabrous, shiny, with a few pale setae in darker sides, apex dark. HW 1.69 mm; HW/PW 0.72; HL (visible part) 1.68 mm. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; distinctly narrower than length of antennomere 1; OI equal to 19.18.

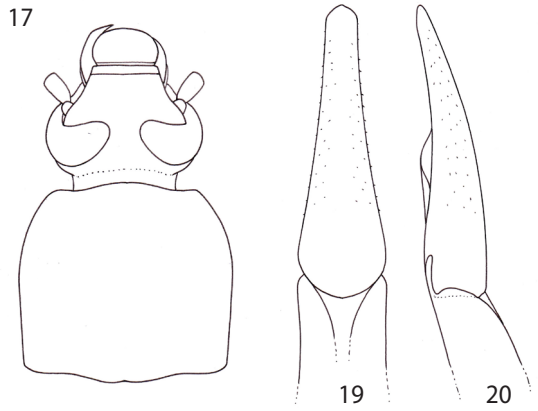
Antenna. Long, narrow, blackish brown, insertion of antennae pale reddish brown (AL 6.47 mm, exceeding half body length - AL/BL 0.55). Surface with recumbent pale setation, microgranulation, longitudinal rugosities and small punctures. Antennomere 2 shortest, antennomere 4 longest, antennomeres 5-11 shorter than antennomere 3. Antennomeres 3-10 slightly widened apically, ultimate antennomere widest before paler apex, half drop shaped.
RLA(1-11): 0.59 : 0.26 : 1.00 : 1.15: 0.94 : 0.94 : 0.92 : 0.92 : 0.90 : 0.86 : 0.89.
RL/WA(1-11): 2.39 : 1.30 : 4.07 : 4.66 : 4.40 : 4.35 : 4.56 : 4.15 : 4.00 : 3.41 : 4.26.

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

Pronotum (Fig. 17) blackish brown, shiny, convex, as long as wide, distinctly narrower than elytra at humeri, widest near two thirds from base to apex. Dorsal surface with pale setae, fine microgranulation and dense, coarse punctuation, punctures relatively large, intervals between punctures almost narrower than diameter of punctures. PL 2.33 mm; PW 2.35 mm; PI equal to 99.19. Border lines very narrow, margins conspicuous in dorsal view, only in the middle of anterior margin not clearly distinct. Lateral margins straight and parallel in basal part, arcuate in apical third, base finely bisinuate. Posterior and anterior angles obtuse.

Elytra. Dark brown, slightly elongate oval, convex, shiny. Dorsal surface with erect, pale setation. EL 7.38 mm; EW 3.52 mm; EL/EW 2.10. Elytral striae with rows of large and coarse punctures (approximately as large as those in pronotum), intervals between punctures in rows narrower than diameter of punctures. Elytral intervals slightly convex, with microgranulation and very sparse, small and shallow punctures.

Scutellum. Blackish brown, pentagonal, rather matte, with a few shallow punctures and microgranulation.



Figs. 16-20: *Chitwania inferna* sp. nov. (male holotype): 16- habitus; 17- head and pronotum; 18- prosternal process between procoxae; 19- apical piece of aedeagus, dorsal view; 20- apical piece of aedeagus, lateral view.

Elytral epipleura well-developed, blackish brown, with pale setae and punctures in basal part, widest at base, distinctly narrowing to ventrite 1, then relatively narrow and parallel with denser and longer setation in apical part.

Legs. Long, blackish brown, dorsal surface with fine microgranulation, pale setation and small, shallow punctures. Protibiae slightly bent, excised in apical half of inner side, mesotibiae distinctly bent, metatibiae distinctly bent near base, femora strong. Pro- and mesotarsomeres 3, 4 and metatarsomere 3 pale brown, widened and lobed. RLT: 1.00 : 0.58 : 0.61 : 1.12 : 1.19 (protarsus); 1.00 : 0.42 : 0.41 : 0.78 (metatarsus).

Tarsal claws long and bent, with teeth only in one side of hollow claw, protarsal claws with almost 40 visible teeth.

Ventral side of body blackish brown, with sparse, short, pale setae and small punctures. Procoxae separated by prosternal process (Fig. 18). Abdomen blackish brown, shiny, with pale setae, small and shallow punctures and very fine microgranulation.

Aedeagus (Figs. 19, 20) pale brown, shiny. Basal piece narrowing in dorsal view and rounded laterally. Apical piece elongate triangular dorsally, beak shaped from dorsal and lateral views. Ratio of length of apical piece to length of basal piece in dorsal view 1: 2.66.

Female has body slightly wider than in male. Tibiae normally shaped, not bent, protarsal claws short with 14 and 15 teeth.
Measurements of female body. BL 10.62 mm; HL 1.60 mm; HW 1.62 mm; OI 25.15; PL 2.04 mm; PW 2.38 mm; PI 85.71; EL 6.98 mm; EW 3.60 mm; AL(1-11) 6.23 mm; AL(1-11)/BL 0.59; HW/PW 0.68; BL/EW 2.95; EL/EW 1.94.
RLA(1-11): 0.60 : 0.25 : 1.00 : 1.12: 1.04 : 1.05 : 1.08 : 1.06 : 1.04 : 0.98 : 1.10.
RL/WA(1-11): 2.47 : 1.41 : 3.84 : 3.94 : 3.46 : 3.49 : 3.50 : 3.33 : 3.28 : 3.16 : 3.86.
RLT: 1.00 : 0.52 : 0.87 : 1.10 : 1.63 (protarsus); 1.00 : 0.39 : 0.45 : 0.77 (metatarsus).

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n= 4). BL 11.21 mm (11.02-11.39 mm); HL 1.69 mm (1.68-1.70 mm); HW 1.70 mm (1.69-1.70 mm); OI 19.56 (19.18-19.94); PL 2.32 mm (2.31-2.33 mm); PW 2.37 mm (2.35-2.39 mm); PI 97.92 (96.65-99.19); EL 7.20 mm (7.01-7.38 mm); EW 3.57 mm (3.52-3.61 mm). Females (n= 2). BL 10.77 mm (10.62-10.91 mm); HL 1.66 mm (1.60-1.71 mm); HW 1.68 mm (1.62-1.73 mm); OI 25.18 (25.15-25.21); PL 2.05 mm (2.04-2.06 mm); PW 2.42 mm (2.38-2.45 mm); PI 84.90 (84.08-85.71); EL 7.06 mm (6.98-7.14 mm); EW 3.66 mm (3.60-3.71 mm).

Differential diagnosis (for more information see the key below). *Chitwania inferna* sp. nov. with blackish brown dorsal surface and metatibiae distinctly bent near base is an unique species, no similar species is known yet.

Etymology. The name is taken from Latin *inferna* (hell), after its dark colour of dorsal surface.

Distribution. Malaysia (Pahang).

Chitwania jualica sp. nov.
(Figs. 21-25)

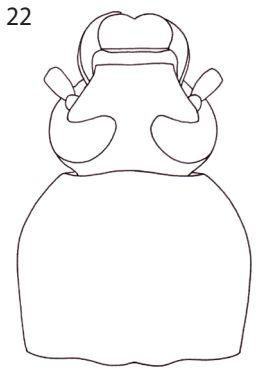
Type locality. Western Malaysia, Kelantan, 30 km south of Jeli, Gunung Jual, 800 m, Kampong Timor.

Type material. Holotype (♂): MALAYSIA W., KELANTAN / 30 km S of Jeli, Gunung Jual, / 800 m, Kampong Timor, 22.iv. / -18.v.2019; Petr Čechovský lgt., (VNPC). Paratypes: (4 ♂♂, 9 ♀♀): same data as holotype, (VNPC). The types are provided with a printed red label: ’Chitwania / jualica sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2022‘.

Description of holotype. Habitus as in Fig. 21, body elongate oval, slightly convex, from pale reddish brown to blackish brown, dorsal surface shiny with pale setation, punctuation and fine microgranulation, BL 10.81 mm. Widest near half elytra length; BL/EW 3.04.

Head (Fig. 22) blackish brown, slightly wider than long, through the eyes distinctly wider than anterior margin of pronotum, distinctly narrower than base of pronotum. Dorsal surface with large and coarse punctures, microgranulation and long, pale setae. Posterior part with a few dark setae behind eyes. Clypeus dark brown, wide and transverse, half heart shaped, lateral margins rounded, shiny, with small and shallow punctures, long, pale setation and microgranulation. Mandibles dark brown, glabrous, shiny, with a few pale setae in sides. HW 1.64 mm; HW/PW 0.75; HL (visible part) 1.47 mm. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; approximately as wide as length of antennomere 1; OI equal to 21.84.

Antenna. Long, narrow, slightly shiny (AL 6.76 mm, almost reaching two thirds body length - AL/BL 0.63). Antennomeres 1-4 blackish brown, antennomeres 5-11 reddish brown with blackish brown apex, insertion of antennae pale reddish brown. Surface with pale setation, microgranulation and small punctures. Antennomere 2 shortest, antennomere 4



Figs. 21-25: *Chitwania jualica* sp. nov. (male holotype): 21- habitus; 22- head and pronotum; 23- prosternal process between procoxae; 24- apical piece of aedeagus, dorsal view; 25- apical piece of aedeagus, lateral view.

longest, antennomeres 8-11 longer than antennomere 3. Antennomeres 3-10 slightly widened apically, ultimate antennomere widest before apex, half drop shaped.
RLA(1-11): 0.46 : 0.25 : 1.00 : 1.15: 0.91 : 0.94 : 0.94 : 1.07 : 1.02 : 1.02 : 1.15.
RL/WA(1-11): 1.71 : 1.19 : 4.13 : 4.61 : 4.31 : 4.41 : 3.96 : 3.60 : 3.47 : 4.15 : 4.61.

Maxillary palpus dark brown, slightly shiny, with pale setae, microgranulation and small, shallow punctures. Palpomeres 2 and 3 distinctly narrowest at base and widest at distinctly paler apex, ultimate palpomere widely triangular, slightly shoe shaped.

Pronotum (Fig. 22) dark reddish brown, shiny, convex, slightly wider than long, distinctly narrower than elytra at humeri, widest near middle of lateral margins. Dorsal surface with a few pale and dark setae, very fine microgranulation and dense, coarse punctuation, punctures large, intervals between punctures almost narrower than diameter of punctures. PL 1.99 mm; PW 2.20 mm; PI equal to 90.46. Border lines very narrow, margins conspicuous from dorsal view, only in the middle of anterior margin not clearly distinct. Lateral margins straight and parallel in basal part, arcuate near middle, base finely bisinuate. Posterior and anterior angles obtuse.

Elytra. Pale reddish brown, suture narrowly darker, elongate oval, slightly convex, shiny. Dorsal surface with erect, pale setae. EL 7.35 mm; EW 3.56 mm; EL/EW 2.07. Elytral striae with rows of large and coarse punctures (approximately as large as those in pronotum), intervals between punctures in rows narrower than diameter of punctures. Elytral intervals slightly convex, with microgranulation and very sparse, small and shallow punctures.

Scutellum. Blackish brown, pentagonal, slightly shiny, with a few shallow punctures, microgranulation and a few setae.

Elytral epipleura well-developed, reddish brown, with row of large punctures in basal part, widest in base, distinctly narrowing to ventrite 1, then relatively narrow and parallel with relatively dense and long, pale setation in apical part.

Legs. Long, blackish brown, dorsal surface with fine microgranulation, pale setation and small, shallow punctures. Protibiae slightly excised in apical half of inner side, mesotibiae distinctly bent. Femora strong, shiny. Pro- and mesotarsomeres 3, 4 and metatarsomere 3 pale brown, widened and lobed. RLT: 1.00 : 0.57 : 0.75 : 0.92 : 1.87 (protarsus); 1.00 : 0.39 : 0.40 : 0.81 (metatarsus).

Tarsal claws long and bent, with teeth only in one side of hollow claw, protarsal claws with about 50 visible teeth.

Ventral side of body dark brown, with sparse, short, pale setae and punctures. Procoxae separated by prosternal process (Fig. 23). Abdomen blackish brown, shiny, with pale setae, very small and shallow punctures and fine microgranulation.

Aedeagus (Figs. 24, 25) pale brown, shiny. Basal piece slightly narrowing in dorsal view and slightly rounded laterally. Apical piece elongate triangular dorsally, beak shaped from dorsal and lateral views. Ratio of length of apical piece to length of basal piece from dorsal view 1: 3.34.

Female has body slightly wider and more oval than in male. Pro- and mesotibiae normally shaped, protarsal claws short with 13 teeth.
Measurements of female body. BL 10.96 mm; HL 1.59 mm; HW 1.76 mm; OI 27.75; PL 1.95 mm; PW 2.56 mm; PI 75.96; EL 7.42 mm; EW 4.02 mm; AL(1-11) 6.39 mm; AL(1-11)/BL 0.58; HW/PW 0.69; BL/EW 2.73; EL/EW 1.85.

RLA(1-11): 0.58 : 0.24 : 1.00 : 1.19: 0.90 : 0.97 : 0.98 : 1.10 : 1.05 : 1.04 : 1.00.
RL/WA(1-11): 1.80 : 0.97 : 3.38 : 4.38 : 3.21 : 2.81 : 2.98 : 3.19 : 3.20 : 3.33 : 3.79.
RLT: 1.00 : 0.47 : 0.71 : 0.86 : 1.38 (protarsus); 1.00 : 0.42 : 0.36 : 0.63 (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 9.62 mm (8.79-10.81 mm); HL 1.38 mm (1.31-1.47 mm); HW 1.50 mm (1.42-1.64 mm); OI 23.60 (21.84-26.17); PL 1.80 mm (1.67-1.99 mm); PW 2.05 mm (1.88-2.20 mm); PI 87.39 (85.89-90.46); EL 6.47 mm (5.83-7.35 mm); EW 3.25 mm (3.05-3.56 mm). Females (n= 9). BL 10.22 mm (9.76-10.96 mm); HL 1.47 mm (1.37-1.59 mm); HW 1.62 mm (1.52-1.76 mm); OI 26.51 (26.01-27.75); PL 1.77 mm (1.63-1.95 mm); PW 2.31 mm (2.13-2.56 mm); PI 76.48 (73.64-79.86); EL 6.99 mm (6.67-7.42 mm); EW 3.72 mm (3.50-4.02 mm).

Differential diagnosis (for more information see the key below). *Chitwania jualica* sp. nov. with unicolored blackish brown legs and unicolored pale reddish brown dorsal surface of elytra is an unique species, no similar species is known yet.

Etymology. Toponymic, named after the type locality Mount Jual in Kelantan.

Distribution. Malaysia (Kelantan).

Chitwania pusilla sp. nov.
(Figs. 26-30)

Type locality. Western Malaysia, Pahang, 50 km northeast of Kuala Rompin, Endau Rompin Nature Preserve.

Type material. Holotype (♂): 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). Paratypes: (14 ♂♂, 6 ♀♀): same data as holotype, (VNPC); (11 ♂♂, 9 ♀♀): MALAYSIA WEST, PAHANG, 70 km SW / of Kuala Rompin, Endau Rompin N. P. / 600 m G.Beremban (Kg.Tebu Hitam) / 13.iv.-3.v.2009, P. Čechovský lgt., (VNPC). The types are provided with a printed red label: 'Chitwania / pusilla sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2022'.

Description of holotype. Habitus as in Fig. 26, body small, elongate oval, convex, from pale reddish brown to blackish brown, dorsal surface shiny with pale setation, punctuation and fine microgranulation, BL 7.28 mm. Widest near half elytra length; BL/EW 3.21.

Head (Fig. 27) approximately as wide as long, through the eyes distinctly wider than anterior margin of pronotum, slightly narrower than base of pronotum. Dorsal surface shiny, with punctures and long, pale setae. Posterior part blackish brown with sparser setae, larger and coarser punctures than those in brown anterior part with distinct microgranulation. A few dark setae behind eyes and glabrous, shiny places between sparser punctures (larger than diameter of punctures) without distinct microgranulation are present. Clypeus pale reddish brown, wide and transverse, lateral margins rounded, shiny, with small and shallow punctures, long, pale setation and microgranulation. Mandibles pale reddish brown, glabrous, shiny, with a few pale setae in sides. HW 1.18 mm; HW/PW 0.79; HL (visible part)

1.11 mm. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; slightly narrower than length of antennomere 1; OI equal to 19.57.

Antenna. Long, narrow, pale reddish brown, slightly shiny (AL 4.78 mm, reaching two thirds body length - AL/BL 0.66). Insertion of antennae pale reddish brown. Surface with recumbent pale setation, microgranulation and small punctures. Antennomere 2 shortest, antennomere 4 longest, antennomeres 7-11 longer than antennomere 3. Antennomeres 3-10 slightly widened apically, ultimate antennomere widest before apex, half drop shaped.
RLA(1-11): 0.67 : 0.28 : 1.00 : 1.21: 0.92 : 0.92 : 1.02 : 1.14 : 1.06 : 1.02 : 1.02.
RL/WA(1-11): 2.21 : 1.25 : 4.04 : 5.08 : 3.47 : 3.44 : 3.47 : 4.59 : 4.00 : 3.70 : 4.00.

Maxillary palpus pale reddish brown, shiny, with pale setae, microgranulation and small, shallow punctures. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular, slightly shoe shaped.

Pronotum (Fig. 27) dark reddish brown, shiny, convex, approximately as long as wide, distinctly narrower than elytra at humeri, widest in middle of lateral margins. Dorsal surface with sparse setae, fine microgranulation and dense, coarse punctuation, punctures relatively large. PL 1.49 mm; PW 1.57 mm; PI equal to 94.91. Border lines very narrow, margins conspicuous from dorsal view, only in the middle of anterior margin not clearly distinct. Lateral margins finely rounded from base to apex, base finely bisinuate. Posterior and anterior angles obtuse.

Elytra. Reddish brown, suture narrowly darker, elongate oval, convex, shiny. Dorsal surface with erect, pale setae. EL 4.68 mm; EW 2.27 mm; EL/EW 2.06. Elytral striae with rows of large and coarse punctures (approximately as large as those in pronotum), intervals between punctures in rows narrower than diameter of punctures. Elytral intervals slightly convex, with microgranulation and very sparse, small and shallow punctures.

Scutellum. Brown with sides darker, square shaped, transverse, slightly shiny, with a few shallow punctures, microgranulation and a few pale setae.

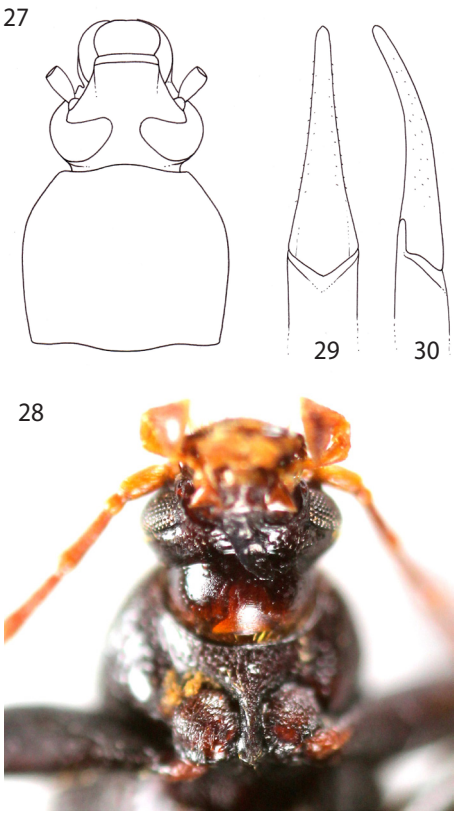
Elytral epipleura well-developed, dark brown, with pale setae and punctures in basal part, widest at base, distinctly narrowing to ventrite 1, then relatively narrow and parallel in apical part.

Legs. Long, femora strong, blackish brown, meso- and metatibiae brown, protibiae and tarsi pale brown. Dorsal surface with fine microgranulation, pale setation and small, shallow punctures. Protibiae very slightly bent, slightly excised in apical half of inner side, mesotibiae distinctly bent. Pro- and mesotarsomeres 3, 4 and metatarsomere 3 widened and lobed. RLT: 1.00 : 0.56 : 0.68 : 0.85 : 1.57 (protarsus); 1.00 : 0.48 : 0.51 : 0.79 : 1.29 (mesotarsus); 1.00 : 0.42 : 0.42 : 0.70 (metatarsus).

Tarsal claws long and bent, with teeth only in one side of hollow claw, protarsal claws with about 30 visible teeth.

Ventral side of body dark brown, shiny, with fine microrugosities, sparse, short, pale setae and larger punctures. Procoxae separated by prosternal process (Fig. 28). Abdomen blackish brown, shiny, with sparse, pale setae, small and shallow punctures and microrugosities and microgranulation.

Aedeagus (Figs. 29, 30) pale brown, shiny. Basal piece slightly narrowing in dorsal view and rounded laterally. Apical piece narrow, elongate triangular dorsally, beak shaped from



Figs. 26-30: *Chitwania pusilla* sp. nov. (male holotype): 26- habitus; 27- head and pronotum; 28- prosternal process between procoxae; 29- apical piece of aedeagus, dorsal view; 30- apical piece of aedeagus, lateral view.

dorsal and lateral views. Ratio of length of apical piece to length of basal piece from dorsal view 1: 3.00.

Female has body slightly wider than in male. Pro- and mesotibiae normally shaped, not bent, protarsal claws short with 14 teeth.
Measurements of female body. BL 7.92 mm; HL 1.23 mm; HW 1.30 mm; OI 24.88; PL 1.43 mm; PW 1.70 mm; PI 84.12; EL 5.26 mm; EW 2.68 mm; AL(1-11) 4.97 mm; AL(1-11)/BL 0.63; HW/PW 0.75; BL/EW 2.96; EL/EW 1.96.
RLA(1-11): 0.61 : 0.37 : 1.00 : 1.24: 1.05 : 1.08 : 1.09 : 1.16 : 1.13 : 1.11 : 1.15.
RL/WA(1-11): 2.19 : 1.65 : 3.62 : 4.48 : 3.64 : 3.73 : 3.61 : 3.83 : 3.91 : 4.00 : 4.35.
RLT: 1.00 : 0.51 : 0.71 : 0.78 : 1.73 (protarsus); 1.00 : 0.49 : 0.47 : 0.54 : 0.99 (mesotarsus); 1.00 : 0.39 : 0.37 : 0.73 (metatarsus).

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n= 26). BL 7.90 mm (7.28-8.66 mm); HL 1.19 mm (1.10-1.29 mm); HW 1.26 mm (1.18-1.35 mm); OI 18.14 (15.42-19.57); PL 1.59 mm

(1.49-1.61 mm); PW 1.68 mm (1.57-1.79 mm); PI 94.49 (93.06-95.12); EL 5.08 mm (4.63-5.46 mm); EW 2.46 mm (2.24-2.63 mm). Females (n= 15). BL 8.02 mm (7.60-8.31 mm); HL 1.25 mm (1.20-1.30 mm); HW 1.31 mm (1.25-1.37 mm); OI 24.12 (22.17-25.23); PL 1.50 mm (1.42-1.60 mm); PW 1.76 mm (1.68-1.90 mm); PI 85.15 (83.54-88.65); EL 5.32 mm (4.95-5.44 mm); EW 2.70 mm (2.49-2.83 mm).

Differential diagnosis (for more information see the key below). *Chitwania pusilla* sp. nov. with smaller body, darker elytral suture, pale brown protibiae, maxillary palpus and antenna is an unique species, no similar species is known yet.

Etymology. Name is taken from Latin *pusilla* (small).

Distribution. Malaysia (Pahang).

Chitwania secreta sp. nov.
(Figs. 31-35)

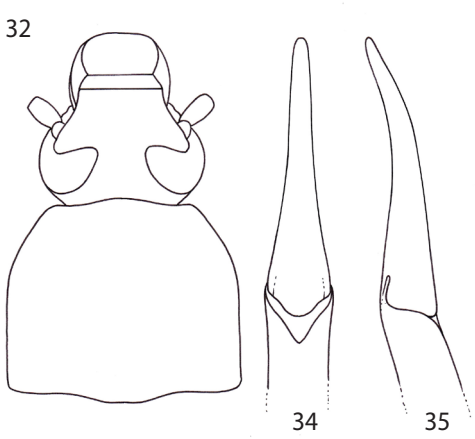
Type locality. Western Malaysia, Kelantan, 30 km northwest of Gua Musang, Ulu Lalat Mt.

Type material. Holotype (male): MALAYSIA W., KELANTAN / 30 km NW of Gua Musang / Ulu Lalat Mt. 800-1000 m / KAMPONG SUNGAI OM; 27. / v.-19.vi.2011; P. Čechovský lgt., (VNPC). Paratypes: (4 ♂♂, 2 ♀♀): same data as holotype, (VNPC); (3 ♀♀): same data but 21.vi.-14.vii.2010, (VNPC); (1 ♂, 4 ♀♀): 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); (2 ♂♂): MALAYSIA WEST, PERAK / 40 km SE of IPOH, 900 m / Banjaran Titi Wangsu / RINGLET, 29.iii.-15.iv.2004 / P. Čechovský lgt., (VNPC); (1 ♂): MALAYSIA West, PAHANG / Cameron Highlands, TANAH / RATA, 3.ii.-19.ii.2005 / P. Čechovský lgt., 1200-1500 m, (VNPC); (1 ♂): MALAYSIA, 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). The types are provided with a printed red label: 'Chitwania / secreta sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2022'.

Description of holotype. Habitus as in Fig. 31, body elongate oval, convex, from pale reddish brown to blackish brown, dorsal surface shiny with setation, punctuation and fine microgranulation, BL 9.69 mm. Widest near half elytra length; BL/EW 3.02.

Head (Fig. 32) approximately as wide as long, through the eyes distinctly wider than anterior margin of pronotum, distinctly narrower than base of pronotum. Dorsal surface with coarser punctures. Posterior part blackish brown with a few pale setae and a few dark setae behind eyes with microgranulation, without shiny places. Apex of anterior part pale reddish brown. Clypeus pale reddish brown, wide and transverse, half heart shaped, lateral margins rounded, shiny, with small and shallow punctures, microgranulation and long, pale setation. Mandibles pale brown with darker apex, glabrous, shiny, with a few pale setae in sides. HW 1.49 mm; HW/PW 0.70; HL (visible part) 1.48 mm. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; slightly narrower than length of antennomere 1; OI equal to 21.53.

Antenna. Long, narrow, slightly shiny (AL 5.94 mm, distinctly exceeding half body length - AL/BL 0.61). Insertion of antennae and antennomere 1 pale reddish brown, antennomere



Figs. 31-35: *Chitwania secreta* sp. nov. (male holotype): 31- habitus; 32- head and pronotum; 33- prosternal process between procoxae; 34- apical piece of aedeagus, dorsal view; 35- apical piece of aedeagus, lateral view.

2 distinctly paler than blackish brown antennomeres 3-11. Surface with recumbent pale setation and small punctures. Antennomere 2 shortest, antennomere 4 longest, antennomeres 8-11 longer than antennomere 3. Antennomeres 3-10 slightly widened apically, ultimate antennomere paler in apical part, widest before apex, half drop shaped.
RLA(1-11): 0.59 : 0.25 : 1.00 : 1.23: 0.88 : 0.90 : 0.93 : 1.05 : 1.03 : 1.05 : 1.06.
RL/WA(1-11): 1.84 : 1.16 : 3.59 : 4.27 : 3.16 : 3.39 : 3.69 : 4.03 : 4.00 : 3.36 : 3.30.

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

Pronotum (Fig. 32) dark reddish brown, shiny, convex, slightly wider than long, distinctly narrower than elytra at humeri, widest in basal half. Dorsal surface with a few pale and dark

setae, fine microgranulation and dense, coarse punctuation, punctures relatively large, intervals between punctures almost narrower than diameter of punctures. PL 1.84 mm; PW 2.14 mm; PI equal to 85.76. Border lines very narrow, margins conspicuous from dorsal view, only in the middle of anterior margin not clearly distinct. Lateral margins straight and parallel in basal part, narrowing in apical half, base finely bisinuate. Anterior and posterior angles obtuse.

Elytra. Reddish brown with suture darker, elongate oval, convex, shiny. Dorsal surface with semierect, pale setae. EL 6.37 mm; EW 3.21 mm; EL/EW 1.98. Elytral striae with rows of large and coarse punctures, larger than those in pronotum, intervals between punctures in rows narrower than diameter of punctures. Elytral intervals slightly convex, with microgranulation and very sparse, small and shallow punctures.

Scutellum. Blackish brown, pentagonal, with microgranulation and a few long, pale setae.

Elytral epipleura well-developed, dark reddish brown, with pale setae, small punctures and one row of large and coarse punctures in basal part, widest in base, distinctly narrowing to ventrite 1, then relatively narrow and parallel with denser and longer setation in apical part.

Legs. Long, blackish brown, dorsal surface with very fine microgranulation, pale setation and small, shallow punctures. Protibiae slightly bent, slightly paler in apical half of inner side, mesotibiae distinctly bent. Femora strong, shiny, pale reddish brown with narrowly dark brown apex. Pro- and mesotarsomeres 3, 4 and metatarsomere 3 pale brown, widened and lobed. RLT: 1.00 : 0.49 : 0.94 : 1.12 : 1.59 (protarsus); 1.00 : 0.45 : 0.51 : 0.65 : 1.15 (mesotarsus); 1.00 : 0.40 : 0.44 : 0.84 (metatarsus).

Tarsal claws long and bent, with teeth only on one side of hollow claw, protarsal claws with more than 40 visible teeth.

Ventral side of body blackish brown, with short, pale setae and punctures. Procoxae separated by prosternal process (Fig. 33). Abdomen blackish brown, shiny, with sparse, pale setae, small and shallow punctures and very fine microgranulation.

Aedeagus (Figs. 34, 35) pale brown, shiny. Basal piece slightly narrowing in dorsal view and slightly rounded laterally. Apical piece narrow, elongate triangular dorsally, beak shaped from dorsal and lateral views. Ratio of length of apical piece to length of basal piece from dorsal view 1: 3.20.

Female has body slightly wider than in male. Pro- and mesotibiae normally shaped, not bent, protarsal claws short with 15 teeth.
Measurements of female body. BL 9.47 mm; HL 1.41 mm; HW 1.43 mm; OI 30.44; PL 1.67 mm; PW 2.11 mm; PI 79.15; EL 6.39 mm; EW 3.31 mm; AL(1-11) 5.68 mm; AL(1-11)/BL 0.60; HW/PW 0.68; BL/EW 2.86; EL/EW 1.93.
RLA(1-11): 0.66 : 0.25 : 1.00 : 1.11: 0.94 : 1.01 : 1.04 : 1.11 : 1.05 : 1.02 : 1.04.
RL/WA(1-11): 2.03 : 1.04 : 3.72 : 4.29 : 3.48 : 3.63 : 3.20 : 3.43 : 3.23 : 3.24 : 3.61.
RLT: 1.00 : 0.55 : 0.73 : 0.84 : 1.58 (protarsus); 1.00 : 0.39 : 0.36 : 0.68 (metatarsus).

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n= 10). BL 9.80 mm (9.29-10.66 mm); HL 1.45

mm (1.37-1.59 mm); HW 1.47 mm (1.39-1.61 mm); OI 23.76 (21.53-25.31); PL 1.89 mm (1.68-2.16 mm); PW 2.19 mm (1.98-2.44 mm); PI 86.74 (84.85-88.53); EL 6.45 mm (6.16-6.91 mm); EW 3.30 mm (3.21-3.6 mm). Females (n= 9). BL 10.19 mm (9.47-11.21 mm); HL 1.52 mm (1.41-1.69 mm); HW 1.55 mm (1.43-1.73 mm); OI 28.09 (24.40-30.44); PL 1.86 mm (1.67-2.08 mm); PW 2.26 mm (2.11-2.47 mm); PI 82.23 (79.15-84.38); EL 6.81 mm (6.39-7.44 mm); EW 3.48 mm (3.31-3.80 mm).

Differential diagnosis (for more information see the key below). Most similar species are *Chitwania amoena* sp. nov. from Malaysia and *Chitwania khaolakica* Novák, 2021 from Thailand.
Chitwania secreta sp. nov. distinctly differs from similar species *Ch*. *amoena* mainly by antennomere 1 and maxillary palpus mostly pale reddish brown, by antennomeres 5-10 blackish brown; while *Ch*. *amoena* has antennomere 1 and maxillary palpus dark brown and antennomeres 5-10 are reddish brown.
Ch. *secreta* is clearly different from similar species *Ch*. *khaolakica* mainly by shape of pronotum (narrowing in apical part); while pronotum of *Ch*. *khaolakica* is arcuate in apical part.

Etymology. Name is taken from Latin *secreta* (secret).

Distribution. Malaysia (Kelantan, Pahang, Perak).

***Chitwania siberutica* sp. nov.**
(Figs. 36-40)

Type locality. Indonesia, Mentawai Islands, South Siberut Island, environ of village Salappa.

Type material. Holotype (♂): Indonesia, Mentawai isls. / S. SIBERUT ISL., 50-100 M / Salappa vill. env, 2.2007 / St Jakl lgt., (VNPC). Paratypes: (1 ♂, 3 ♀♀): same data as holotype, (VNPC). The types are provided with a printed red label: 'Chitwania / siberutica sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2022'.

Description of holotype. Habitus as in Fig. 36, body elongate oval, slightly convex, from ochre yellow to blackish brown, dorsal surface slightly shiny with pale setation, punctuation and fine microgranulation, BL 9.96 mm. Widest near half elytra length; BL/EW 2.97.

Head (Fig. 37) slightly wider than long, through the eyes distinctly wider than anterior margin of pronotum, distinctly narrower than base of pronotum. Dorsal surface with punctures, pale setae and microgranulation. Posterior part dark brown with larger and coarser punctures than those in reddish brown anterior part. Apex of anterior part and clypeus ochre yellow. Clypeus wide and transverse, lateral margins rounded, slightly shiny, with small and shallow punctures, long, pale setation and fine microgranulation. Mandibles pale brown, shiny, glabrous, with a few pale setae in sides. HW 1.55 mm; HW/PW 0.69; HL (visible part) 1.46 mm. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; slightly narrower than length of antennomere 1; OI equal to 21.22.

Antenna. Long, narrow, (AL 6.12 mm, distinctly exceeding half body length - AL/

BL 0.62). Antennomeres 1-6 pale brown, antennomeres 7, 8 pale brown with darker apex, antennomeres 9-11 brown, insertion of antennae pale reddish brown. Surface with short, recumbent pale setation, microgranulation and punctures. Antennomere 2 shortest, antennomere 4 longest, antennomeres 5-11 shorter than antennomere 3. Antennomeres 3-10 slightly widened apically, ultimate antennomere with pale apical half, widest before apex, half drop shaped.

RLA(1-11): 0.62 : 0.24 : 1.00 : 1.17: 0.97 : 0.94 : 0.94 : 0.96 : 0.90 : 0.90 : 0.84.

RL/WA(1-11): 2.19 : 1.20 : 4.23 : 4.93 : 4.73 : 4.14 : 4.96 : 4.15 : 3.38 : 3.32 : 3.18.

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

Pronotum (Fig. 37) blackish brown, matte, convex, slightly wider than long, distinctly narrower than elytra at humeri, widest in two thirds from base to apex. Dorsal surface with long, pale setae, microgranulation and dense, shallower punctuation, punctures relatively large, intervals between punctures almost narrower than diameter of punctures. PL 2.02 mm; PW 2.25 mm; PI equal to 89.84. Border lines very narrow, margins conspicuous from dorsal view, only in the middle of anterior margin not clearly distinct. Lateral margins straight and parallel in basal part, arcuate in apical third, base finely bisinuate. Posterior and anterior angles obtuse.

Elytra. Reddish brown, elongate oval, convex, slightly shiny. Dorsal surface with semierect, pale setae. EL 6.48 mm; EW 3.35 mm; EL/EW 1.93. Elytral striae with rows of coarse punctures distinct only in basal half, intervals between punctures in rows narrower than diameter of punctures, striae in apical part with smaller punctures or punctures missing. Elytral intervals slightly convex, with microgranulation and very sparse, small and shallow punctures.

Scutellum. Blackish brown, semi elliptical, slightly shiny, with microgranulation and small, shallow punctures.

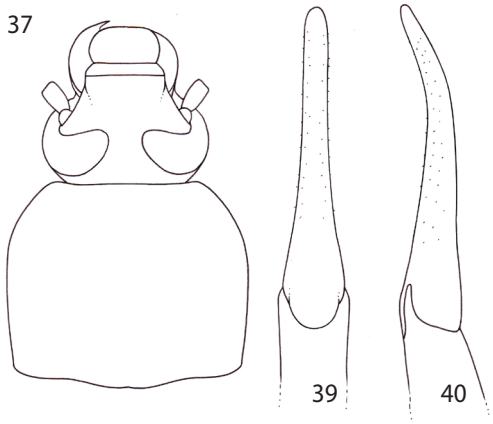
Elytral epipleura well-developed, reddish brown, with row of punctures in basal part, widest in base, distinctly narrowing to ventrite 1, then relatively narrow and parallel with pale setation in apical part.

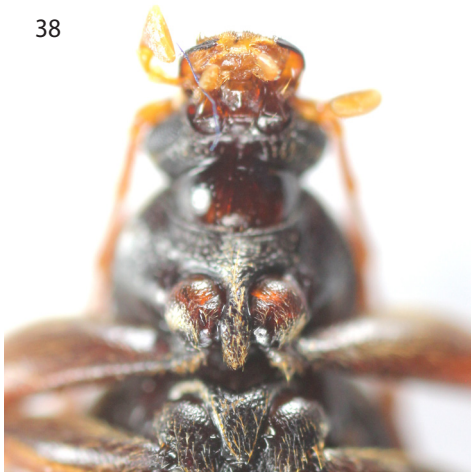
Legs long, reddish brown, tarsi, pro- and mesotibiae pale brown. Dorsal surface rather matte with pale setation, small, shallow punctures and fine microgranulation. Protibiae slightly bent, excised in apical half of inner side, mesotibiae distinctly bent. Femora strong. Pro- and mesotarsomeres 3, 4 and metatarsomere 3 widened and lobed. RLT: 1.00 : 0.56 : 0.66 : 0.99 : 1.64 (protarsus); 1.00 : 0.44 : 0.71 : 0.85 : 1.29 (mesotarsus); 1.00 : 0.40 : 0.43 : 0.76 (metatarsus).

Tarsal claws long and bent, with teeth only in one side of hollow claw, protarsal claws with about 50 visible teeth.

Ventral side of body blackish brown with fine sparse, pale setae and punctures. Procoxae separated by prosternal process (Fig. 38). Abdomen blackish brown, shiny, with pale setae, very small punctures and very fine microgranulation.

Aedeagus (Figs. 39, 40) pale brown, shiny. Basal piece narrowing in dorsal view and rounded laterally. Apical piece narrow and elongate dorsally, beak shaped from dorsal and





Figs. 36-40: *Chitwania siberutica* sp. nov. (male holotype): 36- habitus; 37- head and pronotum; 38- prosternal process between procoxae; 39- apical piece of aedeagus, dorsal view; 40- apical piece of aedeagus, lateral view.

lateral views. Ratio of length of apical piece to length of basal piece from dorsal view 1: 3.00.

Female has body slightly wider than in male. Pro- and mesotibiae normally shaped, not bent, protarsal claws short with 13 teeth.
Measurements of female body. BL 9.42 mm; HL 1.39 mm; HW 1.46 mm; OI 23.79; PL 1.85 mm; PW 2.15 mm; PI 86.04; EL 6.18 mm; EW 3.30 mm; AL(1-11) 5.65 mm; AL(1-11)/BL 0.60; HW/PW 0.68; BL/EW 2.86; EL/EW 1.87.
RLA(1-11): 0.65 : 0.26 : 1.00 : 1.30: 0.96 : 1.07 : 1.15 : 1.23 : 1.20 : 1.16 : 1.11.
RL/WA(1-11): 2.20 : 1.08 : 3.48 : 4.68 : 3.35 : 3.27 : 3.41 : 4.00 : 3.78 : 3.77 : 3.73.
RLT: 1.00 : 0.53 : 0.59 : 0.93 : 1.84 (protarsus); 1.00 : 0.33 : 0.31 : 0.97 (metatarsus).

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n= 2). BL 9.54 mm (9.11-9.96 mm); HL 1.45 mm (1.44-1.46 mm); HW 1.53 mm (1.51-1.55 mm); OI 21.61 (21.22-22.00); PL 1.94 mm (1.85-2.02 mm); PW 2.18 mm (2.10-2.25 mm); PI 88.94 (88.10-89.78); EL 6.15 mm (5.82-6.48 mm); EW 3.20 mm (3.04-3.35 mm). Females (n= 3). BL 9.26 mm (9.17-9.42 mm); HL 1.41 mm (1.39-1.42 mm); HW 1.48 mm (1.46-1.49 mm); OI 24.24 (23.65-25.34); PL 1.78 mm (1.74-1.85 mm); PW 2.11 mm (2.08-2.15 mm); PI 84.34 (83.33-86.04); EL 6.07 mm (6.01-6.18 mm); EW 3.31 mm (3.25-3.38 mm).

Differential diagnosis (for more information see the key below). *Chitwania siberutica* sp. nov. with pale pro- and mesotibiae, antenna and maxillary palpus is an unique species, no similar species is known yet.

Etymology. Toponymic, after the name of type locality Island South Siberut in Indonesia.

Distribution. Indonesia (Mentawai Islands, South Siberut Island).

Chitwania suturalis (Borchmann, 1925) comb. nov.
(Figs. 41, 42)

Type locality. Northeast Sumatra, Tebing-tinggi.

Type material. (male syntype): rl: type [hb] // wl with bf: N.O.Sumatra / Tebing-tinggi / Dr.Schultheiss. [pb] // wl: Coll. Kraatz [pb] // suturalis / sp. [hb] // wl: Sammlung / F. Borchmann / Eing. Nr. 5. 1943[pb], (ZMUH).

Remarks. Habitus of male syntype as in Fig. 41. Tarsal claws of male large with many teeth, hollow with teeth only on one side, procoxae are separated by prosternal process. Protibiae are slightly and mesotibiae distinctly bent. Species distinctly belongs to the genus *Chitwania* Novák, 2015. Labels are shown in Fig. 42.
Measurements of body (male syntype). BL 8.25 mm; HL 1.25 mm; HW 1.34 mm; OI 26.96; PL 1.64 mm; PW 1.76 mm; PI 93.18 EL 5.36 mm; EW 2.68 mm; HW/PW 0.76; BL/EW 3.08; EL/EW 2.00.

Distribution. Indonesia (Sumatra Island).

Chitwania vicina sp. nov.
(Figs. 43-47)

Type locality. Western Malaysia, Pahang, 50 km northeast of Kuala Rompin, Endau Rompin Nature Preserve.

Type material. Holotype (♂): 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). Paratypes: (3 ♂♂, 8 ♀♀): same data as holotype, (VNPC). The types are provided with a printed red label: 'Chitwania / vicina sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2022'.

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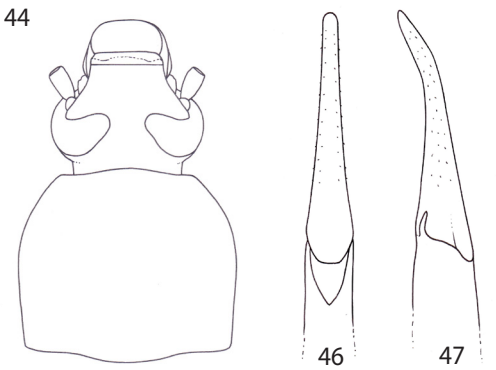
Figs. 41, 42: *Chitwania suturalis* (Borchmann, 1925) comb. nov.: 41- habitus of male syntype; 42- locality labels of male syntype.

Description of holotype. Habitus as in Fig. 43, body elongate oval, convex, from reddish brown to dark brown, dorsal surface shiny with pale setation, punctuation and fine microgranulation, BL 9.65 mm. Widest near half elytra length; BL/EW 3.04.

Head (Fig. 44) dark reddish brown, approximately as wide as long, through the eyes distinctly wider than anterior margin of pronotum, distinctly narrower than base of pronotum. Dorsal surface with punctures and long, pale setae. Posterior part with larger and coarser punctures than those in anterior part with distinct microgranulation. A few dark setae behind eyes and glabrous, shiny places between eyes (larger than diameter of punctures) without microgranulation are present. Clypeus reddish brown, wide and transverse, lateral margins rounded, rather matte, with small and shallow punctures, long, pale setation and microgranulation. Mandibles glabrous, shiny, with a few pale setae in sides. HW 1.50 mm; HW/PW 0.71; HL (visible part) 1.46 mm. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; approximately as wide as length of antennomere 1; OI equal to 25.21.

Antenna. Long, narrow, slightly shiny (AL 6.02 mm, distinctly exceeding half body length - AL/BL 0.62). Antennomeres 1 and 2 pale brown, antennomeres 3-11 brown with blackish brown apex, insertion of antennae pale reddish brown. Surface with recumbent pale setation, microgranulation and small punctures. Antennomere 2 shortest, antennomeres



Figs. 43-47: *Chitwania vicina* sp. nov. (male holotype): 43- habitus; 44- head and pronotum; 45- prosternal process between procoxae; 46- apical piece of aedeagus, dorsal view; 47- apical piece of aedeagus, lateral view.

4, 6-9 longer than antennomere 3. Antennomeres 3-10 slightly widened apically, ultimate antennomere widest before apex, half drop shaped.
RLA(1-11): 0.63 : 0.24 : 1.00 : 1.13: 0.98 : 1.03 : 1.13 : 1.11 : 1.04 : 0.94 : 0.93.
RL/WA(1-11): 2.14 : 1.04 : 3.75 : 4.66 : 4.40 : 3.54 : 3.78 : 3.24 : 4.17 : 3.90 : 4.15.

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

Pronotum (Fig. 44) dark reddish brown, shiny, convex, approximately as long as wide, distinctly narrower than elytra at humeri, widest near middle of lateral margins. Dorsal surface with pale setae, very fine microgranulation and dense, coarse punctuation, punctures relatively large, distinctly larger than those in posterior part of head, intervals between punctures almost narrower than diameter of punctures. PL 2.01 mm; PW 2.21 mm; PI equal to 95.26. Border lines very narrow, margins conspicuous from dorsal view, only in the middle of anterior margin not clearly distinct. Lateral margins straight and parallel in basal

part, arcuate in apical half, base finely bisinuate. Posterior and anterior angles obtuse.

Elytra reddish brown, elongate oval, convex, shiny. Dorsal surface with erect, pale setation. EL 6.18 mm; EW 3.18 mm; EL/EW 1.94. Elytral striae with rows of large and coarse punctures, intervals between punctures in rows narrower than diameter of punctures. Elytral intervals slightly convex, with microgranulation and very sparse, small and shallow punctures.

Scutellum dark brown, semi elliptical, slightly shiny, with a few shallow punctures, microgranulation and a few pale setae.

Elytral epipleura well-developed, reddish brown, with pale setae and row of large punctures in basal part, widest at base, distinctly narrowing to ventrite 1, then relatively narrow and parallel with denser and longer setation in apical part.

Legs. Long, reddish brown, slightly shiny, tibiae and tarsomeres 1 and 2 slightly darker, dorsal surface with pale setation, fine microgranulation and small, shallow punctures. Protibiae finely excised in apical half of inner side, mesotibiae distinctly bent. Femora strong, pro- and mesotarsomeres 3, 4 and metatarsomere 3 pale brown, widened and lobed. RLT: 1.00 : 0.51 : 0.71 : 0.78 : 1.37 (protarsus); 1.00 : 0.47 : 0.61 : 0.62 : 0.99 (mesotarsus); 1.00 : 0.42 : 0.43 : 0.76 (metatarsus).

Tarsal claws long and bent, with teeth only on one side of hollow claw, protarsal claws with about 40 visible teeth.

Ventral side of body dark brown with large punctures. Metaventrite with sparse, short, pale setae, prothorax and mesoventrite almost glabrous. Procoxae separated by prosternal process (Fig. 45). Abdomen dark brown, shiny, with pale setae, small and shallow punctures.

Aedeagus (Figs. 46, 47) pale brown, shiny. Basal piece slightly narrowing in dorsal view and slightly rounded laterally. Apical piece narrow, elongate triangular dorsally, beak shaped in dorsal and lateral views. Ratio of length of apical piece to length of basal piece in dorsal view 1: 3.10.

Female has body slightly wider than in male. Pro- and mesotibiae normally shaped, not bent, protarsal claws have 15 teeth.

Measurements of female body. BL 9.79 mm; HL 1.48 mm; HW 1.54 mm; OI 28.79; PL 1.92 mm; PW 2.25 mm; PI 85.33; EL 6.39 mm; EW 3.22 mm; AL(1-11) 5.99 mm; AL(1-11)/BL 0.61; HW/PW 0.68; BL/EW 3.04; EL/EW 1.99.

RLA(1-11): 0.70 : 0.29 : 1.00 : 1.06: 1.05 : 0.99 : 1.07 : 1.06 : 1.00 : 0.97 : 1.01.

RL/WA(1-11): 2.38 : 1.12 : 3.38 : 3.59 : 3.55 : 3.46 : 3.39 : 3.36 : 4.08: 3.65 : 3.67.

RLT: 1.00 : 0.70 : 0.75 : 0.85 : 1.65 (protarsus); 1.00 : 0.44 : 0.39 : 0.57 (metatarsus).

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n= 4). BL 10.01 mm (9.65-10.20 mm); HL 1.45 mm (1.45-1.46 mm); HW 1.49 mm (1.48-1.50 mm); OI 24.70 (24.19-25.21); PL 2.04 mm (2.01-2.08 mm); PW 2.14 mm (2.11-2.23 mm); PI 94.03 (93.27-95.26); EL 6.52 mm (6.18-6.70 mm); EW 3.18 mm (3.10-3.27 mm). Females (n= 8). BL 9.99 mm (9.69-10.26 mm); HL 1.50 mm (1.47-1.62 mm); HW 1.56 mm (1.52-1.62 mm); OI 29.11 (27.67-30.26); PL 1.91 mm (1.85-1.96 mm); PW 2.20 mm (2.14-2.25 mm); PI 86.64 (83.70-89.25); EL 6.58 mm (6.37-6.80 mm); EW 3.34 mm (3.22-3.41 mm).

Differential diagnosis (for more information see the key below). Similar species with darker elytral suture are *Chitwania acehica* sp. nov., *Chitwania castanea* sp. nov. and *Chitwania suturalis* (Borchmann, 1925) comb. nov.
Chitwania vicina sp. nov. clearly differs from similar species *Ch. acehica* and *Ch. castanea* mainly by maxillary palpus and antennomere 1 pale; while *Ch. acehica* and *Ch. castanea* have antenna and maxillary palpus almost completely dark.
Ch. vicina is distinctly different from similar species *Ch. suturalis* mainly by only antennomere 1 pale; while *Ch. suturalis* has all antennomeres pale.

Etymology. Name is taken from Latin *vicina* (neighbouring).

Distribution. Malaysia (Pahang).

KEY TO THE *CHITWANIA* SPECIES FROM INDONESIA AND MALAYSIA

1(2) Elytra and pronotum blackish brown, metatibiae of male distinctly bent near base. Habitus as in Fig. 16; head and pronotum (Fig. 17); prosternal process between procoxae (Fig. 18); apical piece of aedeagus (as in Figs. 19 and 20). Malaysia. ..... *Chitwania inferna* sp. nov.
2 (1) Elytra paler than pronotum (with different colour), metatibiae of male not bent near base. 3
3(4) Elytra pale reddish brown. Habitus as in Fig. 21; head and pronotum (Fig. 22); prosternal process between procoxae (Fig. 23); apical piece of aedeagus (as in Figs. 24 and 25). Malaysia. *Chitwania jualica* sp. nov.
4(3) Elytra darker, reddish brown. 5
5(6) Femora bicolor (ochre yellow or pale reddish brown with dark apex). 7
6(5) Femora unicolored dark. 9
7(8) Maxillary palpus and antennomere 1 pale reddish brown. Habitus as in Fig. 31; head and pronotum (Fig. 32); prosternal process between procoxae (Fig. 33); apical piece of aedeagus (as in Figs. 34 and 35). Malaysia. ..... *Chitwania secreta* sp. nov.
8(7) Maxillary palpus and antennomere 1 dark brown or blackish brown. Habitus as in Fig. 6; head and pronotum (Fig. 7); prosternal process between procoxae (Fig. 8); apical piece of aedeagus (as in Figs. 9 and 10). Malaysia. ..... *Chitwania amoena* sp. nov.
9(10) Protibiae pale. 11
10(9) Protibiae dark. 13
11(12) Mesotibiae pale brown. Habitus as in Fig. 36; head and pronotum (Fig. 37); prosternal process between procoxae (Fig. 38); apical piece of aedeagus (as in Figs. 39 and 40). Indonesia. .... *Chitwania siberutica* sp. nov.
12(11) Mesotibiae dark. Habitus as in Fig. 26; head and pronotum (Fig. 27); prosternal process between procoxae (Fig. 28); apical piece of aedeagus (as in Figs. 29 and 30). Malaysia. ..... *Chitwania pusilla* sp. nov.
13(14) Antenna pale reddish brown or reddish brown. Habitus as in Fig. 41. Indonesia. .... *Chitwania suturalis* (Borchmann, 1925) comb. nov.
14(13) Antenna mostly dark. 15
15(16) Maxillary palpus and antennomere 1 pale brown. Habitus as in Fig. 43; head and pronotum (Fig. 44); prosternal process between procoxae (Fig. 45); apical piece of aedeagus (as in Figs. 46 and 47). Malaysia. ..... *Chitwania vicina* sp. nov.
16(15) Maxillary palpus and antennomere 1 dark. 17
17(18) Antennomeres 5-9 as long or longer than antennomere 3, pronotum widest near middle of lateral margins, metatarsomere 1 three times longer than metatarsomere 2. Habitus as in Fig. 1; head and pronotum (Fig. 2); prosternal process between procoxae (Fig. 3); apical piece of aedeagus (as in Figs. 4 and 5). Indonesia. ... . *Chitwania acehica* sp. nov.

18(17) Antennomeres 5-9 shorter than antennomere 3, pronotum widest in two thirds from base to apex, metatarsomere 1 two times longer than metatarsomere 2. Habitus as in Fig. 11; head and pronotum (Fig. 12); prosternal process between procoxae (Fig. 13); apical piece of aedeagus (as in Figs. 14 and 15). Indonesia. ..... *Chitwania castanea* sp. nov.

LIST OF THE KNOWN SPECIES OF THE GENUS *CHITWANIA*

Chitwania acehica sp. nov.	Indonesia (Sumatra Island)
Chitwania amoena sp. nov.	Malaysia
Chitwania attapeuica Novák, 2021	Laos (Attapeu Province)
Chitwania castanea sp. nov.	Malaysia
Chitwania crassipes (Fairmaire, 1882)	Indonesia (Sumatra Island), Myanmar (Tenasserim)
Chitwania fulva Novák, 2021	Nepal
Chitwania hueica Novák, 2021	Vietnam (Thua Thien Hue Province)
Chitwania inferna sp. nov.	Malaysia
Chitwania juelica sp. nov.	Malaysia
Chitwania kejvali Novák, 2015	India (Uttaranchal State), Nepal (Narayani Province)
Chitwania khaolakica Novák, 2021	Thailand (Phang-nga Province)
Chitwania luteimembris (Pic, 1925)	Myanmar (Tenasserim)
Chitwania myanmarica Novák, 2021	Myanmar
Chitwania placida Novák, 2021	India (Maharasthra State)
Chitwania pusilla sp. nov.	Malaysia
Chitwania secreta sp. nov.	Malaysia
Chitwania siberutica sp. nov.	Indonesia (Mentawai Island)
Chitwania suturalis (Borchmann, 1925) comb. nov.	Indonesia (Sumatra Island)
Chitwania vicina sp. nov.	Malaysia
Chitwania valida Novák, 2021	Thailand (Chanthaburi Province)

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