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

# Vladimír NOVÁK

Nepasické náměstí 796, CZ-190 14 Prague 9 - Klánovice, Czech Republic, e-mail: alleculinae.vn@centrum.cz

# Taxonomy, new species, descriptions, Coleoptera, Tenebrionidae, Alleculinae, Alleculini, *Cistelochara*, Oriental and Palaearctic Regions, China, India, Laos, Malaysia, Myanmar, Nepal, Thailand

Abstract. A new genus *Cistelochara* gen. nov. with the following new species are described as: *Cistelochara* aspera sp. nov. (as a type species) from China, Laos, Malaysia, Myanmar, Nepal and Thailand, *Cistelochara* dirangica sp. nov. from India, *Cistelochara habaica* sp. nov. from China (Yunnan) and *Cistelochara maculata* sp. nov. from India and Nepal. All new species are described, illustrated and compared together, *Cistelochara* gen. nov. is compared with similar genera *Mycetocula* Novák, 2015 (subtribe Alleculina) and habitually with the genus *Mycetochara* Guérin-Méneville, 1827 (subtribe Mycetocharina).

#### INTRODUCTION

A new genus *Cistelochara* gen. nov. with new species as follows are described below: *Cistelochara aspera* sp. nov. (as a type species) from China, Laos, Malaysia, Myanmar, Nepal and Thailand, *Cistelochara dirangica* sp. nov. from India, *Cistelochara habaica* sp. nov. from China (Yunnan), *Cistelochara maculata* sp. nov. from India and Nepal. Similar genera are *Mycetocula* Novák, 2015 (subtribe Alleculina) and habitually also the genus *Mycetochara* Guérin-Méneville, 1827 (subtribe Mycetocharia).

Species of *Cistelochara* gen. nov. is clearly different from the species of the genus *Mycetochara* by penultimate tarsomere of each tarsi widened and lobed; while *Mycetochara* species have none penultimate tarsomere widened and lobed.

Species of *Cistelochara* gen. nov. distinctly differs from similar species of *Mycetocula* mainly by wider body, by almost semicircular pronotum, by shorter elytra (EL/EW 1.9-2.2) widest near middle, by protarsal claws with less than 10 teeth; while *Mycetocula* species have body more parallel, pronotum is rather square shaped, elytra are more parallel and longer (EL/EW 2.4-2.6) widest at humeri and protarsal claws have more than 10 teeth.

The new species are described, illustrated and keyed.

#### MATERIAL AND METHODS

Two important morphometric characteristics used for the descriptions of species of the subfamily Alleculinae, the 'ocular index' dorsally (Campbell & Marshall 1964) and 'pronotal index' (Campbell 1965), are used in 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  $(100 \times \text{length of pronotum along midline}) / (width across$ 

basal angles of pronotum). In the list of type or examined material, a slash (/) separates data in separate rows, double slash (//) separates data in separate labels.

The following collection code is used:

KMTJ private collection of Kimio Masumoto, Tokyo, Japan;

MTDG Staatlisches Museum für Tierkunde, Dresden, Germany;

NMPC National Museum, Praha, Czech Republic;

NMBS Naturhistorisches Museum, Basel, Switzerland;

SMNS Staatliches Museum für Naturkunde, Stuttgart, Germany;

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

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).

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

#### Cistelochara gen. nov.

Type species: Cistelochara aspera sp. nov.

**Description.** Habitus as in Figs. 1, 8, 13, 18 and 19, body outline as in Fig. 2, habitually similar to the species of the genus *Mycetochara* Guérin-Méneville, 1827 (subtribe Mycetocharina), body small, narrow, elongate, slightly oval, finely convex, dorsal surface with punctuation and setation, widest near middle elytra length. BL/EW 2.8-3.2. Head (Figs. 3, 9, 14, 20) widest through the eyes, distinctly narrower than pronotum at base. Dorsal surface with punctuation and setae. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; OI 10-29. Antenna (Figs. 4, 10, 15 and 21) short, almost not reaching half body length. Antennomere 2 shortest, antennomeres 4-11 distinctly longer than antennomere 3 and 2-3 times longer than wide. Ultimate maxillary palpomere widely triangular. Pronotum (Figs. 3, 9, 14, 20) wide, transverse, almost semicircular, slightly narrower than elytra in humeri, widest at base. Dorsal surface with setation and punctures. PI 64-70. Elytra at humeri finely convex, elongate, slightly

oval, widest near middle elytra length. Dorsal surface with punctures and setation, EL/EW 1.9-2.2. Elytral epipleura well-developed. Legs relatively long and narrow, with setation, microgranulation and very small punctures. Tarsomeres narrow, pro- and mesotarsomeres 3, 4 and penultimate metatarsomeres distinctly widened and lobed. Both protarsal claws have less than 10 visible teeth. Ventral side of body with punctures and almost with setae. Aedeagus (Figs. 5, 6, 11, 12, 16, 17, 22, 23).

**Female** without distinct differences, only space between eyes very slightly wider, protarsal claws have less teeth.

**Differential diagnosis.** Similar genera are *Mycetocula* Novák, 2015 (subtribe Alleculina) and habitually also species of the genus *Mycetochara* Guérin-Méneville, 1827 (subtribe Mycetocharina).

Species of *Cistelochara* gen. nov. is clearly different from the species of the genus *Mycetochara* by penultimate tarsomere of all tarsi widened and lobed; while *Mycetochara* species have none of penultimate tarsomeres widened and lobed.

Species of *Cistelochara* gen. nov. distinctly differ from similar species of *Mycetocula* mainly by wider body, by almost semicircular pronotum, by shorter elytra (EL/EW 1.9-2.2) widest near middle, by protarsal claws with less than 10 teeth; while *Mycetocula* species have body more parallel, pronotum is rather square shaped, elytra are more parallel and longer (EL/EW 2.4-2.6) widest at humeri and protarsal claws have more than 10 teeth.

**Etymology.** Compound name formed by *Cistel-* (according to old name of earlier family Alleculidae (Cistelidae)) and ending *-ochara* resembling the habitus similarity to species of the genus *Mycetochara*. Gender: feminine.

**Distribution.** Malaysia, China (Hainan Island, Yunnan), India (Arunachal Pradesh, Meghalaya), Laos, Malaysia, Myanmar, Nepal, Thailand.

# *Cistelochara aspera* sp. nov. (Figs. 1-7)

Type locality. Northeastern Laos, Houa Phan Province, Ban Saleuy, Phou Pane Mountain, 20°12-13.5'N 103°59.5'E, 1340-1870 m.

**Type material.** Holotype ( $\delta$ ): LAOS-NE, Houa Phan prov. / 20°12-13.5 N 103°59.5 E, / Ban Saleuy → Phou Pane Mt. / 1340-1870 m, 2.-22.vi.2011, / Vít Kubáň et Lao coll. leg. // Primary mountain forest, / *individual collecting* / Laos 2011 Expedition / National Museum Prague, / Czech Republic, (NMPC). Paratypes: (1  $\delta$ ): NE LAOS, Hua Phan prov. / Ban Saluei, Phu Phan Mt. env., / 20°13 N 103°59 E, 1300-2000 m, / 6.-18.v.2004, J. Bezděk leg, (SMNS); (1  $\varphi$ ): LAO, Phongsaly prov. / 21°41 N 102°6 E, / PHONGSALY env. / 6.-17.v.2004, ~ 1500m, / M. Brancuccii leg., (NMBS); (1  $\varphi$ ): CHINA, Hainan Island / Minfeng Valley / Jianfeng Township / Ledong Li Autonomous County / 12.VI.2018, 950m / 18°44′38.98′N, 108°58′39′ E / P. Viktora lgt., (VNPC); (1  $\varphi$ ): LAOS Muang, alt. 1456 m / 19.158704°103.703988° / 10 V 2019 Light trap / leg. T.HIGURASHI / Permit: 08/05/2019, (VNPC); (1  $\varphi$ ): Malaysia NW / Cameron Highlands / Tanah Rata, / 16.-29.1.2006 / P. Viktora lgt., (VNPC); (1  $\varphi$ ): Myanmar (Burma) / Chin State; Chin Hills / Avocado Plantage / 30. VI. - 01. VII. 2008

/ leg. M. Langer // N 21°23'34.7'' / E 093°52'29.4'' / H = 1.914 m (NF), (VNPC); (1  $\bigcirc$ ): Nepal 1995 / Anapurna Mts. / lg. O. Jager // Marsyandi - / vall., Chamje / 1500m, 24.VIII., (MTDG); (2  $\bigcirc$  $\bigcirc$ ): Thailand, Fang / Doi Ang Khang, / 2-4.VI.2014, / K. Takahashi leg., (KMTJ, VNPC); (1  $\bigcirc$ ): Thailand, Chiang / Mai, Doi Suthep / 16. XI. 2012 / K. Masumoto leg., (KMTJ); (1  $\bigcirc$ ): NW Thailand, 19.-23. / Chiang Mai, 4.1991 / Doi Suthep to Doi Fui / J. Horák leg., (VNPC). The types are provided with a printed red label: 'Cistelochara / aspera sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2021'.

**Description of holotype.** Habitus as in Fig. 1, body outline as in Fig. 2, body small, narrow, elongate, slightly oval, finely convex, dorsal surface from pale brown to black, shiny, with coarse punctuation and long, pale setation, BL 5.78 mm. Widest near middle elytra length; BL/EW 3.12.

Head (Fig. 3) slightly wider than long, shiny, through the eyes wider than anterior margin of pronotum, distinctly narrower than pronotum at base. Dorsal surface with coarse and dense punctuation, interspaces between punctures narrow, distinctly narrower than diameter of punctures. Posterior part black, anterior half reddish brown with long, pale setae. Clypeus pale reddish brown with fine microgranulation and pale setation, rounded apically. HW 0.96 mm; HW/PW 0.69; HL (visible part) 0.86 mm. Eyes very large, transverse, strongly excised, space between eyes very narrow, distinctly narrower than diameter of one eye; approximately as wide as length of antennomere 2; OI equal to 10.78.

Antenna (Fig. 4) short, brown (reaching half body length, AL 3.08 mm; AL/BL 0.53), antennomeres strong, with brown setation, microgranulation and punctuation, rather matte. Antennomere 2 shortest, antennomeres 4-11 distinctly longer than antennomere 3. RLA(1-11): 1.12 : 0.63 : 1.00 : 1.56 : 1.56 : 1.91 : 1.84 : 1.88 : 1.98 : 1.95 : 1.91.

RL/WA(1-11): 1.71 : 1.04 : 1.72 : 2.23 : 2.31 : 2.41 : 2.32 : 2.19 : 2.36 : 2.47 : 3.04.

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

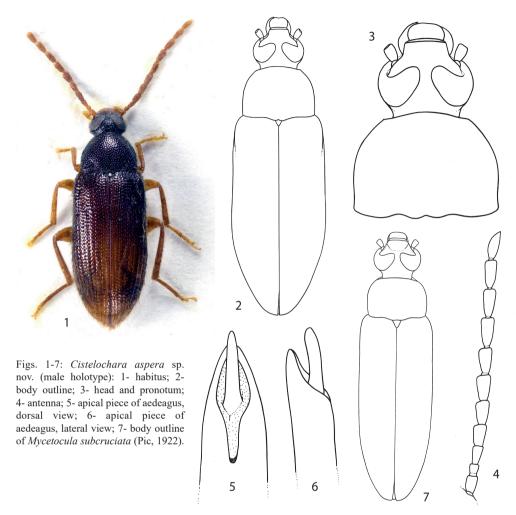
Pronotum (Fig. 3) blackish brown, wide, transverse, shiny, slightly narrower than elytra at humeri, widest at base. Dorsal surface with long, pale setation, dense, large and coarse punctures, intervals between punctures narrow. PL 0.98 mm; PW 1.40 mm; PI equal to 70.00. Border lines very narrow, not clearly distinct in dorsal view. Posterior and anterior angles obtuse. Lateral margins straight and distinctly excised before base in basal half, arcuate in apical part, anterior margin slightly arcuate, base bisinuate.

Elytra. Brown, finely convex, elongate, slightly oval, widest near middle elytra length, shiny. EL 3.94 mm; EW 1.85 mm; EL/EW 2.13. Dorsal surface with large, coarse punctures and long erect setation, dense near lateral margins. Rows of punctures in elytral striae distinct near lateral margins, near suture indistinct.

Scutellum. Blackish brown, triangular, with coarse punctures and microgranulation, shiny.

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

Legs. Pale brown, relatively long and narrow, with long and dense, pale setation, microgranulation and very small punctures. Tarsomeres narrow, pro- and mesotarsomeres 3, 4 and penultimate metatarsomeres distinctly widened and lobed.



RLT: 1.00 : 0.44 : 0.53 : 0.64 : 1.47 (protarsus); 1.00 : 0.33 : 0.31 : 0.34 : 0.64 (mesotarsus); 1.00 : 0.26 : 0.18 : 0.39 (metatarsus).

Both anterior tarsal claws with 8 visible teeth.

Ventral side of body brown, with punctures and short, pale setae. Abdomen shiny, pale reddish brown, with dense, long, pale setation, very fine microgranulation and dense, shallow punctures.

Aedeagus (Figs. 5, 6) ochre yellow, more matte. Basal piece rounded laterally, wide and finely narrowing in dorsal view. Apical piece short and narrow, unusually shaped. Ratio of length of apical piece to length of basal piece in dorsal view 1: 4.13.

**Female.** Without distinct differences, only space between eyes very slightly wider (OI approximately 16). Protarsal claws with 6 or 7 teeth.

Measurements of female body. BL 6.39 mm; HL 0.97 mm; HW 1.04 mm; OI 18.33; PL 1.14 mm; PW 1.69 mm; PI 67.46; EL 4.28 mm; EW 2.09 mm; AL(1-11) 3.05 mm; AL(1-11)/BL 0.48; HW/PW 0.62; BL/EW 3.06; EL/EW 2.05.

RLA(1-11): 0.88 : 0.58 : 1.00 : 1.36 : 1.28 : 1.50 : 1.58 : 1.64 : 1.62 : 1.56 : 1.74. RL/WA(1-11): 1.38 : 1.07 : 1.79 : 2.06 : 2.00 : 2.34 : 2.32 : 2.34 : 2.38 : 2.29 : 2.72. RLT: 1.00 : 0.46 : 0.48 : 0.77 : 1.46 (protarsus); 1.00 : 0.24 : 0.24 : 0.27 : 0.57 (mesotarsus); 1.00 : 0.26 : 0.22 : 0.31 (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 5.94 mm (5.78-6.10 mm); HL 0.90 mm (0.86-0.93 mm); HW 0.98 mm (0.96-1.00 mm); OI 11.18 (10.78-11.57); PL 1.03 mm (0.98-1.07 mm); PW 1.50 mm (1.40-1.60 mm); PI 68.44 (66.88-70.00); EL 4.02 mm (3.94-4.10 mm); EW 1.99 mm (1.85-2.13 mm). Females (n=11). BL 6.15 mm (5.67-6.56 mm); HL 0.91 mm (0.85-0.99 mm); HW 0.98 mm (0.91-1.06 mm); OI 16.03 (12.31-19.43); PL 1.07 mm (0.99-1.14 mm); PW 1.66 mm (1.55-1.81 mm); PI 64.46 (60.74-68.90); EL 4.16 mm (3.81-4.49 mm); EW 2.11 mm (1.99-2.24 mm).

**Differential diagnosis.** (See the key below for more information). Similar species are *Cistelochara dirangica* sp. nov. from India (Arunachal Pradesh) and *Cistelochara habaica* sp. nov. from China (Yunnan Province).

The new species *Cistelochara aspera* sp. nov. distinctly differs from similar species *C. dirangica* and *C. habaica* mainly by space between eyes very narrow (OI approximately 11), distinctly narrower than length of antennomere 3, by punctures of dorsal surface of pronotum and elytra large, by rows of punctures in elytral striae not clearly distinct everywhere; while *C. dirangica* and *C. habaica* have space between eyes distinctly wider (OI 28-29), wider than length of antennomere 3, punctures of pronotum and elytra are smaller, rows of punctures in elytral striae are distinct and punctures in elytral intervals are smaller than those in striae.

Etymology. From Latin aspera (coarse), reflecting nature of punctures on its dorsal surface.

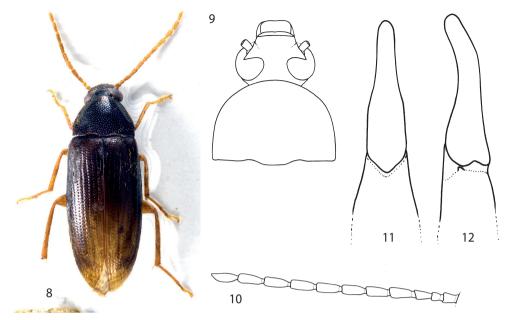
**Distribution.** China (Hainan Island), Laos (Houa Phan, Phongsaly and Xieng Khouang Provinces), Malaysia, Myanmar, Nepal, Thailand (Chiang Mai Province).

# Cistelochara dirangica sp. nov. (Figs. 8-12)

Type locality. Northeastern India, Arunachal Pradesh, Dirang vicinity, 27°21'-23'N, 92°13'-16'E, 1400-1700 m.

**Type material.** Holotype ( $\delta$ ): NE INDIA; ARUNACHAL PR. / DIRANG vicinity; 1550+-150m / 27°21'-23'N 92°13'-16'E / L. Dembický leg.; 1.-9.vi.2004, (VNPC). The type is provided with a printed red label: 'Cistelochara / dirangica sp. nov. / HOLOTYPUS / V. Novák det. 2021'.

**Description of holotype.** Habitus as in Fig. 8, body small, elongate, slightly oval, finely convex, dorsal surface from ochre yellow to blackish brown, shiny, with pale, recumbent



Figs. 8-12: Cistelochara dirangica sp. nov.: male holotype: 8- habitus; 9- head and pronotum; 10- antenna; 11apical piece of aedeagus, dorsal view; 12- apical piece of aedeagus, lateral view.

setation, fine microgranulation and punctuation, BL 6.64 mm. Widest near middle elytra length; BL/EW 3.01.

Head (Fig. 9) distinctly wider than long, through the eyes distinctly narrower than pronotum in base. Dorsal surface slightly shiny with punctuation, microgranulation and sparse, pale setae. Posterior part blackish brown with coarser punctures than those in reddish brown anterior half (apex with denser setae). Clypeus reddish brown, wide, transverse with microgranulation and pale setation, apex almost straight. HW 1.14 mm; HW/PW 0.67; HL (visible part) 0.84 mm. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; distinctly wider than length of antennomere 3, approximately as wide as length of antennomere 4; OI equal to 28.11.

Antenna (Fig. 10) pale brown, short (not reaching half body length, AL 2.96 mm; AL/BL 0.45), dorsal surface of antennomeres with pale setation, microgranulation and punctuation, rather matte. Antennomeres 4-11 distinctly longer than antennomere 3, antennomere 2 shortest.

RLA(1-11): 0.69 : 0.57 : 1.00 : 1.35 : 1.28 : 1.26 : 1.45 : 1.45 : 1.53 : 1.43 : 1.47.

RL/WA(1-11): 1.40 : 1.21 : 2.22 : 2.56 : 2.50 : 2.67 : 2.85 : 2.55 : 3.25 : 3.04 : 3.13.

Maxillary palpus pale brown, with pale setae and fine microgranulation. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere triangular, axe-shaped.

Pronotum (Fig. 9) brown, wide, transverse, almost semicircular, finely convex, shiny, approximately as wide as elytra at humeri, widest near base. Dorsal surface with sparse, pale

setae, very fine microgranulation and dense punctuation, punctures medium sized. Intervals between punctures almost narrower than diameter of punctures. PL 1.18 mm; PW 1.70 mm; PI equal to 69.41. Border lines very narrow, not clearly distinct in the middle of anterior and posterior margins. Posterior angles rectangular, anterior angles indistinct. Lateral and anterior margins arcuate, base bisinuate.

Elytra. Dark brown, elongate, slightly oval, finely convex, lateral margins rather parallel, widest near middle elytra length, with sparse, pale setae, shiny. EL 4.62 mm; EW 2.21 mm; EL/EW 2.09. Elytral striae with distinct rows of coarse punctures approximately as large as those in pronotum, distinctly larger than those in elytral interspaces. Elytral interspaces with fine microgranulation.

Scutellum. Blackish brown, pentagonal, with small punctures, slightly shiny.

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

Legs. Pale brown, narrow, with pale setation, small, shallow punctures and microgranulation. Tarsomeres narrow, pro- and mesotarsomeres 3, 4 and penultimate metatarsomeres finely widened and lobed.

RLT: 1.00 : 0.76 : 0.62 : 0.78 : 1.76 (protarsus); 1.00 : 0.36 : 0.18 : 0.26 : 0.59 (mesotarsus); 1.00 : 0.29 : 0.20 : 0.41 (metatarsus).

Both anterior tarsal claws with 7 visible teeth.

Ventral side of body blackish brown with punctures. Prothorax and metaventrite with short, sparse, pale setae, metaventrite without distinct setation. Abdomen dark brown, slightly shiny, with long, pale setae, shallow punctures and microgranulation. Ultimate ventrite rather matte.

Aedeagus (Figs. 11, 12) small, pale brown, slightly shiny. Basal piece 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: 3.49.

# Female unknown.

**Differential diagnosis.** (See the key below for more information). A similar species is *Cistelochara habaica* sp. nov. from India (China, Yunnan Province).

The new species *Cistelochara dirangica* sp. nov. clearly differs from the similar species *C. habaica* mainly by dorsal surface of body shiny, by pronotum blackish brown with denser punctuation (interspaces between punctures on disc almost as wide or narrower than diameter of punctures) and by posterior angles of pronotum almost rectangular; while *C. habaica* has dorsal surface of body rather matte, pronotum is brown with a little sparser punctuation (interspaces between punctures on disc are almost slightly wider than diameter of punctures) and posterior angles of pronotum are slightly obtuse.

**Etymology.** Toponymic, named after the type locality Dirang vicinity in Arunachal Pradesh (India).

Distribution. India (Arunachal Pradesh).

# *Cistelochara habaica* sp. nov. (Figs. 13-17)

Type locality. China, Yunnan Province, Haba Xueshan Mountains, 1.3-2.0 km South of Haba, 27°22.1'N 100°08.2'E, 2830-3000 m.

**Type material.** Holotype ( $\mathcal{A}$ ): CHINA: Yunnan prov., 1.3-2.0 / km S of HABA, 17.-20.VI.2007 / Haba Xueshan Mts., 2830- / 3000 m. 27°22.1 N 100°08.2 E, / J. Hájek & J. Růžička leg. // individually collected on soil / surface and on plants and / shrubs, sparse mixed forest / (with dominant *Pinus*) near the brook [Ch32-35], (NMPC). The type is provided with a printed red label: 'Cistelochara / habaica sp. nov. / HOLOTYPUS / V. Novák det. 2021'.

**Description of holotype.** Habitus as in Fig. 13, body small, elongate, slightly oval, dorsal surface from ochre yellow to brown, slightly shiny, with recumbent, pale setation, fine microgranulation and punctuation, BL 6.91 mm. Widest near middle elytra length; BL/EW 3.16.

Head (Fig. 14) distinctly wider than long, through the eyes distinctly narrower than pronotum at base. Dorsal surface shiny with punctuation, microgranulation and pale setae. Posterior part brown with a few dark setae behind eyes with coarser punctures and sparser setation than those in pale brown anterior half. Clypeus pale brown, transverse, margins rounded, with microgranulation and pale setation. HW 1.16 mm; HW/PW 0.74; HL (visible part) 1.03 mm. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; wider than length of antennomere 3; OI equal to 28.66.

Antenna (Fig. 15) short (not reaching half body length, AL(1-9) 2.26 mm; AL(1-9)/BL 0.33), antennomeres 1-3 ochre yellow, slightly shiny, rest of antennomeres pale brown, rather matte. Surface of antennomeres with pale setation, microgranulation and punctuation, punctures shallow. Antennomeres 4-9 distinctly longer than antennomere 3, antennomeres 3-9 slightly widened apically, antennomere 2 shortest.

RLA(1-9): 0.77 : 0.53 : 1.00 : 1.34 : 1.36 : 1.49 : 1.49 : 1.62 : 1.49.

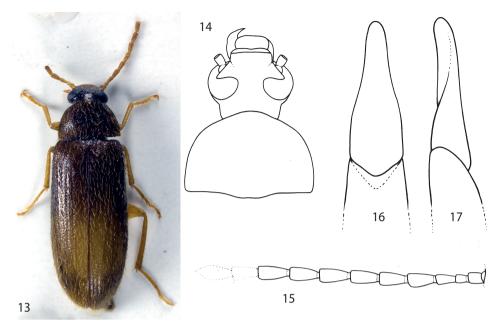
RL/WA(1-9): 1.44 : 1.39 : 2.24 : 2.25 : 2.37 : 2.69 : 2.26 : 2.38 : 2.26.

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

Pronotum (Fig. 14) brown, wide, transverse, almost semicircular, finely convex, shiny, approximately as wide as elytra at humeri, widest near base. Dorsal surface with long, recumbent, pale setation, microgranulation and relatively dense punctuation, punctures medium sized. PL 1.08 mm; PW 1.57 mm; PI equal to 68.79. Border lines very narrow, not clearly distinct in the middle of posterior margins. Posterior angles obtuse, anterior angles indistinct. Lateral margins slightly arcuate, base finely bisinuate.

Elytra. Brown, elongate, slightly oval, finely convex, lateral margins rather parallel, widest near middle elytra length, slightly shiny. EL 4.80 mm; EW 2.19 mm; EL/EW 2.19. Rows of punctures in elytral striae not clearly distinct. Dorsal surface with long and dense pale setation, fine microgranulation and relatively large punctures approximately as large as those in pronotum and sparse, small punctures.

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



Figs. 13-17: *Cistelochara habaica* sp. nov.: male holotype: 13- habitus; 14- head and pronotum; 15- antenna; 16- apical piece of aedeagus, dorsal view; 17- apical piece of aedeagus, lateral view.

Elytral epipleura well-developed, brown, with pale setae and punctures, widest near base, regularly narrowing to apex.

Legs. Ochre yellow or pale brown, narrow, with pale setation, shallow, not clearly distinct punctures and microgranulation. Tarsomeres narrow, pro- and mesotarsomeres 3, 4 and penultimate metatarsomeres finely widened and lobed.

RLT: 1.00 : 0.67: 0.60 : 0.67 : 1.78 (protarsus); 1.00 : 0.37 : 0.24 : 0.27 : 0.66 (mesotarsus); 1.00 : 0.30 : 0.18 : 0.49 (metatarsus).

Both anterior tarsal claws with 7 visible teeth.

Ventral side of body brown with punctures. Abdomen pale brown, slightly shiny, with relatively long and dense, pale setae, small, shallow punctures and fine microgranulation. Ventrites 1-3 with dark spots.

Aedeagus (Figs. 16, 17) small, ochre yellow, rather matte. Basal piece 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: 3.49.

Female unknown.

**Differential diagnosis.** (See the key below for more information). A similar species is *Cistelochara dirangica* sp. nov. from India (Arunachal Pradesh).

The new species *Cistelochara habaica* sp. nov. clearly differs from similar species *C. dirangica* mainly by dorsal surface of body rather matte, by pronotum brown with a

little sparser punctuation (interspaces between punctures on disc almost slightly wider than diameter of punctures) and by posterior angles of pronotum slightly obtuse; while *C. dirangica* has dorsal surface of body shiny, pronotum is blackish brown with denser punctuation (interspaces between punctures on disc almost as wide or narrower than diameter of punctures) and posterior angles of pronotum are almost rectangular.

**Etymology.** Toponymic, named after the first name of Haba Xueshan Mountains in Province Yunnan (China).

Distribution. China (Yunnan Province).

#### *Cistelochara maculata* sp. nov. (Figs. 18-23)

Type locality. Northeastern India, Meghalaya, 1 km East of Tura, 25°30'N, 90°14'E, 500-600 m.

**Type material.** Holotype (♂): NE INDIA, Meghalaya, 2002, / 1 km E of TURA, 500-600m, / 25°30'N, 90°14'E, 13.-18.v. / M. Trýzna et P. Benda lgt., (VNPC). Paratype: (1 ♂): Nepal S-Ganesh Himal village / near Kali Sundba'a Bazar 700 / m 24./26.V.1998 lg. Ahrens, / Kulbe, Rulik, (MTDG). The types are provided with a printed red label: 'Cistelochara / maculata sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2021'.

**Description of holotype.** Habitus as in Fig. 18, body small, elongate, slightly oval, finely convex, dorsal surface from ochre yellow to blackish brown, slightly shiny, with pale, recumbent setation, fine microgranulation and punctuation, BL 5.31 mm. Widest near middle elytra length; BL/EW 2.87.

Head (Fig. 20) distinctly wider than long, through the eyes approximately as wide as anterior margin of pronotum, distinctly narrower than pronotum at base. Dorsal surface slightly shiny with punctuation. Posterior part blackish brown with a few pale setae, anterior half with distinct microgranulation, paler and with denser setation than in posterior part. Clypeus pale brown with microgranulation, pale setation and small shallow punctures, rounded apically. HW 1.02 mm; HW/PW 0.70; HL (visible part) 0.78 mm. Eyes large, transverse, strongly excised, space between eyes very narrow, distinctly narrower than diameter of one eye; slightly wider than length of antennomere 2 and narrower than length of antennomere 3; OI equal to 14.89.

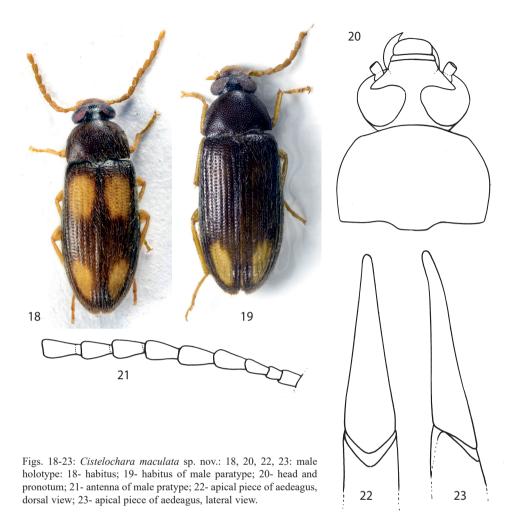
Antenna (Fig. 21) short (not reaching half body length, AL 2.08 mm; AL/BL 0.39), antennomeres pale brown, strong, with pale setation, microgranulation and punctuation, rather matte. Antennomeres 4-11 distinctly longer than antennomere 3, antennomeres 4-10 slightly widened apically, antennomere 2 shortest, ultimate antennomere longest.

RLA(1-11): 0.96 : 0.58 : 1.00 : 1.51 : 1.56 : 1.46 : 1.63 : 1.61 : 1.69 : 1.71 : 2.01.

RL/WA(1-11): 1.54 : 0.96 : 1.61 : 1.60 : 1.67 : 1.60 : 1.84 : 1.81 : 2.07 : 1.97 : 2.59.

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

Pronotum (Fig. 20) brown, wide, transverse, finely convex, slightly shiny, approximately as wide as elytra at humeri, widest near middle of lateral margins. Dorsal surface with long,



relatively dense, semierect, pale setation, microgranulation and dense punctuation, punctures small. Intervals between punctures wider than diameter of punctures. PL 0.99 mm; PW 1.45 mm; PI equal to 68.28. Border lines very narrow, not clearly distinct in the middle of anterior and posterior margins. Posterior and anterior angles obtuse. Lateral and anterior margins arcuate, base bisinuate.

Elytra. Brown with four large ochre yellow spots (each elytron with two spots as in Fig. 18), elongate, slightly oval, finely convex, lateral margins rather parallel, widest near middle elytra length, slightly shiny. EL 3.54 mm; EW 1.85 mm; EL/EW 1.91. Elytral striae with distinct rows of punctures distinctly larger than those in elytral interspaces and in pronotum. Elytral interspaces with fine microgranulation, sparse, small punctures and long, recumbent, pale setation.

Scutellum. Brown, triangular, with coarse punctures, microgranulation and a few pale setae, slightly shiny.

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

Legs. Ochre yellow, narrow, with pale setation and microgranulation. Tarsomeres narrow, pro- and mesotarsomeres 3, 4 and penultimate metatarsomeres widened and lobed.

RLT: 1.00 : 0.71 : 0.78 : 0.76 : 1.79 (protarsus); 1.00 : 0.38 : 0.23 : 0.47 (metatarsus).

Both anterior tarsal claws with 7 visible teeth.

Ventral side of body dark brown with punctures and pale setae. Abdomen shiny, with pale setae, dense, shallow punctures and fine microgranulation. Ultimate and penultimate ventrites slightly paler than ventrites 1-3.

Aedeagus (Figs. 22, 23) ochre yellow, slightly shiny. Basal piece rounded laterally and narrowing in dorsal view. Apical piece elongate triangular in dorsal view, beak-shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1: 2.52.

Female unknown.

**Variability.** Male paratype from Nepal has only apical spots (Fig. 19). The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n=2). BL 5.49 mm (5.31-5.67 mm); HL 0.80 mm (0.78-0.81 mm); HW 1.04 mm (1.02-1.06 mm); OI 16.01 (14.89-17.13); PL 1.00 mm (0.99-1.01 mm); PW 1.51 mm (1.45-1.57 mm); PI 66.31 (64.33-68.28); EL 3.70 mm (3.54-3.85 mm); EW 1.92 mm (1.85-1.99 mm).

**Differential diagnosis.** (See the key below for more information). The new species *Cistelochara maculata* sp. nov. clearly differs from all other similar species of the genus *Cistelochara* gen. nov. mainly by bicolor elytra (dark with ochre yellow spots); while all other similar species of the genus *Cistelochara* gen. nov. have unicolored dark elytra.

Etymology. Named after its main distinguishing character - elytra with ochre yellow spots.

Distribution. India (Meghalaya), Nepal.

# KEY TO THE SPECIES OF THE GENUS CISTELOCHARA

1(2)	Elytra unicolored
	Elytra with ochre yellow spots. Habitus as in Figs. 18 and 19, head and pronotum (Fig. 20), antenna (Fig. 21),
	aedeagus (Figs. 22 and 23). India, Nepal Cistelochara maculata sp. nov.
3(4)	Space between eyes very narrow (OI 10), distinctly narrower than length of antennomere 3, punctures of
	pronotum and elytra large, rows of punctures in elytral striae not clearly distinct. Habitus as in Fig. 1, body
	outline (Fig. 2), head and pronotum (Fig. 3), antenna (Fig. 4), aedeagus (Figs. 5 and 6). China, Laos, Malaysia,
	Myanmar, Nepal, Thailand Cistelochara aspera sp. nov.

- 4(3) Space between eyes wider (OI 28-29), distinctly wider than length of antennomere 3, punctures of pronotum and elytra smaller, rows of punctures in elytral striae distinct, punctures in elytral intervals smaller than those in striae.

ACKNOWLEDGEMENTS. Sincere thanks are due to Michel Brancucci (†) and Michael Geiser (earlier in NMBS), Jiří Hájek (NMPC), Olaf Jäger (MTDG) and Wolfgang Schawaller (SMNS) for loaning me a new material under their care and to Volker Gollkowski (Oelsnitz, Germany), Kimio Masumoto (KMTJ) and Petr Viktora (Kutná Hora, Czech Republic) for bringing me a new material. Special thanks are due to Zuzana Čadová (Liberec, Czech Republic) for excellent drawings.

#### REFERENCES

- CAMPBELL J. M. 1965: A revision of the genus Charisius (Coleoptera: Alleculidae). *The Coleopterist's Bulletin* 19: 43-56.
- CAMPBELL J. M. & MARSHALL J. D. 1964: The ocular index and its applications to the taxonomy of the Alleculidae (Coleoptera). *The Coleopterist's Bulletin* 18: 42.
- GUÉRIN-MÉNEVILLE F. E. 1827. Mycétochare. Mycetochara [p. 346]. In: Dictionnaire classique d'histoire naturelle, par Messieurs Audouin, Isid. Bordon, Ad. Brongniart, De Candolle, Dandebard de Férussac, A. Desmoulins, Drapiez, Edwards, Flourens, Geoffroy de Saint-Hilaire, A. De Jussieu, Kunth, G. de Lafosse, Lamouroux, Latreille, Lucas fils, Presle-Duplessis, C. Prévost, A. Richard, Thiébaut de Berneaud, et Bory de Saint-Vincent. Ouvrage dirigé par ce dernier collaborateur; et dans lequel on a ajouté, pour le porter au niveau de la science, un grand nombre de mots qui n'avaient pu faire partie de la plupart des dictionnaires antérieurs. Tome onzième. MO– NSO (J. B. G. Bory de Saint-Vincent, editor). Ray et Gravier [&] Baudouin Frères, Paris, France.
- Novák V. 2015: New genera of Alleulinae (Coleoptera: Tenebrionidae: Alleculinae) from Palaearctic and Oriental Regions. Part V - Mycetocula gen. nov. Folia Heyrovskyana, Series A 23(1): 77-89.

Received: 23.4.2021 Accepted: 30.5.2021 Printed: 5.10.2021