A Review of *Cistelomorpha* L. Redtenbacher, 1868 species with bicolour dorsal surface (Coleoptera: Tenebrionidae: Alleculinae: Cteniopodini) with a new species from Nepal and Oriental Region

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Taxonomy, new species, description, new synonymy, Coleoptera, Tenebrionidae, Alleculinae, Cteniopodini, *Cistelomorpha*, Palaearctic and Oriental Regions

Abstract. Twelve new species of the genus *Cistelomorpha* L. Redtenbacher 1868 are described as follows: *Cistelomorpha adonis* sp. nov. from Cambodia, *Cistelomorpha agrymonia* sp. nov. from Cambodia and Thailand, *Cistelomorpha anemone* sp. nov. from Cambodia, Laos and Thailand, *Cistelomorpha borchmanni* sp. nov. from Laos and Vietnam, *Cistelomorpha gagea* sp. nov. from Laos, *Cistelomorpha nuphar* sp. nov. from Thailand, *Cistelomorpha primula* sp. nov. from Cambodia, Thailand and Vietnam, *Cistelomorpha pulsatilla* sp. nov. from Cambodia, *Cistelomorpha ranunculus* sp. nov. from Thailand, *Cistelomorpha tussilago* sp. nov. from Laos, *Cistelomorpha verbascum* sp. nov. from Nepal and *Cistelomorpha viola* sp. nov. from Malaysia. New synonymy is proposed: *Cistelomorpha nigrosparsa* Fairmaire, 1899 (= *Cistelomorpha nigrosparsa separata* Pic, 1908 syn. nov.). Species *Cteniopinus binotatus* Pic, 1908 is transferred to the genus *Cistelomorpha* as *Cistelomorpha binotata* (Pic, 1908) comb. nov. Names *Cistelomorpha quadriplagiata* Borchmann and *Cistelomorpha signata* Borchmann are treated as unpublished names. Five new groups are proposed as follows: *Cistelomorpha atriceps* species group, *Cistelomorpha atricollis* species group, *Cistelomorpha nigrolineata* species group, *Cistelomorpha nigrosparsa* species group and *Cistelomorpha martini* species group. New distributional data for the species *Cistelomorpha nigrosparsa* Fairmaire, 1899 is added (China: Gansu, Quinghai, Sichuan, Xizang).

INTRODUCTION

The genus *Cistelomorpha* L. Redtenbacher 1868 was introduced by L. Redtenbacher (1868) for *Cistelomorpha straminea* L. Redtenbacher 1868 as a type species. Species of this genus are distributed in Palaearctic and Oriental Regions. Borchmann (1910) listed 27 species in both regions, Mader (1928) presented 19 species and Novák & Pettersson (2008) listed 32 species from the Palaearctic Region. More than 60 species were described from Oriental Region by Allard (1894), Borchmann (1913, 1925, 1929, 1932a, b, 1934, 1937, 1938 and 1947), Fairmaire (1893 and 1894), Pic (1907, 1908, 1912, 1913a, b, 1915a, b, 1920 and 1924a, b) and by L. Redtenbacher (1868).

Dorsal surface of the species is almost unicolored yellow, ochre yellow, pale brown or orange. Some species have dorsal surface red or with reddish lustre or bicolour. Twelve new species with dorsal surface bicolour (yellow and black) are described as follows: *Cistelomorpha adonis* sp. nov. from Cambodia, *Cistelomorpha agrymonia* sp. nov. from Cambodia and Thailand, *Cistelomorpha anemone* sp. nov. from Cambodia, Laos and Thailand, *Cistelomorpha borchmanni* sp. nov. from Laos and Vietnam, *Cistelomorpha gagea* sp. nov. from Laos, *Cistelomorpha nuphar* sp. nov. from Thailand, *Cistelomorpha primula* sp. nov. from Cambodia, Thailand and Vietnam, *Cistelomorpha pulsatilla* sp. nov. from Cambodia, *Cistelomorpha ranunculus* sp. nov. from Thailand, *Cistelomorpha tussilago* sp. nov. from Laos, *Cistelomorpha verbascum* sp. nov. from Nepal and *Cistelomorpha viola* sp. nov. from Malaysia. All new species are described, illustrated and compared with similar species. New synonymy is proposed: *Cistelomorpha nigrosparsa* Fairmaire, 1899 (=*Cistelomorpha nigrosparsa separata* Pic, 1908

syn. nov.). Species *Cteniopinus binotatus* Pic, 1908 distinctly belongs to the genus *Cistelomorpha* L. Redtenbacher and is transfered as *Cistelomorpha binotata* (Pic, 1908) comb. nov.

Names *Cistelomorpha quadriplagiata* Borchmann and *Cistelomorpha signata* Borchmann are treated as unpublished names. *Cistelomorpha signata* Borchmann is the same species as *Cistelomorpha martini* Pic, 1912.

Five new groups are proposed. Head black and dorsal surface of elytra yellow with black spots have the species of *Cistelomorpha atriceps* species group (*C. atriceps* Pic, 1915, *C. adonis* sp. nov., *C. borchmanni* sp. nov. and *C. gagea* sp. nov.). Head and pronotum black and elytron yellow have the species of *Cistelomorpha atricollis* species group (*C. atricollis* Pic, 1924, *C. basalis* Borchmann, 1934, *C. inusitatis* Borchmann, 1934 and *C. nuphar* sp. nov.). Dorsal surface yellow, elytron with black longitudinal strips have the species of *Cistelomorpha nigrolineata* species group (*C. bruneolineata* Pic, 1924, *C. nigrolineata* Allard, 1894 and *C. semilineata* Pic, 1912). Dorsal surface yellow, elytron with many small black spots has a member of *Cistelomorpha nigrosparsa* species group (*C. nigrosparsa* Fairmaire, 1899). Dorsal surface yellow, elytron with one or two black spots have the species of *Cistelomorpha martini* species group (*C. agrymonia* sp. nov., *C. anemone* sp. nov., *C. bina* Fairmaire, 1899, *C. binotata* (Pic, 1908), *C. bisbimaculata* Pic, 1913, *C. bisbinotata* Pic, 1909, *C. bisbinotata subobliterata* Pic, 1909, *C. calida* Allard, 1894, *C. calida nigromaculata* Allard, 1894, *C. calida nigropicta* Allard, 1894, *Cistelomorpha celebensis* Pic, 1912, *C. humeralis* Allard, 1894, *C. humeralis bimaculata* Pic, 1907, *C. martini* Pic, 1912, *C. primula* sp. nov., *C. pulsatilla* sp. nov., *C. quadrinotata* Borchmann, 1934, *C. renardii* Fairmaire, 1894, *C. ranunculus* sp. nov., *C. semirubra* Pic, 1915, *C. trabeata* Fairmaire, 1894, *C. tussilago* sp. nov., *C. verbascum* sp. nov. and *C. viola* sp. nov.

Aedeagus from dorsal and lateral view are shown the first time for the species *Cistelomorpha bina* Fairmaire, 1899, *Cistelomorpha nigrosparsa* Fairmaire, 1899 and *Cistelomorpha inusitatis* Borchmann, 1934 (only from lateral view).

New distributional data for the species *Cistelomorpha nigrosparsa* Fairmaire, 1899 is added (China: Gansu, Quinghai, Sichuan, Xizang).

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 material, a slash (/) separates data in separate rows, a double slash (//) separates different labels, author´s comments is in brackets {}.

The following collection code is used:

IRSCN	Institut Royal des Sciences Naturalles de Belgique, Bruxelles, Belgium;
KMTJ	private collection of Kimio Masumoto, Tokio, Japan;
MNHN	Muséum National d´Histoire naturelle, Paris, France;
NMEG	Naturkundemuseum, Erfurt, Germany;
MNFI	Museo di Storia Naturale, Firenze, Italy;
NMPC	National Museum, Praha, Czech Republic;
OKZC	private collection of Ondřej Konvička, Zlín, Czech Republic;

VNPC private collection of Vladimír Novák, Praha, Czech Republic;
ZMUH collection of Zoologisches Museum und Universität, Hamburg, Germany.

Measurements of body parts and corresponding abbreviations used in text are as follows: AL - total antennae length, BL - maximum body length, EL - maximum elytral length, EW - maximum elytral width, HL - maximum length of head (visible part), HW - maximum width of head, OI - ocular index dorsally, PI - pronotal index dorsally, PL - maximum pronotal length, PW - pronotal width at base, RLA - ratios of relative lengths of antennomeres 1-11 from base to apex (3=1.00), RL/WA - ratios of length / maximum width of antennomeres 1-11 from base to apex, RLT - ratios of relative lengths of tarsomeres 1-5 respectively 1-4 from base to apex (1=1.00).

Other abbreviations: bf= black frame; bl= beige label; hb= handwritten black; pb= printed black; pbl= pale beige label; pgl= pale grey label; pl= pink label; pyl= pale yellow label; rl= red label; wl= white label; wyl= whitish yellow 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

DESIGNATION OF GROUPS

1 *Cistelomorpha atriceps* group

Designation. Species with dorsal surface black and yellow. Head black, sometimes with yellow spot. Pronotum yellow, elytron yellow with black spots.

2 *Cistelomorpha atricollis* group

Designation. Species with black head and pronotum.

3 *Cistelomorpha nigrolineata* group

Designation. Species with yellow dorsal surface and elytron black longitudinally striped.

4 *Cistelomorpha nigrosparsa* group

Designation. Species with yellow dorsal surface and elytron with many black spots.

5 *Cistelomorpha martini* group

Designation. Species with yellow dorsal surface and elytron with one or two black spots.

KEY TO THE GROUPS

A (B) Species with black head. C
B (A) Species with head distinctly paler (from yellow to pale brown). ..... E
C (D) Species with only head black. ..... *Cistelomorpha atriceps* group
D (C) Species with head and pronotum black. ..... *Cistelomorpha atricollis* group
E (F) Species with black elytral interspaces. ..... *Cistelomorpha nigrolineata* group
F (E) Species with black spots on dorsal surface of elytron. ..... G
G (H) Species with many black spots. ..... *Cistelomorpha nigrosparsa* group
H (G) Species with 2 or 4 black spots on dorsal surface of elytra. ..... *Cistelomorpha martini* group

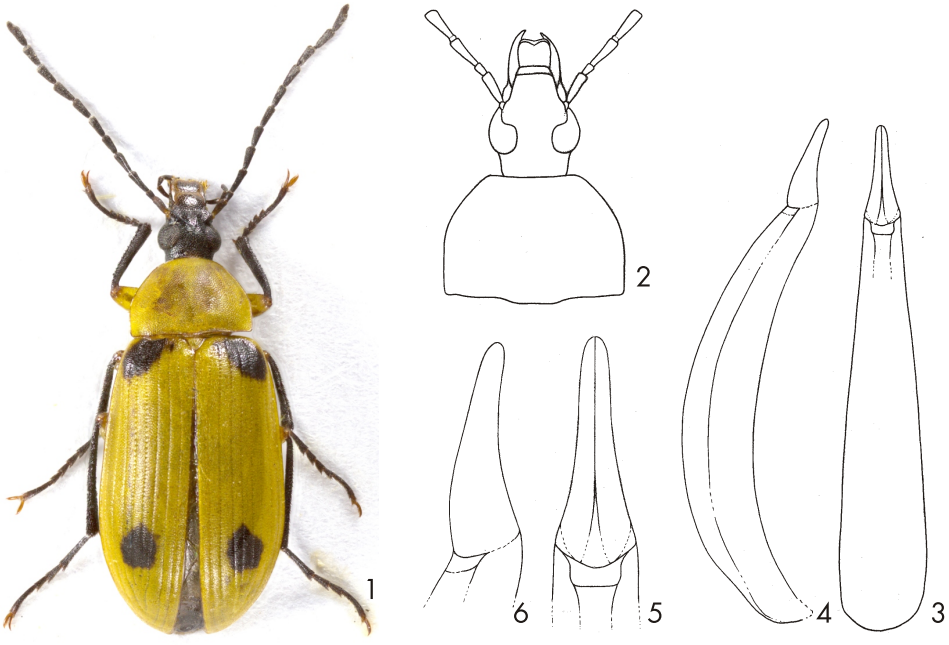
1 *Cistelomorpha atriceps* group

KEY TO THE SPECIES OF *CISTELOMORPHA ATRICEPS* GROUP

1 (2) Base of elytra black. Habitus as in Fig. 7. Southern Vietnam. ..... *Cistelomorpha atriceps* Pic, 1915
2 (1) Base of elytra at least narrowly yellow. 3
3 (4) Dorsal surface of elytra yellow with four large, oval, black spots. Habitus as in Fig. 9, 15; head and pronotum of male holotype (Fig. 10); aedeagus (Figs. 11-14). Laos, Vietnam. ..... *Cistelomorpha borchmanni* sp. nov.
4 (3) Dorsal surface of elytra with four smaller spots. 5
5 (6) Head behind eyes with small yellow spot, anterior tarsal claws of male with 30 teeth. Habitus as in Fig. 17; head and pronotum (Fig. 18); aedeagus (Figs. 19-22). Laos. .. *Cistelomorpha gagea* sp. nov.
6 (5) Head behind eyes black, male anterior tarsal claws with 20 teeth. Habitus as in Fig. 1; head and pronotum (Fig. 2); aedeagus (Figs. 3-6). Cambodia. ..... *Cistelomorpha adonis* sp. nov.

Cistelomorpha adonis sp. nov.

(Figs. 1-6)



(Figs. 1-6). *Cistelomorpha adonis* sp. nov.: 1- Habitus of male holoype; 2- head and pronotum of male holotype; 3- aedeagus, dorsal view; 4- aedeagus, lateral view; 5- aedeagus (apical piece), dorsal view; 6- aedeagus (apical piece), lateral view.

Type locality. Cambodia, Kirirom National Preserve, pine forest.

Type material. Holotype (♂): yl: Coll. I.R.Sc.N.B. / CAMBODIA / Kirirom N.P. / Light Trap Pine Forest / 21 IV 2005 / Leg. Smets&I. Var, (IRSCN). Paratypes: (2 ♂♂ 2 ♀♀): same data as holotype, (IRSCN, VNPC); (3 ♀♀): yl: Coll. I.R.Sc.N.B. / CAMBODIA: Pursat prov. / Phnom Samkos W.S. / Temple Hill, 18-IV-2005 / Grassland,bamboo forest / Light trap,Leg. K.Smets I. Var, (IRSCN, VNPC). The types are provided with one printed red label: Cistelomorpha / adonis sp. nov. / HOLOTYPUS [resp. PARATYPUS] / V. Novák det. 2018.

Description of holotype. Habitus as in Fig. 1, body relatively small, elongate oval, convex, from yellow to black, dorsal surface with very short setation, punctuation and microgranulation, rather matte. BL 8.27 mm. Widest near two thirds elytra length; BL/EW 2.69.

Head (Fig. 2) relatively narrow and long, distinctly longer than wide, approximately as wide as anterior margin of pronotum, dorsal surface glabrous. Posterior part black, slightly darker than blackish brown anterior part and clypeus, with coarser medium sized punctures. Anterior part with sparser and shallower punctures, punctuation of clypeus not clearly distinct, surface of anterior part and clypeus with very fine microrugosities. Clypeus with a few long, dark and pale setae, distinctly excised in middle of apex. Mandibles glabrous, pale brown, shiny, with sides darker. HL (visible part) 1.62 mm; HW 1.12 mm; HW/PW 0.54. Eyes very large, transverse, excised, space between eyes relatively narrow; slightly wider than diameter of one eye, approximately as wide as length of antennomere 1; OI equal to 38.66.

Antennae. Relatively long, slightly exceeding half body length, black, with punctuation, short, pale setation and microgranulation, rather matte. AL 4.37 mm; AL/BL 0.53. Antennomere 1 slightly paler, in base pale brown. Antennomeres 4-10 slightly serrate, distinctly widest in apex. Antennomere 2 shortest, antennomere 11 longest. Each of antennomeres 4-10 shorter than antennomere 3 long.

RLA: 0.80 : 0.36 : 1.00 : 0.91 : 0.81 : 0.91 : 0.92 : 0.96 : 0.95 : 0.96 : 1.18.

RL/WA: 3.44 : 2.00 : 3.55 : 2.96 : 2.63 : 2.73 : 2.77 : 2.68 : 2.74 : 2.89 : 3.41.

Maxillary palpus. Blackish brown, with short, pale setation, fine microgranulation, slightly shiny. Palpomeres 2-4 distinctly narrowest at base and widest at apex. Ultimate palpomere longly club-shaped.

Pronotum (Fig. 2). Slightly transverse, widest near half of lateral margins, glabrous, with dense punctuation, punctures small-sized. Interspaces between punctures very narrow, narrower than diameter of punctures. PL 1.38 mm; PW 2.09 mm; PI equal to 66.03. Border lines complete, only in the middle of anterior margin not clearly distinct, lateral margins straight and parallel in basal half, very slightly arcuate in apical half. Base finely bisinuate, approximately as wide as elytra at base. Anterior margin straight. Posterior angles rectangular, anterior angles obtuse.

Ventral side of body black, prothorax yellow with dense punctuation, punctures small. Abdomen black with very small punctures, very fine microgranulation and pale setation, shiny.

Elytron. Relatively short and wide, slightly oval, convex, yellow, with two small, black spots, one in humeral part reaching base of elytron (as in Fig. 1). Rows of very small punctures in elytral striae clearly distinct, elytral intervals with very short, dark and pale setae, microgranulation and sparse, very small, shallow punctures. EL 5.27 mm; EW 3.07 mm; EL/EW 1.72.

Scutellum. Small, triangular, yellow, slightly shiny, with punctures.

Elytral epipleura. Well developed, yellow, with short, pale setae, widest near base, regularly narrowing to ventrite 1, then relatively wide leads parallel.

Legs. Femora ochre yellow with short, dark setation, shiny. Tibia and tarsi black, with pale and dark setation, microgranulation and punctuation. Tibia with strong setae in inner side and coarser punctuation than those in tarsi. Claws reddish brown. RLT: 1.00 : 0.50 : 0.59: 0.55 : 2.48 (protarsus); 1.00 : 0.61 : 0.57 : 0.45 : 1.45 (mesotarsus); 1.00 : 0.39 : 0.32 : 0.86 (metatarsus).

Anterior tarsal claws long with 20 visible teeth.

Aedeagus (Figs. 3-6). Ochre yellow and partly pale brown. Basal piece rounded laterally and narrowing dorsally. Apical piece elongate, narrowly triangular dorsally, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece 1: 4.04.

Female. Without distinct differences, anterior tarsal claws with 10 teeth.

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Specimens (n=8). BL 9.50 mm (8.27-10.15 mm); HL 1.78 mm (1.55-1.89 mm); HW 1.27 mm (1.12-1.40 mm); OI 36.16 (33.04-38.66); PL 1.58 mm (1.38-1.74 mm); PW 2.50 mm (2.09-2.73 mm); PI 63.34 (58.97-66.03); EL 6.19 mm (5.27-6.65 mm); EW 3.64 mm (3.07-3.94 mm).

Differential diagnosis. New species *Cistelomorpha adonis* sp. nov. distinctly differs from similar species *Cistelomorpha atriceps* Pic, 1915 mainly by dorsal surface of elytra with four small, rounded, black spots and base of elytron distinctly yellow (Fig. 1); while *C. atriceps* has dorsal surface of elytra with four large, black, not rounded spots and base of elytra is black (Fig. 7).
C. adonis is clearly different from similar species *Cistelomorpha borchmanni* sp. nov. mainly by dorsal surface of elytra with four small, rounded, black spots and by black head behind eyes (as in Fig. 1); while *C. borchmanni* has dorsal surface of elytra with black, large, rounded spots and small yellow spot in head behind eyes (as in Fig. 9).
C. adonis distinctly differs from similar species *Cistelomorpha gagea* sp. nov. mainly by black head behind eyes (as in Fig. 1), by shape of pronotum (Fig. 2), shape of aedeagus, longer apical piece of aedeagus (Figs. 3-6) and anterior tarsal claws of male with 20 teeth; while *C. gagea* has small yellow spot in head behind eyes (as in Fig. 17), shorter apical piece of aedeagus and 30 teeth has male on anterior tarsal claws.

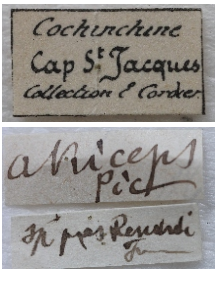
Etymology. The name of the species, a noun in aposition, is the Latin generic name of the flower *Adonis vernalis* (L.).

Distribution. Cambodia.

Cistelomorpha atriceps Pic, 1915
(Figs. 7, 8)

Cistelomorpha atriceps Pic, 1915: 20.

7



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Figs. 7, 8. *Cistelomorpha atriceps* Pic, 1915 (Type): 7- Habitus; 8- labels.

Type locality. Southern Vietnam, Vung Tau, Cap Saint Jacques.

Type material. (1 spec.): wl with bf: Cochinchine / Cap St Jacques / Collection ... [hb] // wl: atriceps / Pic [hb] // wl: sp pres Renardi / Frm [hb], (MNHN).

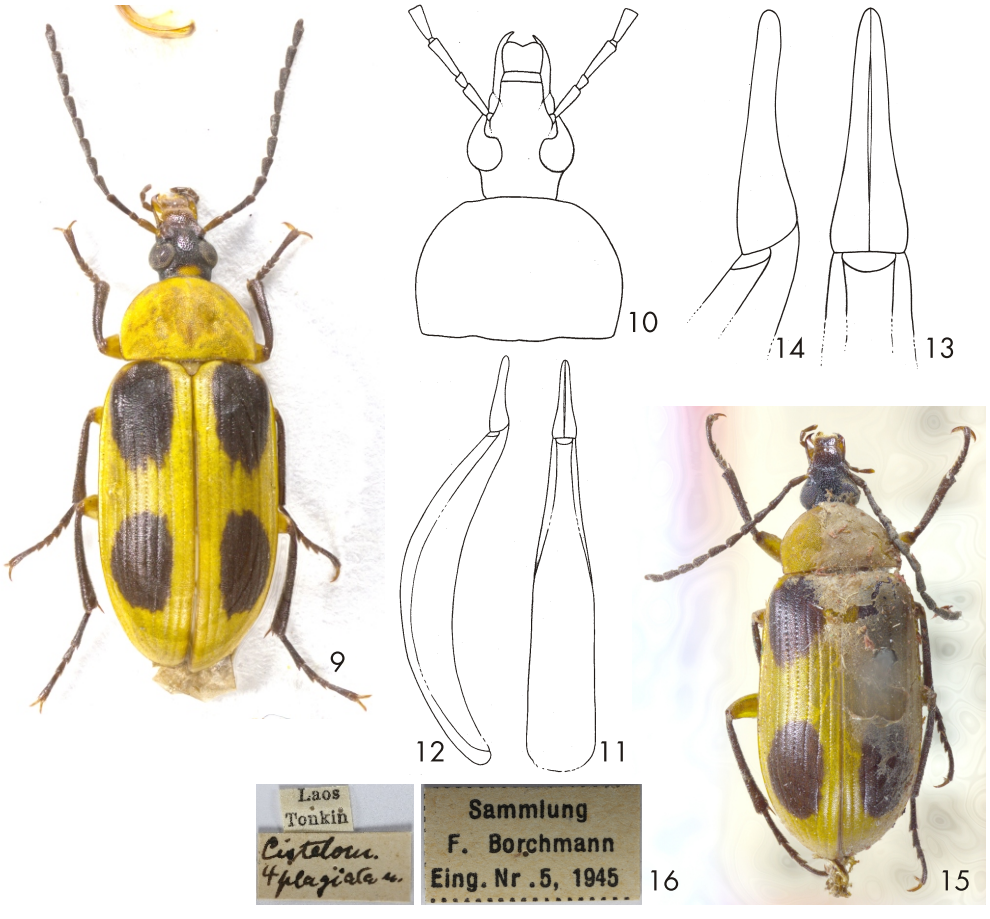
Remarks. The habitus of the type specimen as in Fig. 7, head black, base of elytra (shoulders black), elytra with black spots. Labels as in Fig. 8.

Distribution. Vietnam.

Cistelomorpha borchmanni sp. nov.

(Figs. 9-16)

Cistelomorpha quadriplagiata Borchmann **unpublished name**



Figs. 9-16. *Cistelomorpha borchmanni* sp. nov.: 9- Habitus of male holotype; 10- head and pronotum of male holotype; 11- aedeagus, dorsal view; 12- aedeagus, lateral view; 13- aedeagus (apical piece), dorsal view; 14- aedeagus (apical piece), lateral view; 15- habitus of *Cistelomorpha quadriplagiata* unpublished name; 16- labels of *C. quadriplagiata*.

Type locality. Vietnam, province Dak Lak, Buon Ha Thod.

Type material. Holotype (♂): wl [hb]: VIETNAM v. 84 / Buon Ha Thod / Prov. Dak - Lak, (VNPC). Paratypes: (2 ♀♀): wl [hb]: same data as holotype, (VNPC); (1 ♀): wl [pb]: Laos / Tonkin // wl [hb]: Cistelom. / 4plagiata n. / wl [pb]: Sammlung / F. Borchmann / Eing. Nr .5, 1945, (ZMUH). The types are provided with one printed red label: Cistelomorpha / borchmanni sp. nov. / HOLOTYPUS [resp. PARATYPUS] / V. Novák det. 2018.

Description of holotype. Habitus as in Fig. 9, body smaller, elongate oval, convex, from yellow to black, dorsal surface setose, with punctuation, microrugosities and microgranulation, rather matte. BL 9.08 mm. Widest near half elytra length; BL/EW 2.76.

Head (Fig. 10) long and narrow, approximately as wide as anterior margin of pronotum, dorsal surface with sparse and short, pale setae. Posterior part black or blackish brown, with yellow oval spot in the middle of base, coarse and dense medium sized punctures, distinctly darker than paler (brown or pale brown) anterior part with sparser and shallower punctures in apex. Clypeus pale brown with fine microgranulation and long pale setae distinctly excised in middle of apex. Mandibles glabrous, ochre yellow with darker sides and apex. HL (visible part) 1.85 mm; HW 1.27 mm; HW/PW 0.53. Eyes large, transverse, distinctly excised, space between eyes narrow; approximately as wide as diameter of one eye or as wide as length of antennomere 1; OI equal to 32.75.

Antennae. Relatively long, reaching half body length, black, with punctuation and microgranulation and short, pale setation. AL 4.58 mm; AL/BL 0.50. Pale brown antennomere 1 and reddish brown antennomere 2 slightly shiny. Antennomeres 3-11 matte, antennomeres 4-10 slightly serrate. Antennomere 2 shortest, each of antennomeres 4-10 distinctly shorter than antennomere 3, antennomere 11 longest.

RLA: 0.81 : 0.38 : 1.00 : 0.78 : 0.74 : 0.78 : 0.82 : 0.91 : 0.84 : 0.82 : 1.07.

RL/WA: 3.48 : 2.13 : 4.29 : 3.18 : 2.48 : 2.80 : 2.96 : 3.57 : 3.04 : 3.22 : 4.00.

Maxillary palpus. Dark reddish brown, with pale setation, fine microgranulation and sparse punctures, slightly shiny. Palpomeres 2, 3 distinctly narrowest at base and widest at apex, with a long pale setae. Ultimate palpomere longest, slightly club-shaped, widest near apex.

Pronotum (Fig. 10) from yellow to ochre yellow, transverse, wide, slightly longer than semicircular, widest near half of lateral margins, with dense, shallow, medium sized punctures, setation indistinct. Interspaces between punctures very narrow, narrower than diameter of punctures. PL 1.48 mm; PW 2.38 mm; PI equal to 62.19. Border lines complete, lateral margins slightly arcuate and distinctly darker than surface of pronotum, base very finely bisinuate, approximately as wide as base of elytra. Anterior margin straight. Posterior angles roundly obtuse, anterior angles indistinct, roundly obtuse.

Ventral side of body blackish brown, with short pale setation. Prothorax black in middle, yellow in sides. Abdomen slightly shiny, ventrites 1 and 2 brown with longitudinal rugosities, pale setation and dense punctuation, punctures small. Ventrite 3 blackish brown with dense punctuation and rugosities. Penultimate and ultimate ventrites black with very fine microgranulation and sparser punctuation.

Elytron elongate oval, convex, yellow with two large oval black spots each (as in Fig. 9), dorsal surface with short pale setation. Rows of very small punctures in elytral striae clearly distinct, elytral intervals with microgranulation, microrugosities and sparse, very small, shallow punctures. EL 5.75 mm; EW 3.29 mm; EL/EW 1.75.

Scutellum. Roundly triangular, yellow with sides darker, slightly shiny, with fine microgranulation, shallow punctures and pale setae.

Elytral epipleura. Well developed, yellow, wide, with short, pale setae and very small

punctures, widest near base, regularly narrowing to ventrite 1, then relatively wide leads parallel.

Legs. Femora ochre yellow with short, dark setation. Tibia and tarsi with microgranulation, pale and dark setation and punctuation. Protibia and tarsi blackish brown, meso- and metatibia black. Tibia with strong setae in inner side and coarser punctuation than those in tarsi. Claws reddish brown. RLT: 1.00 : 0.48 : 0.46 : 0.38 : 1.21 (mesotarsus); 1.00 : 0.46 : 0.37 : 0.78 (metatarsus).

Anterior tarsal claws long with approximately 30 visible teeth.

Aedeagus (Figs. 11-14). Partly ochre yellow and partly pale brown. Basal piece rounded laterally and narrowing dorsally. Apical piece short, narrowly triangular dorsally, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece 1: 4.29.

Female. Slightly wider than male, anterior tarsal claws with 10 teeth.

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Specimens (n=4). BL 9.43 mm (9.08-9.70 mm); HL 1.74 mm (1.67-1.85 mm); HW 1.30 mm (1.27-1.33 mm); OI 38.57 (36.32-40.00); PL 1.57 mm (1.48-1.69 mm); PW 2.56 mm (2.38-2.70 mm); PI 61.51 (58.69-66.28); EL 6.13 mm (5.75-6.43 mm); EW 3.57 mm (3.29-3.77 mm).

Differential diagnosis. The new species *Cistelomorpha borchmanni* sp. nov. distinctly differs from a similar species *Cistelomorpha atriceps* Pic, 1915 mainly by dorsal surface of elytra with four large, rounded, black spots and base of elytron distinctly yellow (Fig. 9); while *C. atriceps* has dorsal surface of elytra with four large, black, not rounded spots and base of elytra is black (Fig. 7).

C. borchmanni distinctly differs from a similar species *Cistelomorpha adonis* sp. nov. mainly by large yellow spot in head behind eyes as in Fig. 9, by shape of pronotum (Fig. 10), by shape of aedeagus (Figs. 11-14) and anterior tarsal claws of male with 30 teeth; while *C. adonis* has black head behind eyes as in Fig. 1, shape of pronotum as in Fig. 2, shape of aedeagus (Figs. 3-6) and male has 20 teeth on anterior tarsal claws.

C. borchmanni is clearly different from a similar species *Cistelomorpha gagea* sp. nov. mainly by dorsal surface of elytra with four large, rounded, black spots as in Fig. 9, by shape of pronotum (Fig. 10) and by shape of aedeagus and longer apical piece of aedeagus (Figs. 11-14); while *C. borchmanni* has dorsal surface of elytra with black, small, rounded spots as in Fig. 17, shape of pronotum (Fig. 18) and by longer apical piece of aedeagus.

Etymology. The new species is dedicated to Fritz Borchmann, a well - known expert in Alleculinae, Lagriinae and Meloidae.

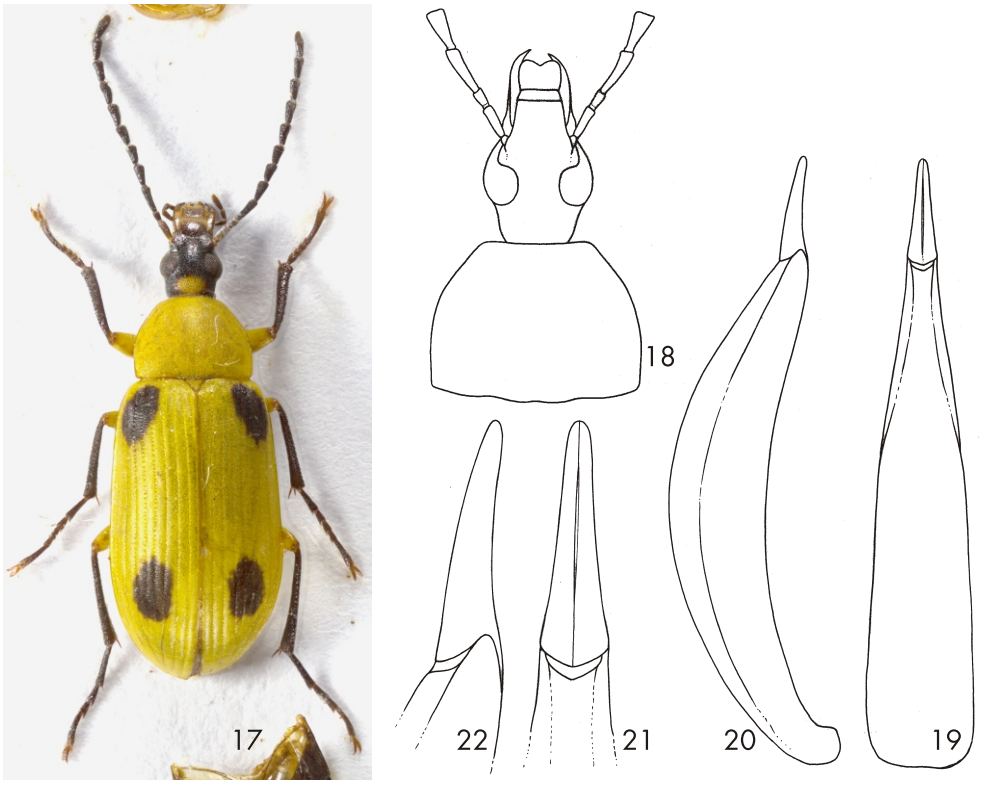
Distribution. Laos, Vietnam.

***Cistelomorpha gagea* sp. nov.**

(Figs. 17-22)

Type locality. Laos centralis, Khammouan province, environs of Nakai, 17°43 N; 105°09 E; 500-600 m.

Type material. Holotype (♂): wl: LAOS centr., Khammouan / NAKAI env., 22.v.-8.vi.2001 / 17°43 N; 105°09 E; 500-600 m / E. Jendek & O. Šauša leg., (VNPC). Paratypes: (1 ♂, 2 ♀♀): wl: same data as holotype, (VNPC). The types are provided with one printed red label: Cistelomorpha / gagea sp. nov. / HOLOTYPUS [resp. PARATYPUS] / V. Novák det. 2018.



Figs. 17-22. *Cistelomorpha gagea* sp. nov.: 17- Habitus of male holotype; 18- head and pronotum of male holotype; 19- aedeagus, dorsal view; 20- aedeagus, lateral view; 21- aedeagus (apical piece), dorsal view; 22- aedeagus (apical piece), lateral view.

Description of holotype. Habitus as in Fig. 17, body relatively large, elongate oval, convex, from sulphuric yellow to black, dorsal surface with short setation, punctuation and microgranulation, rather matte. BL 8.83 mm. Widest near two thirds elytra length; BL/EW 2.72.

Head (Fig. 18) narrow, distinctly longer than wide, widest through the eyes, slightly narrower than anterior margin of pronotum. Posterior part black with sulphuric yellow, oval, relatively large spot in the middle near base and very short, sparse, pale setae. Dorsal surface with microgranulation, dense punctuation, punctures medium sized, interspaces between punctures very narrow, smaller than diameter of punctures. Anterior part dark reddish brown with microgranulation and punctuation in apical part distinctly sparser. Clypeus reddish brown with microgranulation and punctuation, punctures small and sparse, distinctly excised in middle of apex, with longer pale setation near sides. Mandibles ochre yellow, glabrous, shiny, with darker sides and apex. HL (visible part) 1.89 mm; HW 1.16 mm; HW/PW 0.48. Eyes large, transverse, excised, space between eyes narrow; slightly wider than diameter of one eye, slightly narrower than length of antennomere 3; OI equal to 40.12.

Antennae black, relatively long, slightly exceeding half body length, with short setation, sparse punctures and microgranulation, AL 4.44 mm; AL/BL 0.50. Antennomeres 1, 2 brown, distinctly paler than slightly serrate antennomeres 3-10. Antennomere 2 shortest, antennomere 3 longest.

RLA: 0.76 : 0.56 : 1.00 : 0.77 : 0.71 : 0.80 : 0.82 : 0.85 : 0.78 : 0.74 : 0.85.

RL/WA: 3.38 : 3.04 : 4.19 : 3.22 : 3.24 : 3.36 : 3.42 : 3.91 : 3.34 : 3.17 : 4.27.

Maxillary palpus. Brown, with pale setae and microgranulation, shiny. Palpomeres narrow, distinctly narrowest at base and widest at apex, ultimate palpomere longest, longly club shaped.

Pronotum (Fig. 18). Sulphuric yellow, transverse, widest near half of lateral margins, almost parallel in basal half, with short, almost indistinct, pale setation, dense, shallow punctuation, punctures small. Interspaces between punctures narrower than diameter of punctures. PL 1.47 mm; PW 2.13 mm; PI equal to 69.01. Border lines narrow, complete, lateral margins narrowing in apical half. Base slightly narrower than base of elytra. Base and anterior margin almost straight. Posterior angles slightly obtuse, anterior angles distinctly more obtuse.

Ventral side of body. Prothorax sulphuric yellow, middle blackish brown, meso- and metathorax blackish brown with rugosities and small punctures. Abdomen black or blackish brown, with fine microgranulation, pale setation and dense punctuation, punctures very small.

Elytron. Sulphuric yellow, with two larger oval spots (as in Fig. 17) oval, convex, dorsal surface with dense and short pale setation. Rows of very small punctures in elytral striae clearly distinct, elytral intervals with microgranulaion and sparse, small, shallow punctures. EL 5.47 mm; EW 3.25 mm. EL/EW 1.68.

Scutellum. Triangular, sulphuric yellow with sides pale brown, glabrous, shiny.

Elytral epipleura. Well developed, sulphuric yellow, with very short setation in apical half. Widest in base, regularly narrowing to ventrite 1, then relatively wide leads parallel.

Legs. Femora sulphuric yellow with apex narrowly brown, with microgranulation and pale setae. Tibia and tarsi black, with small punctures, dark setation and microgranulation. Ultimate tarsomere partly reddish brown. Claws reddish brown. Protarsomeres 2-4 short and transverse. RLT: 1.00 : 0.44 : 0.53 : 0.47 : 2.89 (protarsus) ; 1.00 : 0.48 : 0.42 : 0.33 : 1.18 (mesotarsus); 1.00 : 0.37 : 0.32 : 0.97 (metatarsus).

Anterior tarsal claws long with more than 30 visible teeth.

Aedeagus (Figs. 19-22). Ochre yellow, shiny. Basal piece rounded laterally and narrowing dorsally. Apical piece short, narrowly triangular dorsally, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece 1: 4.42.

Female. Without distinct differences, anterior tarsal claws with 12 teeth.

Variability. Dorsal surface of elytra in one male and one female is ochre yellow. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Specimens (n=4). BL 9.48 mm (8.83-10.16 mm); HL 1.83 mm (1.73-1.94 mm); HW 1.24 mm (1.16-1.31 mm); OI 39.92 (39.77-40.12); PL 1.61 mm (1.47- 1.72 mm); PW 2.45 mm (2.13-2.62 mm); PI 65.67 (63.12-69.01); EL 6.04 mm (5.47-6.68 mm); EW 3.55 mm (3.25-3.89 mm).

Differential diagnosis. The new species *Cistelomorpha gagea* sp. nov. distinctly differs from a similar species *Cistelomorpha atriceps* Pic, 1915 mainly by dorsal surface of elytra with four small, rounded, black spots and base of elytron distinctly yellow (Fig. 17); while *C. atriceps* has dorsal surface of elytra with four large, black, not rounded spots and base of elytra is black (Fig. 7).

C. gagea is clearly different from similar species *Cistelomorpha borchmanni* sp. nov. mainly by dorsal surface of elytra with four small, rounded, black spots as in Fig. 17, by shape of pronotum (Fig. 18) and by shape of aedeagus and shorter apical piece of aedeagus (Figs. 19-22); while

C. borchmanni has dorsal surface of elytra with black, large, rounded spots (as in Fig. 9), shape of pronotum (Fig. 10) and by longer apical piece of aedeagus.
C. gagea distinctly differs from a similar species *Cistelomorpha adonis* sp. nov. mainly by small yellow spot in head behind eyes as in Fig. 17, by shape of pronotum (Fig. 18), shape of aedeagus, shorter apical piece of aedeagus (Figs. 19-22) and anterior tarsal claws of male with 30 teeth; while *C. adonis* has black head behind eyes as in Fig. 1, shape of pronotum as in Fig. 2, longer apical piece of aedeagus and male has 20 teeth on anterior tarsal claws.

Etymology. The name of the species, a noun in aposition, is the Latin generic name of the flower *Gagea lutea* (L.).

Distribution. Laos.

2 *Cistelomorpha atricollis* group

KEY TO THE SPECIES OF *CISTELOMORPHA ATRICOLLIS* SPECIES GROUP

1 (2) Elytron with elytral interspaces (2 and 4) black. Habitus as in Fig. 23. The Philippines. ..... *Cistelomorpha atricollis* Pic, 1924
2 (1) Basal fifth of elytra black, rest of elytra orange red or pale brown or elytra completely yellow. 3
3 (4) Elytra yellow. Habitus as in Fig. 31, head and pronotum (Fig. 32), aedeagus (Figs. 33-36). Thailand. ..... *Cistelomorpha nuphar* sp. nov.
4 (3) Elytral basal fifth black. *5*
5 (6) Body large (12-13 mm), elytra orange red, lateral sides of pronotum more arcuate, legs darker. Ultimate ventrite black. Habitus as in Fig. 25, head and pronotum (Fig. 26), abdomen (Fig. 27). Indonesia (Island Java). ..... *Cistelomorpha basalis* Borchmann, 1934
6 (5) Body small (8.5-9 mm), elytra orange yellow, lateral sides of pronotum more angled, legs paler. Ultimate and penultimate ventrites black. Habitus as in Fig. 28, head and pronotum (Fig. 29), abdomen with aedeagus from lateral view (Fig. 30). Indonesia (Island Java). ..... *Cistelomorpha inusitatis* Borchmann, 1934

Cistelomorpha atricollis Pic, 1924
(Figs. 23, 24)

Cistelomorpha atricollis Pic, 1924: 230.

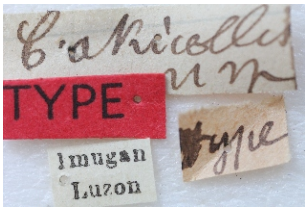
Type locality. The Philippines, Luzon, Imugan.

Type material. (1 spec.): wl: Imugan / Luzon [pb] // C. atricollis / n sp [hb] // rl: TYPE [pb] // wl: type [hb], (as in Fig. 24), (MNHN).

Remark. Type specimen as in Fig. 23, pronotum black with dense and small punctuation, posterior part of head black, anterior part of head and elytra ochre yellow, with black interspaces 2 and 4 distinctly narrower than interspaces 3 and 5. Rows of small punctures in elytral striae distinct. Antennomeres 1-3 ochre yellow, antennomeres 4-11 black, antennomeres 4-10 slightly serrate. Legs ochre yellow, ultimate tarsomere distinctly darker.

Distribution. The Philippines.

23



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Figs. 23, 24. *Cistelomorpha atricollis* Pic, 1924 (Type): 23- Habitus; 24- labels.

***Cistelomorpha basalis* Borchmann, 1934**

(Figs. 25-28)

Cistelomorpha basalis Borchmann, 1934: 15.

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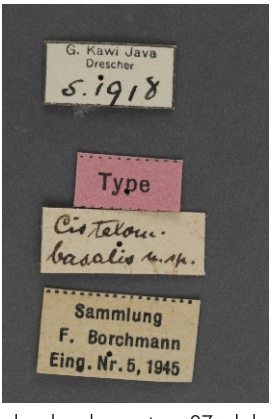

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Figs. 25-28. *Cistelomorpha basalis* Borchmann, 1934 (Type): 25- Habitus; 26- head and pronotum; 27- abdomen; 28- labels.

Type locality. Indonesia, Island Java, Kavi.

Type material. (1 Syntype): pgl: G. Kawi Java / Drescher [pb] / 5.1918 [hb] // pl: Type [pb] // pgl: Cistelom. / basalis n. sp. [hb] // bl: Sammlung / F. Borchmann / Eing. Nr. 5, 1945 [pb], (ZMUH).

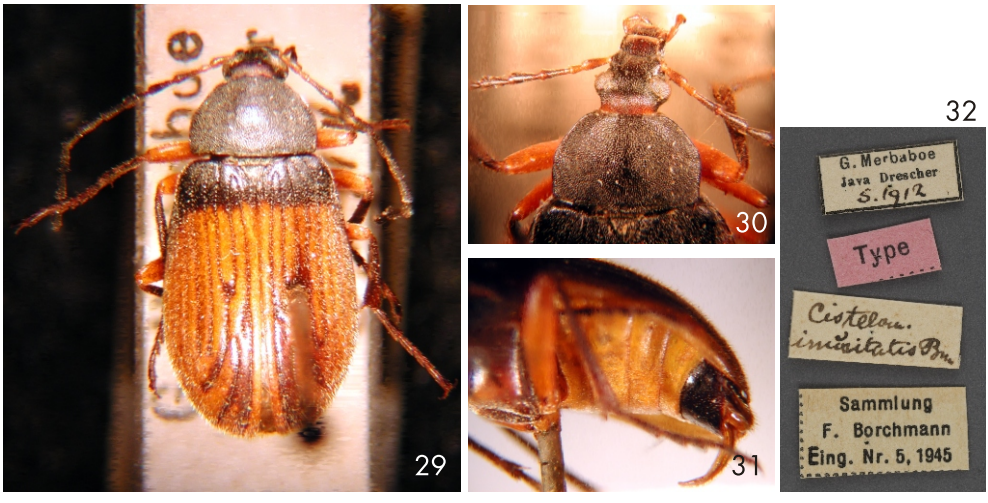
Remark. The syntype as in Fig. 25, head, pronotum and basal fifth of elytra black, rest of elytra orange red. Anterior part of head, clypeus and maxillary palpus orange red. Pronotum with dense and small punctuation and pale setation. Antennomeres 1-4 orange red, antennomeres from 5 black. Abdomen yellow, ultimate ventrite black (Fig. 27), labels as in Fig. 28.

Distribution. Indonesia (Island Java).

Cistelomorpha inusitatis Borchmann, 1934

(Figs. 29-32)

Cistelomorpha inusitatis Borchmann, 1934: 16.



Figs. 29-32. *Cistelomorpha inusitatis* Borchmann, 1934 (Type): 29- Habitus; 30- head and pronotum; 31- abdomen with aedeagus from lateral view; 32- labels.

Type locality. Indonesia, Island Java, Merbaboe.

Type material. (1 Syntype): pgl: G. Merbaboe / Java Drescher [pb] / 5.1912 [hb] // pl: Type [pb] // pgl: Cistelom. / inusitatis Bm [hb] // bl: Sammlung / F. Borchmann / Eing. Nr. 5, 1945 [pb], (ZMUH).

Remark. The syntype as in Fig. 29, head, pronotum and basal fifth of elytra black, rest of elytra orange yellow. Anterior part of head, clypeus and maxillary palpus orange red or reddish brown. Pronotum with dense and small punctuation and pale setation. Antennomeres 1-2 orange red, antennomere 3 partly pale partly dark, from antennomere 4 brown or blackish brown. Abdomen yellow, ultimate and penultimate ventrites black. Abdomen and aedeagus from lateral view as in Fig. 31, labels (Fig. 32).

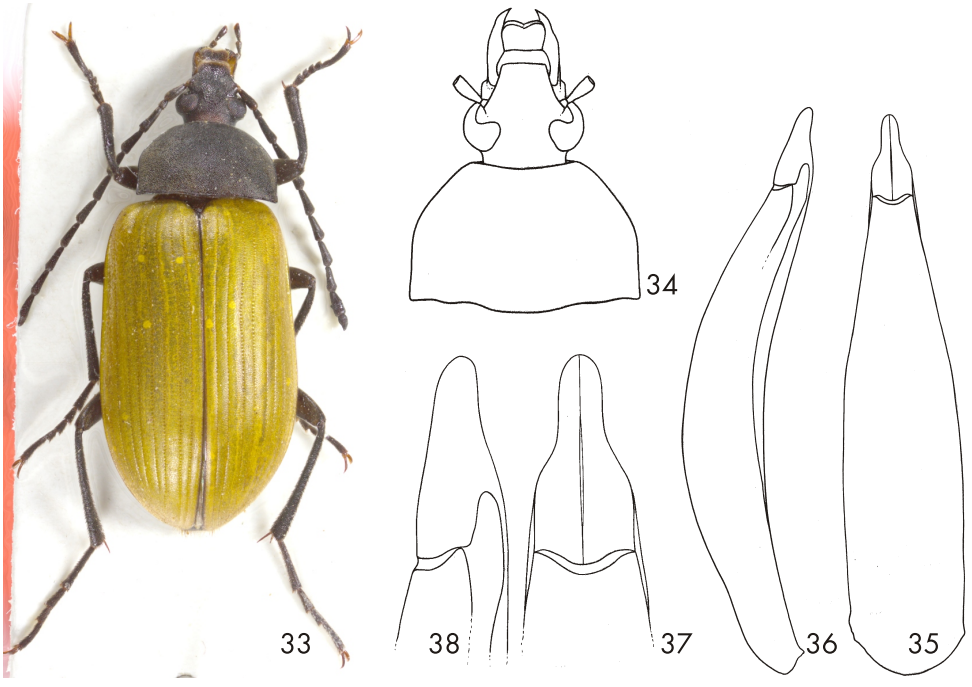
Distribution. Indonesia (Island Java).

Cistelomorpha nuphar sp. nov.

(Figs. 33-38)

Type locality. Northwestern Thailand, Mae Hong Son province, Ban Si Lang, 1200 m.

Type material. Holotype (♂): wl: NW THAILAND / 20.5.-22.5.1996, Mae Hong / Son, Ban Si Lang,1200 m / Hovorka leg., (VNPC). Paratype: (1 ♂ 1 ♀): same data as holotype, (OKZC); (1 ♀): wl: THAILAND bor. occ. / PAI / SOPPONG / 28. 5. – 5. 6. 1997 / Lgt. M. Sníže k, (VNPC) (1 ♀): wl: NW THAILAND 1-8.V. / MAE HONG SON 1992 / BAN SI LANG 1200m / J.HORAK LEG., (VNPC); (2 ♀♀): wl [pb]: NW Thailand, 1600m / Mae Hong Son pr. / Ban Huai Po, 15.-19.iv. / Sv. Bílý leg. 1996, (NMPC). The types are provided with one printed red label: Cistelomorpha / nuphar sp. nov. / HOLOTYPUS [resp. PARATYPUS] / V. Novák det. 2018.



Figs. 33-38. *Cistelomorpha nuphar* sp. nov.: 33- Habitus of male holotype; 34- head and pronotum of male holotype; 35- aedeagus, dorsal view; 36- aedeagus, lateral view; 37- aedeagus (apical piece), dorsal view; 38- aedeagus (apical piece), lateral view.

Description of holotype. Habitus as in Fig. 33, body relatively large, oval, convex, from ochre yellow to black, dorsal surface setose, with punctuation and microgranulation, rather matte. BL 11.25 mm. Widest near two thirds elytra length; BL/EW 2.51.

Head (Fig. 34) slightly longer than wide, widest through the eyes, slightly wider than anterior margin of pronotum, dorsal surface with short, pale setation. Posterior part black with reddish brown part in the middle near base and dense punctuation, punctures medium sized, interspaces between punctures very small, smaller than diameter of punctures. Anterior part blackish brown with ochre yellow apex, punctuation in apical part distinctly sparser. Clypeus pale brown with punctuation and microgranulation, distinctly excised in middle with longer ochre setation near sides. Mandibles reddish brown, glabrous, shiny with darker sides and apex. HL (visible part) 1.89 mm; HW 1.61 mm; HW/PW 0.48. Eyes large, transverse, excised, space between eyes narrow; slightly wider than diameter of one eye, approximately as wide as length of antennomere 1; OI equal to 36.52.

Antennae black, relatively long, distinctly exceeding half body length, with short pale setation, punctuation and microgranulation, AL 6.76 mm; AL/BL 0.60. Antennomeres 3-10 slightly serrate. Antennomere 2 shortest, antennomere 11 longest.

RLA: 0.89 : 0.37 : 1.00 : 1.02 : 0.92 : 1.01 : 1.04 : 1.03 : 0.98 : 0.98 : 1.22.

RL/WA: 2.86 : 1.48 : 3.33 : 3.19 : 3.29 : 3.48 : 3.36 : 3.55 : 3.50 : 2.80 : 4.21.

Maxillary palpus. Dark brown, with partly pale and partly darker setation, sparse punctures, microgranulation and microrugosities, slightly shiny. Palpomeres distinctly narrowest at base and

widest at apex, ultimate palpomere longest and widest in apex.

Pronotum (Fig. 34). Black, transverse, wide, widest in base, parallel in basal half of lateral margins, with pale setation, dense medium sized punctuation and fine microgranulation. Interspaces between punctures narrower than diameter of punctures. PL 1.67 mm; PW 3.35 mm; PI equal to 49.85. Border lines complete, lateral margins arcuate in apical half, base almost straight, slightly narrower than base of elytra. Anterior margin distinctly excised. Posterior angles almost rectangular, anterior angles indistinct, roundly obtuse.

Ventral side of body black, with very short and dense pale setation, matte. Abdomen black with very short and dense, pale setation.

Elytron. Ochre yellow, oval, convex, suture narrowly darker, dorsal surface with dense and short pale setation. Rows of very small punctures in elytral striae clearly distinct, elytral intervals with microgranulation and sparse, small, shallow punctures. EL 7.69 mm; EW 4.49 mm. EL/EW 1.71.

Scutellum. Triangular, blackish brown with pale setae, punctures and microgranulation, shiny.

Elytral epipleura. Well developed, ochre yellow, with very short setation and very small punctures, wide in basal half, regularly narrowing to ventrite 1, then relatively wide leads parallel.

Legs. Dark blackish brown, claws reddish brown, slightly shiny, with dense punctuation, dark, dense setation and fine microgranulation. Protarsomeres 2- 4 short and transverse. RLT: 1.00 : 0.65 : 0.63: 0.49 : 3.05 (protarsus); 1.00 : 0.51 : 0.45 : 0.40 : 1.14 (mesotarsus); 1.00 : 0.45 : 0.34 : 0.75 (metatarsus).

Anterior tarsal claws long with 25 visible teeth.

Aedeagus (Figs. 35-38). Basal part of basal piece ochre yellow, apical half of basal piece pale brown. Basal piece rounded laterally and narrowing dorsally. Apical piece short, narrowly triangular dorsally, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece 1: 5.11.

Female. Without distinct differences, anterior tarsal claws with 12 teeth.

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Specimens (n=7). BL 11.69 mm (11.26-12.71 mm); HL 1.79 mm (1.59-1.90 mm); HW 1.65 mm (1.49-1.80 mm); OI 40.71 (39.32-43.52); PL 1.80 mm (1.66-2.05 mm); PW 3.38 mm (3.18-3.71 mm); PI 53.37 (49.11-56.79); EL 8.10 mm (7.69-8.91 mm); EW 4.61 mm (4.43-5.06 mm).

Differential diagnosis. The new species *Cistelomorpha nuphar* sp. nov. distinctly differs from a similar species *Cistelomorpha atricollis* Pic, 1924, *Cistelomorpha basalis* Borchman, 1934 and *Cistelomorpha inusitatis* Borchman, 1934 mainly by yellow dorsal surface of elytra (Fig. 33); while *C. basalis* and *C. inusitatis* have humeral part in dorsal surface of elytra black (Figs. 26 or 29) and *C. atricollis* has dorsal surface of elytra with black longitudinal strips (Fig. 23).

Etymology. The name of the species, a noun in aposition, is the Latin generic name of the flower *Nuphar lutea* (L.).

Distribution. Thailand.

3 *Cistelomorpha nigrolineata* group

Cistelomorpha bruneolineata Pic, 1924

Cistelomorpha bruneolineata Pic, 1924: 32.

Type locality. Manila, The Philippines.

Remark. The type material was not found. A yellow, elongate oval species with reddish head, pronotum and antennomeres 1 and 2. Rest of antennomeres, tibiae, tarsi, ultimate and penultimate ventrites black. Elytra with brown longitudional strips. A relatively large species, 13 mm long.

Distribution. The Philippines.

Cistelomorpha nigrolineata Allard, 1894

Cistelomorpha nigrolineata Allard, 1894: 153.

Type locality. Madura, India.

Remark. The type material was not found. A yellow, elongate oval species with black elytral interspaces 2, 4, 6 and 8. Antennomeres 3-11, tibiae, tarsi and ultimate ventrite black, 10 mm long.

Distribution. India.

Cistelomorpha semilineata Pic, 1912

Cistelomorpha semilineata Pic, 1912: 53.

Type locality. Walardi, India.

Remark. The type material was not found. Elytral intervals 2, 4, 6 and 8 from base to middle length of elytron black, rest yellow. A shiny species, ultimate and penultimate ventrites black, 11 mm.

Distribution. India.

4 *Cistelomorpha nigrosparsa* group

Cistelomorpha nigrosparsa Fairmaire, 1899
(Figs. 39-44)

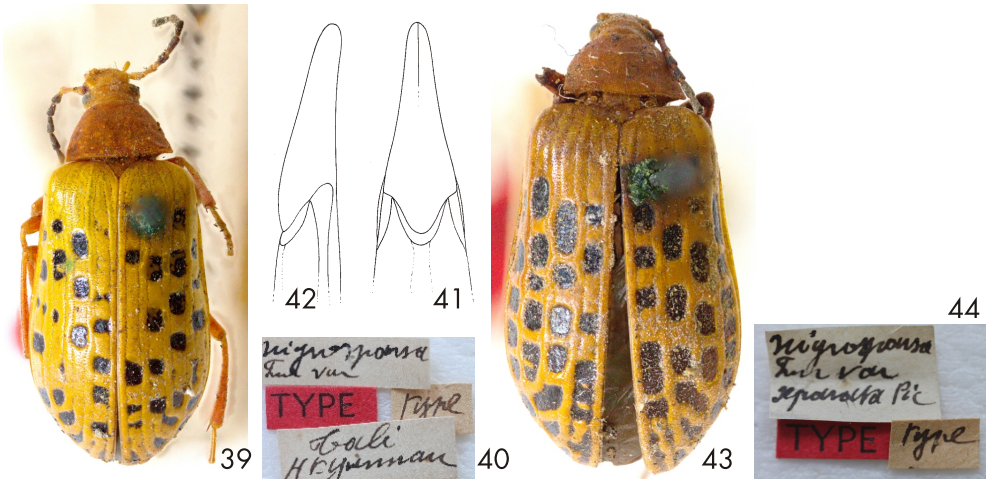
Cistelomorpha nigrosparsa Fairmaire, 1899: 630.
Cistelomorpha nigrosparsa separata Pic, 1908c: 40 **syn. nov.**

Type locality. China, North Yunnan.

Type material. Type specimen (*C. nigrosparsa nigrosparsa* Fairmaire, 1899): wl: boli / Hr yunnan [hb] // nigrosparsa /

Frm var // rl: TYPE [pb] // pgl: type [hb], (MNHN).
Type specimen (*Cistelomorpha nigrosparsa separata* Pic, 1908): wl: nigrosparsa / Frm var / separata Pic [hb] // rl: TYPE [pb] // pgl: type [hb], (MNHN).

Other material examined. (1 spec.): wl: China, NW Sichuan, 3000-3500m, / road Luhuo-Sértar, / pass 35 km NNE LUHUO, / J. Kaláb leg., 29.7. 1994, / region of Thuya and Picea forest, (VNPC); (1 spec.): wl: CHINA-SICUAN pr. / KANDING distr. 16.-19.7.1992 / MUGUCUO lake 4500m / J. SCHNEIDER lgt., (VNPC); (1 spec.): wl: CH. SICHUAN/GANSU / DOGCANGHAMO, S-env. / 34:03/102:35, 3500-4100m / alp. meadow/scree/grassland / 13.VII.1995 K. & B. Březina, (VNPC); (1 spec.): wl: CHINA,Sichuan24.-26.6.2006 / Yading Nat. Res. / N:28°27´ E:100°20´ / 3800-4200m, lgt. A. Mikyška, (VNPC); (1 spec.): wl: CHINA, E-TIBET 16.-18.7.96 / MARKAM env., 3800-4000m / 29°40´-42´N 98°35´ E / L. & R. BUSINSKÝ lgt., (VNPC); (1 spec.): wl: CHINA, E-TIBET 3100-3300m / SUMZOM-SE env. 7.-9.7.96 / 29°40´-44´N 96°07´-13´ E / L. & R. BUSINSKÝ lgt., (VNPC); (1 spec.): wl CHINA / ULÁN / LEG. / NECHVÍLE / 24.7.1992 [hb], (VNPC).



Figs. 39-42. *Cistelomorpha nigrosparsa nigrosparsa* Fairmaire, 1899 (Type): 39- Habitus; 40- labels. 41- aedeagus, dorsal view, 42- aedeagus, lateral view. Figs. 43, 44. *Cistelomorpha nigrosparsa separata* Pic, 1908 (Type): 43- Habitus; 44- labels.

Remark. The habitus of type specimens is in Figs. 39 and 43. No distinct differences between type specimens and same distribution (China: Yunnan) allow to propose *Cistelomorpha nigrosparsa separata* Pic, 1908 as a new synonym of *Cistelomorpha nigrosparsa* Fairmaire, 1899.

Distribution. China (Yunnan). New for Gansu, Quinghai, Sichuan and Xizang (Tibet) in China.

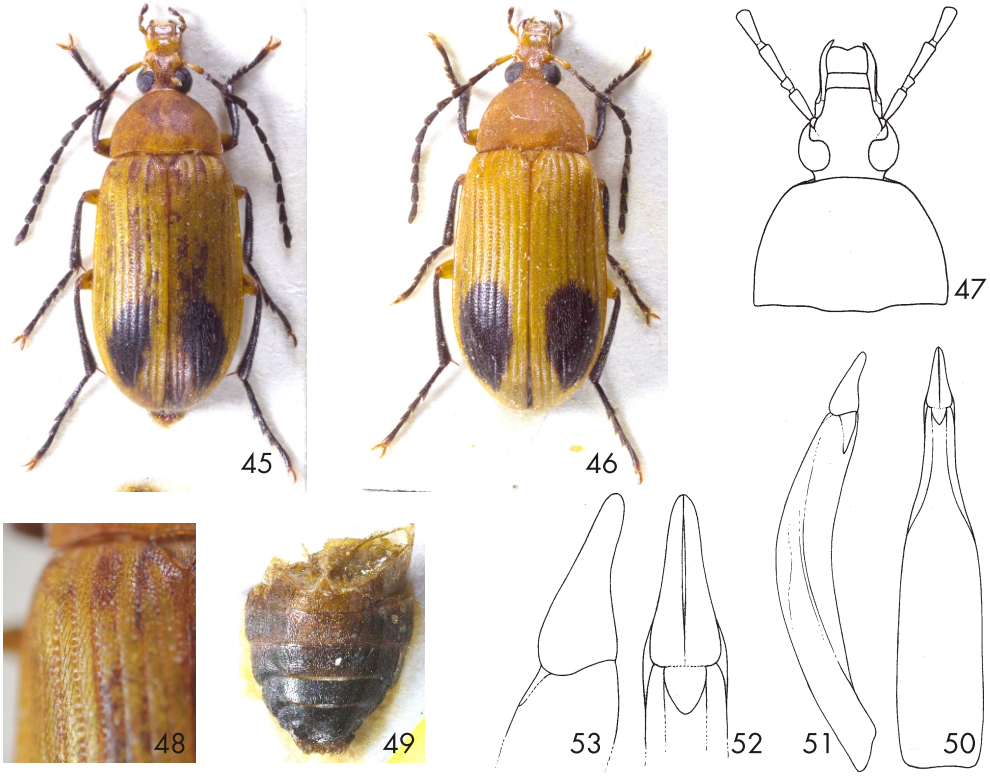
5 *Cistelomorpha martini* group

Cistelomorpha agrymonia sp. nov.
(Figs. 45-53)

Type locality. Thailand, Loei province, Na Haeo.

Type material. Holotype (♂): ygl: Coll. I.R.Sc.N.B. / THAILAND (loei) / Na-Haeo (field res stat) / 15-19.V.2003 Light trap / Leg. J. Constant, / K. Smets & P. Grootaert, (IRSCN). Paratypes: **Thailand:** (1 spec.): same data as holotype, (VNPC); (1 spec.): yl: Coll. R.I.Sc.N.B. / THAILAND-Loei / Na Haeo(Field Res / Stat)Light Trap / 15-19.V.2003 / Leg. J. Constant, Smets& / P. Grootaert, (VNPC); (1 spec.): ygl: Thailand, Loei / Na Haeo 22/V/2000 / Station 20007 / Leg.: P. Grootaert,

(IRSCN); **Cambodia:** (1 spec.): ygl: Coll. I.R.Sc.N.B. / CAMBODIA / Phnom Kulen 24.V. / 2003 Light trap Leg. / J. Constant & K. Smets, (VNPC); (6 spec.): yl: Coll. I.R.Sc.N.B. / CAMBODIA / Kirirom N.P. / Light Trap Pine Forest / 21 IV 2005 / Leg. Smets&I.Var , (IRSCN, VNPC); (1 spec.): yl: Coll. I.R.Sc.N.B. / CAMBODIA (Siem / Raep Prov) / Kbal Speam,Light trap / 28/5/2005 /Legl.Var&P. Grootaert, (IRSCN); (1 spec.): ygl: Coll. I.R.Sc.N.B. / Cambodia - 8 KM north / of Sre Noi (road to / Along Vaeng) / Light trap / 29.V.2003 / Leg. J Constant & / K. Smets, (IRSCN). The types are provided with one printed red label: Cistelomorpha / agrymonia sp. nov. / HOLOTYPUS [resp. PARATYPUS] / V. Novák det. 2018.



Figs. 45-53. *Cistelomorpha agrymonia* sp. nov.: 45- Habitus of holotype; 46- habitus of paratype without small spots; 47- head and pronotum of holotype; 48- elytra, dorsal aspect; 49- abdomen, ventral aspect; 50- aedeagus, dorsal view; 51- aedeagus, lateral view; 52- aedeagus (apical piece), dorsal view; 53- aedeagus (apical piece), lateral view.

Description of holotype. Habitus as in Fig. 45, body smaller, elongate oval, convex, from ochre yellow to black, dorsal surface setose, with punctuation, microrugosities and microgranulation, rather matte. BL 8.42 mm. Widest near two thirds elytra length; BL/EW 2.77.

Head (Fig. 47) long and narrow, approximately as wide as anterior margin of pronotum. Posterior part pale reddish brown, rather matte, dorsal surface with sparse and short, dark setae, microgranulation and dense, coarse medium sized punctures, interspaces between punctures narrow. Anterior part ochre yellow with sparser and shallower punctures, apex impunctate, glabrous and shiny. Clypeus pale reddish brown with small and sparse punctures, fine microgranulation, apex distinctly excised in middle with pale setae. Mandibles glabrous, shiny, ochre yellow with darker sides and apex. HL (visible part) 1.57 mm; HW 1.19 mm; HW/PW 0.50. Eyes large, transverse, distinctly excised, space between eyes narrow; approximately as wide as diameter of one eye or as wide as length of antennomere 1; OI equal to 36.23.

Antennae. Relatively long, slightly exceeding half body length, black, with punctuation and microgranulation and short, pale setation, rather matte. AL 4.73 mm; AL/BL 0.56. Pale brown antennomere 1 slightly shiny. Antennomeres 4-10 slightly serrate. Antennomere 2 shortest, each of antennomeres 4-10 distinctly shorter than antennomere 3, antennomere 11 longest.

RLA: 0.86 : 0.33 : 1.00 : 0.94 : 0.84 : 0.86 : 0.89 : 0.95 : 0.89 : 0.83 : 1.12.

RL/WA: 3.31 : 1.22 : 3.09 : 2.79 : 2.52 : 2.55 : 2.66 : 2.49 : 2.57 : 2.40 : 3.46.

Maxillary palpus. Pale brown, with dark setation, fine microgranulation and sparse punctures, slightly shiny. Palpomeres 2, 3 distinctly narrowest at base and widest at apex. Ultimate palpomere dark reddish brown, distinctly darker and longer than penultimate palpomere, slightly club-shaped, widest in apex.

Pronotum (Fig. 47) pale reddish brown, transverse, wide, slightly longer than semicircular, widest at base, with dense, shallow, small sized punctures and dark setation. Interspaces between punctures very narrow, narrower than diameter of punctures. PL 1.39 mm; PW 2.36 mm; PI equal to 54.66. Border lines complete, lateral and anterior margins slightly arcuate, base very finely bisinuate, approximately as wide as base of elytra. Posterior angles almost rectangular, anterior angles indistinct, roundly obtuse.

Ventral side of body with pale setation and small punctuation. Prothorax pale reddish brown with dark spot in middle. Metathorax ochre yellow. Abdomen (Fig. 49) black, with longer pale setae.

Elytron elongate oval, convex, ochre yellow with one large, oval, black spot each and more reddish brown indistinct spots (as in Fig. 45), dorsal surface (Fig. 48) with longer dark setation on disc and pale setation near lateral margins. Rows of very small punctures in elytral striae clearly distinct, elytral intervals slightly convex with microgranulation and punctures as large as those in striae. EL 5.46 mm; EW 3.04 mm; EL/EW 1.77.

Scutellum. Triangular, ochre yellow with sides darker, slightly shiny, with microgranulation, dark setae and shallow punctures.

Elytral epipleura. Well developed, ochre yellow, wide, with short, pale setae, widest near base, regularly narrowing to ventrite 2, then relatively wide leads parallel.

Legs. Femora ochre yellow with short, dark setation. Tibia and tarsi black with dark setation, punctuation and microgranulation. Tibia with strong setae in inner side and coarser punctuation than those in tarsi. Claws and apical spurs on tibia reddish brown. RLT: 1.00 : 0.68 : 0.61: 0.63 : 2.95 (protarsus); 1.00 : 0.55 : 0.49 : 0.56 : 1.32 (mesotarsus); 1.00 : 0.43 : 0.40 : 0.83 (metatarsus).

Anterior tarsal claws long with approximately 16 visible teeth.

Aedeagus (Figs. 50-53). Pale brown, slightly shiny. Basal piece rounded laterally, parallel in basal half of basal piece and narrowing dorsally in apical half. Apical piece short with rounded apex, triangular dorsally, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece 1: 6.00.

Female. Without distinct differences, anterior tarsal claws with 11 or 12 teeth.

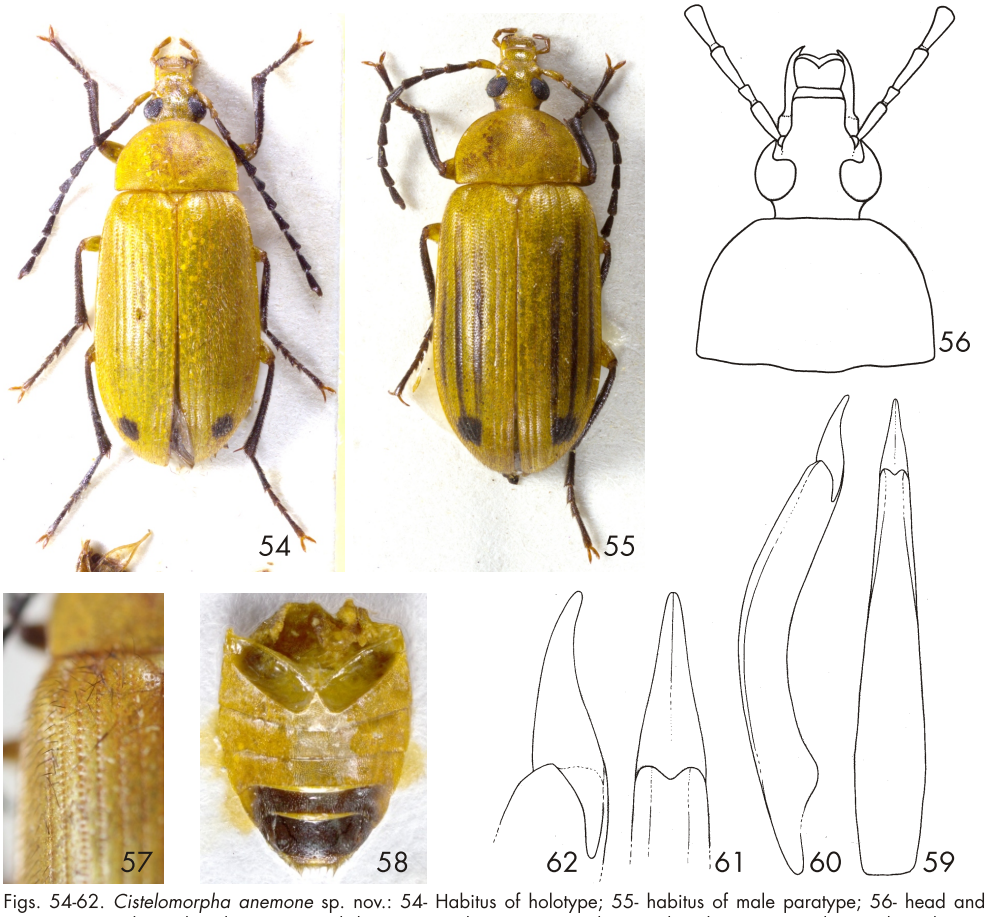
Variability. Some type specimens without small reddish brown spots (Fig. 46). The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Specimens (n=13). BL 8.83 mm (8.41-9.36 mm); HL 1.58 mm (1.47-1.73 mm); HW 1.24 mm (1.19-1.27 mm); OI 34.32 (28.41-38.20); PL 1.50 mm (1.29-1.70 mm); PW 2.43 mm (2.31-2.53 mm); PI 60.50 (54.66-65.70); EL 5.73 mm (5.46-6.04 mm); EW 3.33 mm (3.09-3.51 mm).

Differential diagnosis. No similar species with very large oval spot in apical part of elytron.

Etymology. The name of the species, a noun in aposition, is the Latin generic name of the flower *Agrymonia eupatoria* (L.).

Distribution. Cambodia, Thailand.

***Cistelomorpha anemone* sp. nov.**
(Figs. 54-62)



Figs. 54-62. *Cistelomorpha anemone* sp. nov.: 54- Habitus of holotype; 55- habitus of male paratype; 56- head and pronotum; 57- elytra, dorsal aspect; 58- abdomen, ventral aspect; 59- aedeagus, dorsal view; 60- aedeagus, lateral view; 61- aedeagus (apical piece), dorsal view; 62- aedeagus (apical piece), lateral view.

Type locality. Thailand, Loei province, Na Haeo.

Type material. Holotype: (♂): ygl: Coll. I.R.Sc.N.B. / THAILAND (loei) / Na-Haeo (field res stat) / 15-19.V.2003 Light trap / Leg. J. Constant, / K. Smets & P. Grootaert, (IRSCN). Paratypes **Thailand:** (141 spec.): same data as holotype, (IRSCN, VNPC); (12 spec.): same data as holotype, but yl, (IRSCN, VNPC); (42 spec.): yl: Coll. I.R.Sc.N.B. / THAILAND (Loei) / Na-Haeo / Light Trap River Bank / 15-V-2003 / Leg. J. Constant, / K.Smets& P. Grootaert, (IRSCN, VNPC); (7 spec.): yl: Coll.

I.R.Sc.N.B. / THAILAND(Loei) / Na-Haeo Light Trap / River Bank / 15-V-2003 / Leg. P. Grootaert / J. Constant,K.Smets, (IRSCN, VNPC); (3 spec.): ygl: Coll. I.R.Sc.N.B. / Thailande (Loei) / Na-Haeo / 24/05/1998 / Leg. P. Grootaert, (IRSCN); (3 spec.): ygl: same data as penultimate, but 23/05/1998, (IRSCN); (14 spec.): ygl: Coll. R.I.Sc.N.B. / Thailand, Loei / Na Haeo 22/V/2000 / Station 20007 / Leg.: P. Grootaert, (IRSCN); (3 spec.): ygl: Coll. I.R.Sc.N.B. / Thailand: Loei / Na Haeo / 29.IV-06.V.2001 / Malaise trap / Leg.: Constant & Grootaert, (IRSCN); (9 spec.): ygl: Coll. I.R.Sc.N.B. / Thailande (Loei) / Na Haeo (bio station) / 05-12.V.2001 / Light trap / Leg.: Constant & Grootaert, (IRSCN, VNPC); (8 spec.): ygl: Coll. I.R.Sc.N.B. / Thailand (Loei) / Na-Haeo (edge pond) / Light trap 17.V.2003 / Leg.: J. Constant & / K. Smets, (IRSCN); (7 spec.): yl: Coll. I.R.Sc.N.B. / THAILAND (Loei) / Na-Haeo, 17-V-2003 / Light trap,Edge Pond / Leg. J. Constant&Smets, (IRSCN, VNPC); yl: (1 spec.): ygl: Coll. I.R.Sc.N.B. / Thailande (Loei) / Na Haeo (malaise trap) / 24-30.IV.2000 / / Leg.: Constant & Grootaert, (IRSCN); yl: (2 spec.): yl: Coll. I.R.Sc.N.B. / THAILAND (Loei prov.) / Na Haeo - Firs / light trap/16-V-2003 / Leg P. Grootaert& / J. Constent, (IRSCN, VNPC); **Cambodia:** (84 spec.): yl: Coll. I.R.Sc.N.B. / CAMBODIA / Kirirom N.P. / Light Trap Pine forest / 21 IV 2005 / Leg. Smets&I.Var, (IRSCN, VNPC); (40 spec.): yl: Coll. I.R.Sc.N.B. / CAMBODIA Kirirom N.P. / 21 IV 2005 / Pine Forest,Light Trap / Leg. K.Smets&I.Var, (IRSCN, VNPC); **Laos:** (2 spec.): wl: LAOS centr., 27.iv.-1.v.1997 / 70 km NE Vientiane, 150 m / BAN PHABAT env., / N 18°16.1; E 103°10.9; / E. Jendek & O. Šauša leg., (VNPC); (1 spec.): wl: LAOS centr., Khammonan / Nakai env., 22.v.-8.vi.2001 / 17°43 N; 105°09 E; 500-600 m / E. Jendek & O. Šauša leg., (VNPC); (1 spec.): wl: LAOS, 35 km NE / Vientiane, LAO PAKO / env., alt. 50 m 31.V.-4.VI. / 2004, 18°10´N, 102°52´E, E. Jendek & O. Šauša leg., (VNPC); (3 spec.): wl: Laos N, 5.-11.V.1997 / 20km NW Louang Namtha, / N21°09.2 E 101°18.7., 900+-100m, / Roman Hergovits leg., (VNPC). The types are provided with one printed red label: Cistelomorpha / anemone sp. nov. / HOLOTYPUS [resp. PARATYPUS] / V. Novák det. 2018.

Description of holotype. Habitus as in Fig. 54, body small, elongate oval, convex, from yellow to black, dorsal surface setose, with punctuation and microgranulation, rather matte. BL 8.31 mm. Widest near two thirds elytra length; BL/EW 2.60.

Head (Fig. 56) long, distinctly longer than wide, dorsal surface with sparse, pale setation. Posterior part ochre yellow with darker spots, distinctly darker than ochre yellow anterior part and pale reddish brown clypeus, with dense, shallow, medium sized punctures. Anterior part with sparse, smaller, shallow punctures and a few large and coarse punctures. Clypeus with a few small, shallow punctures, dorsal surface with microgranulation, shiny, apex slightly excised. Mandibles yellow with reddish brown apex, shiny. HL (visible part) 1.59 mm; HW 1.20 mm; HW/PW 0.50. Eyes large, transverse, distinctly excised, space between eyes relatively narrow; wider than diameter of one eye, approximately as wide as length of antennomere 3 and slightly wider than length of antennomere 1; OI equal to 39.89.

Antennae. Relatively long, slightly exceeding half body length, black, with short setation, microgranulation and small punctures, AL 4.58 mm; AL/BL 0.55. Antennomeres 1 and 2 ochre yellow, slightly shiny. Antennomeres 3-11 rather matte, antennomeres 4-10 distinctly serrate. Antennomeres 4, 8-10 approximately as long as antennomere 3. Antennomere 2 shortest, antennomere 11 longest.

RLA: 0.83 : 0.43 : 1.00 : 1.02 : 0.86 : 0.81 : 0.94 : 1.02 : 1.02 : 1.00 : 1.24.

RL/WA: 2.92 : 1.33 : 2.79 : 2.36 : 2.05 : 1.96 : 2.42 : 2.62 : 2.67 : 3.05 : 3.61.

Maxillary palpus. Pale brown, with pale setation and microgranulation, slightly shiny. Palpomeres 2, 3 distinctly narrowest at base and widest in apex. Ultimate palpomere elongate, club shaped, distinctly longer than penultimate.

Pronotum (Fig. 56) yellow with indistinct pale reddish brown spots, transverse, wide, widest in base, disc with dark, sides with pale setation, dense and shallow punctuation, punctures small sized. PL 1.35 mm; PW 2.41 mm; PI equal to 56.02. Border lines complete, only in the middle of anterior margin not clearly distinct. Lateral margins parallel in basal half, arcuate in apical half, base finely bisinuate, slightly wider than base of elytra. Anterior margin straight. Posterior angles rectangular, anterior angles indistinct, rounded.

Ventral side of body yellow with pale reddish brown indistinct spots and pale setation. Abdomen (Fig. 58) with pale setation, ventrites 1-3 ochre yellow. Ultimate and penultimate ventrites black.

Elytron. Yellow, relatively short and wide, oval, convex, widest near half elytra length, dorsal surface with small black spot near apex (as in Fig. 54), with sparser, dark setation in disc (Fig. 57), dense pale setation near lateral margins. Rows of small punctures in elytral striae distinct, elytral intervals with microgranulaion and sparse, small punctures as large as punctures in striae. EL 5.37 mm; EW 3.20 mm. EL/EW 1.68.

Scutellum. Triangular, yellow with very small punctures and dark setae.

Elytral epipleura. Well developed, yellow, with pale setae and very small punctures, widest near base, regularly narrowing to ventrite 1, then relatively wide leads parallel.

Legs relatively narrow, with dark setation, punctuation, punctures small. Femora yellow, tibia and tarsi black, tarsal claws reddish brown, slightly shiny, with microgranulation and punctuation, punctures small. Tibia with strong setae in inner side. RLT: 1.00 : 0.63 : 0.57: 0.66 : 2.89 (protarsus); 1.00 : 0.42 : 0.35 : 0.27 : 1.04 (mesotarsus); 1.00 : 0.32 : 0.30 : 0.81 (metatarsus).

Anterior tarsal claws long with 16 visible teeth.

Aedeagus (Figs. 59-62). Pale brown, shiny. Basal piece rounded laterally and slightly, regularly narrowing dorsally. Apical piece short, triangular dorsally, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece 1: 5.29.

Female. Dorsal surface of pronotum and elytra with longer, errected dark setation than those in male, anterior tarsal claws with 12 teeth.

Variability. Some type specimens with dorsal surface of elytra as in Fig. 55. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n=380). BL 8.33 mm (7.40-9.59 mm); HL 1.40 mm (1.11-1.59 mm); HW 1.21 mm (1.09-1.32 mm); OI 38.13 (34.44-42.55); PL 1.34 mm (1.16-1.51 mm); PW 2.39 mm (2.17-2.64 mm); PI 56.25 (51.89-61.67); EL 5.59 mm (5.13-6.49 mm); EW 3.23 mm (2.84-3.58 mm).

Differential diagnosis. The most similar species is *Cistelomorpha binotata* (Pic, 1908). The new species *Cistelomorpha anemone* sp. nov. clearly differs from the species *C. binotata* (Fig. 71) by smaller body and dorsal surface of elytra with dark and long setation; while *C. binotata* has larger body and dorsal surface of elytra covered by short pale setation.

Etymology. The name of the species, a noun in aposition, is the Latin generic name of the flower *Anemone nemorosa* (L.).

Distribution. Cambodia, Laos, Thailand.

***Cistelomorpha bina* Fairmaire, 1899**

(Figs. 63-70)

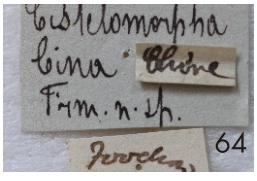
Cistelomorpha bina Fairmaire, 1899: 631.

Type locality. Taiwan ("Formose, Cap Sud"].

Type material. Type specimen: wl: Chine [hb] // wl: Cistelomorpha / bina / Frm. n. sp. [hb], (MNHN).

Material examined. (1 ♂): wl: Taiwan: Taitung / Lanyu / 05. V.2012,leg.S.-F. Yu, (VNPC); (1 spec.): wl: TAIWAN, Taitung prov. / Schonchia env. 18.5.2012 / N22,20670° E120,86034° / Walter Grosser lgt. 315m, (VNPC).


63



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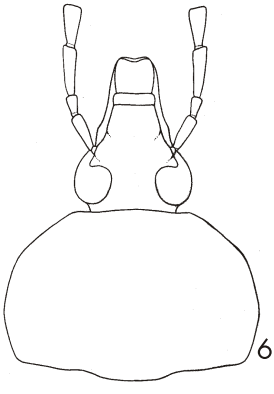
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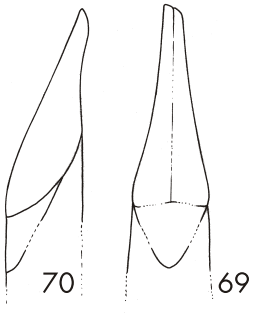

70 69

Figs. 63-70. *Cistelomorpha bina* Fairmaire, 1899: 63- Habitus (Type); 64- labels (Type); 65- habitus (species from Taitung); 66- head and pronotum; 67- aedeagus, dorsal view; 68- aedeagus, lateral view; 69- aedeagus (apical piece), dorsal view; 70- aedeagus, (apical piece), lateral view.

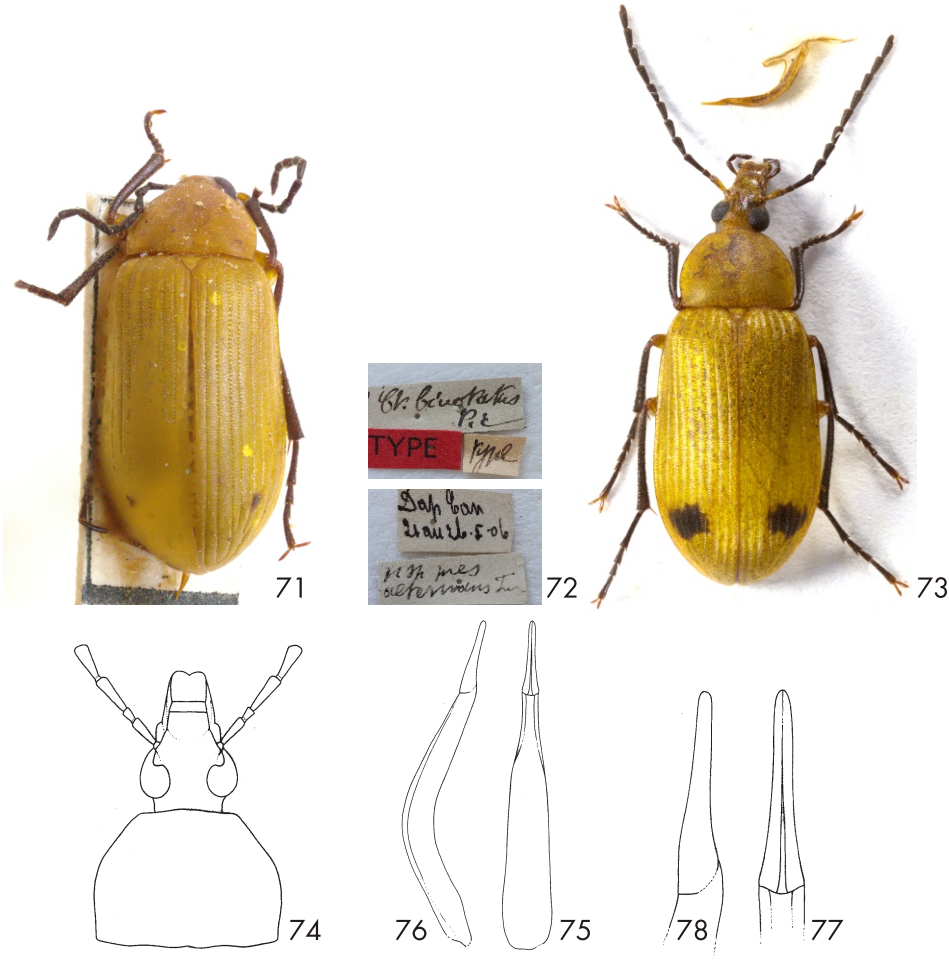
Remark. A species with yellow dorsal surface covered by pale setae (setae slightly darker than surface), habitus as in Figs. 63 and 65. Head and pronotum (Fig. 66), each elytron with a black, apical spot. Legs black or blackish brown, femora yellow with apex narrowly darker. Antennomere 1 yellow, antennomeres 2-11 black, antennomeres 4-10 slightly serrate, ventrites 1-2 black, ventrites 3-5 ochre yellow, aedeagus as in Figs. 67-70.

Distribution. Taiwan.

Cistelomorpha binotata (Pic, 1908) comb. nov.

(Figs. 71-78)

Cteniopinus binotatus Pic, 1908: 39.



Figs. 71-78. *Cistelomorpha binotata* Pic, 1908 comb. nov. (Type): 71- Habitus of type specimen; 72- labels (Type); 73- habitus (species from North Vietnam); 74- head and pronotum; 75- aedeagus, dorsal view; 76- aedeagus, lateral view; 77- aedeagus (apical piece), dorsal view; 78- aedeagus, (apical piece), lateral view.

Type locality. Northern Vietnam, Tonkin: Dap Kan.

Type material. Type specimen: wl: Dap Can / ... 26.5.06 [hb] // wl: n sp pres / alternans Frm // Ct. binotatus / Pic [hb] // rl: TYPE [pb] // pgl: type [hb], (MNHN).

Material examined. (1 male): wl: N-VIETNAM: Phu Tho Prov., / XUAN SON NATIONAL PARK, 500 m / 13-17.VI.2010 L. Bartolozzi & / S. Bambi legit. (n° Mag. 2894), (MNFI); (1 male, 1 female): wl: Vietnam, Hoa Binh. / 4.-7.6.1986 / Ha son binh prov. / lgt. J. Rybníček, (VNPC).

Remark. Species was described originally in genus *Cteniopinus* Seidlitz, 1896 - distinctly belonging to the genus *Cistelomorpha* L. Redtenbacher, 1868 (as you can see in Fig. 71).

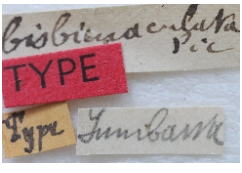
Distribution. Vietnam.

Cistelomorpha bisbimaculata Pic, 1913

(Figs. 79, 80)

Cistelomorpha bisbimaculata Pic, 1913: 11.

79



80

Figs. 79, 80. *Cistelomorpha bisbimaculata* Pic, 1913 (Type): 79- Habitus; 80- labels.

Type locality. Indonesia (Island Sumbava).

Type material. Type specimen: wl: Sumbava [hb] // wl: bisbimaculata / Pic [hb] // rl: TYPE [pb] // pyl: Type [hb], (MNHN).

Remark. The habitus of type specimen as in Fig. 79, 11 mm long. Antennomere 1 red, antennomeres 2-11, tarsi, tibiae, ultimate and penultimate ventrites black. Elytron darker ochre yellow with two small, black spots near apex. Pronotum reddish brown. Labels as in Fig. 80.

Distribution. Indonesia (Island Sumbava).

Cistelomorpha bisbinotata bisbinotata Pic, 1909

Cistelomorpha bisbinotata bisbinotata Pic, 1909: 134.

Type locality. Himalaya.

Remark. The type specimen was not found. A species from Himalaya, yellow, slightly reddish with grey pubescence. Antennae without base, tarsi, tibiae, ultimate and penultimate ventrites black, 11 mm long. Elytron with two black spots.

Distribution. Himalaya.

Cistelomorpha bisbinotata subobliterata Pic, 1909

Cistelomorpha bisbinotata subobliterata Pic, 1909: 134.

Type locality. Himalaya.

Remark. The type specimen was not found. Elytron only with one black spot.

Distribution. Himalaya.

Cistelomorpha calida calida Allard, 1894

Cistelomorpha calida calida Allard, 1894: 153.

Type locality. South India, Madura.

Remark. The type specimen was not found. The species 12-13 mm long, eliptically shaped, oval, convex, shiny, yellow orange, with tarsi, tibiae, antennomeres 2-11 and ultimate ventrite black.

Distribution. India.

Cistelomorpha calida nigromaculata Allard, 1894

Cistelomorpha calida nigromaculata Allard, 1894: 153.

Type locality. South India, Madura.

Remark. The type specimen was not found. Species eliptically shaped, oval, convex, shiny, yellow orange, with tarsi, tibiae, antennomeres 2-11 and ultimate ventrite black. Elytron with a small black spot near middle of elytral length.

Distribution. India.

Cistelomorpha calida nigropicta Allard, 1894

Cistelomorpha calida nigropicta Allard, 1894: 153.

Type locality. South India, Madura.

Remark. The type specimen was not found. Species eliptically shaped, oval, convex, shiny, yellow orange, with tarsi, tibiae, antennomeres 2-11 and ultimate ventrite black. Elytron with one small black spot near middle of elytral length and second larger, oblique, a black spot in humeral part of elytron.

Distribution. India.

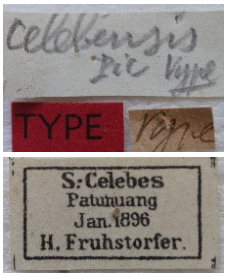
Cistelomorpha celebensis Pic, 1912
(Figs. 81, 82)

Cistelomorpha celebensis Pic, 1912: 53.

Type locality. Indonesia, Island Celebes, Patuhuang.

Type material. Type specimen: pgl with bf: S: Celebes / Patuhuang / Jan.1896 / H. Fruhstorfer. [hb] // pgl: celebensis / Pic type [hb] // rl: TYPE [pb] // bsl: type [hb], (MNHN).

81



82

Figs. 81, 82. *Cistelomorpha celebensis* Pic, 1912 (Type): 81- Habitus; 82- labels.

Remark. The habitus of the type specimen as in Fig. 81, dorsal surface of body yellow with a small, black, longitudinal strip in humeral part of elytron near side margin. Labels as in Fig. 82.

Distribution. Indonesia (Island Celebes).

Cistelomorpha humeralis humeralis Allard, 1894

Cistelomorpha humeralis humeralis Allard, 1894: 153.

Type locality. India, Madura.

Remark. Type specimen was not found. Species reddish brown, elytron with large, oblique, black spot in basal quarter. Antennae (except antennomere 1), tibiae, tarsi and ultimate ventrite black. Rest of abdomen yellow.

Distribution. India.

Cistelomorpha humeralis bimaculata Pic, 1907

(Figs. 83, 84)

Cistelomorpha humeralis bimaculata Pic, 1907: 120.

Type locality. India, Kerala state (Travancore), Wallardi.

Type material. Type specimen: bl with bf: WALLARDI / (Travancore) / R. P: FAVRE / 5. 9. 1903 [pb] // Cistelomorpha / humeralis var / bimaculata [hb] // rl: TYPE [pb] // bl: type [hb], (MNHN).

Remark. The habitus of the type specimen as in Fig. 81, head, pronotum and antennomere 1 orange red, antennomeres 2-11, tibiae and tarsi black. Femora yellow with narrow, black strip at

apex. Elytron with two large black spots (as in Fig. 81).

83

84

Figs. 83, 84. *Cistelomorpha humeralis bimaculata* Pic, 1907 (Type): 83- Habitus; 84- labels.

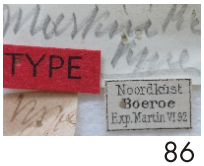
Distribution. India, Kerala state.

***Cistelomorpha martini* Pic, 1912**

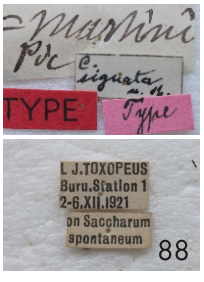
(Figs. 85-90)

Cistelomorpha martini Pic, 1912: 53.
= *signata* Borchmann **unpublished name**

85



86



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Figs. 85-90. Figs. 85, 86: *Cistelomorpha martini* Pic, 1912: 85- Habitus (Type MNHN); 86- labels (Type MNHN); Figs. 87-90: *Cistelomorpha signata* Borchmann unpublished name; 87- Habitus; 88- labels; 89- elytra, dorsal aspect; 90- abdomen, lateral aspect.

Type locality. Indonesia, Molucas, Buru island.

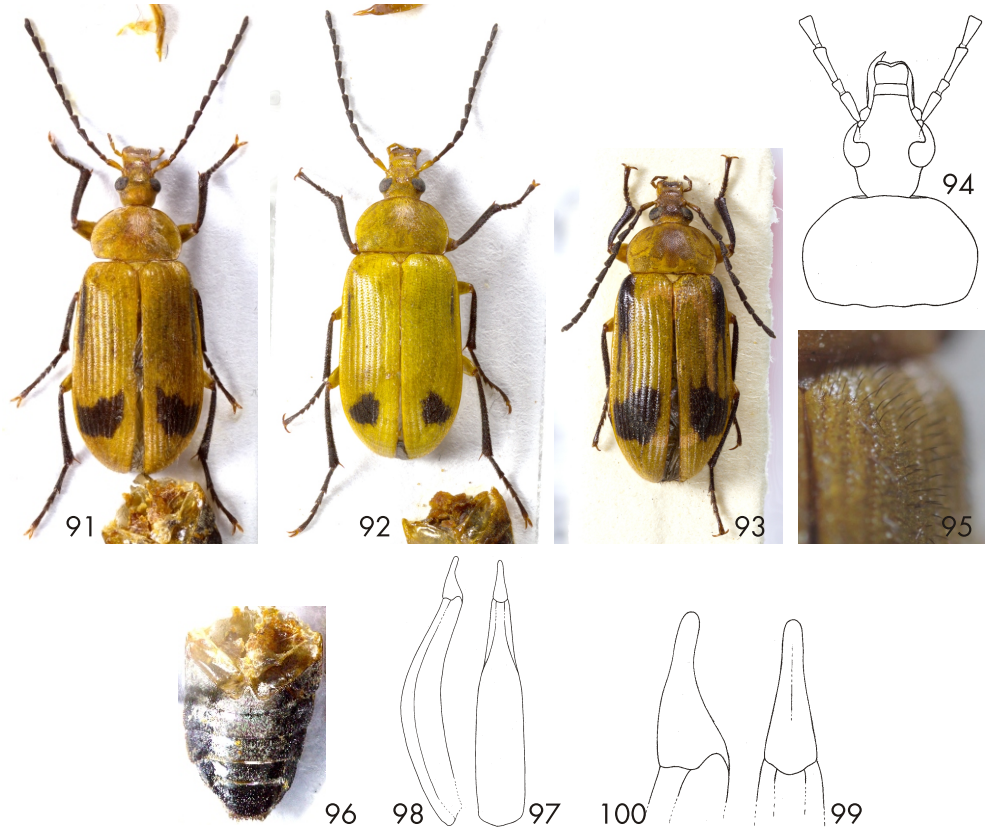
Type material. Type specimen (*C. martini* Pic, 1912): pgl with bf: Noordkust / Boeroe / Exp.Martin VI 92 [pb] // pgl: nartini Pic / type [hb] // rl: TYPE [pb] // bsl: type [pb], (MNHN).
Two specimen of *Cistelomorpha signata* Borchmann unpublished name, (one in MNHN, second in ZMUH): pgl: L J. TOXOPEUS / Buru.Station 1 / 2-6.XII.1921 [pb] // pgl: on Saccharum / spontaneum [pb] //
wl: C. / signata / n. sp. [hb] // pl: type [hb] {Borchman´s labels}// wl: = martini / Pic [hb] {Pic´s label} // rl: TYPE [pb] {?!}, (MNHN, ZMUH).

Remark. *Cistelomorpha signata* Borchmann was not published. Pic´s opinion is clear (= *martini* Pic). All specimens are from the same locality (Buru island) in Molucas (Indonesia). The habitus as in Figs. 85 and 87.

Distribution. Indonesia (Buru Island in the Molucas).

Cistelomorpha primula sp. nov.

(Figs. 91-100)



Figs. 91-100. *Cistelomorpha primula* sp. nov.: 91- Habitus of male holotype (Thailand: Na Haeo); 92- habitus of paratype (Thailand: Chiang Mai); 93- habitus of paratype (Vietnam); 94- head and pronotum of male holotype; 95- elytron, dorsal aspect; 96- abdomen, ventral aspect; 97- aedeagus, dorsal view; 98- aedeagus, lateral view; 99- aedeagus (apical piece), dorsal view; 100- aedeagus (apical piece), lateral view.

Type locality. Thailand, Loei province, Na Haeo.

Type material. Holotype (♂): yl: Coll. I.R.Sc.N.B. / THAILAND (loei) / Na-Haeo (field res stat) / 15-19.V.2003 Light trap / Leg. J. Constant, / K. Smets & P. Grootaert, (IRSCN). Paratypes: **Thailand:** (5 spec.): ygl: same data as holotype, (IRSCN, VNPC); (3 spec.): ygl: same data as holotype, (IRSCN, VNPC); (7 spec.): ygl: Coll. R.I.Sc.N.B. / Thailand, Loei / Na Haeo 22/V/2000 / Station 20007 / Leg.: P. Grootaert, (IRSCN, VNPC); (2 spec.): yl: Coll. I.R.Sc.N.B. / THAILAND (Loei) / Na Haeo / Light Trap clearing / 16.V.2003 / Leg. J. Constant / & K Smets, (IRSCN); (1 spec.): yl: Coll. I.R.Sc.N.B. / THAILAND-(Loei) / Na Haeo / Forest Clearing / Light Trap / 16.V.2003 / Leg. Constant & Smets, (IRSCN); (3 spec.): ygl: Coll. I.R.Sc.N.B. / Thailande (Loei) / Na Haeo (bio station) / 05-12.V.2001 / Light trap / Leg.: Constant & Grootaert, (IRSCN, VNPC); (2 spec.): ygl: Coll. I.R.Sc.N.B. / Thailand (Loei) / Na-Haeo (edge pond) / Light trap 17.V.2003 / Leg.: J. Constant & / K. Smets, (IRSCN, VNPC); (1 spec.): ygl: Coll. I.R.Sc.N.B. / Thailande (Loei) / Na Haeo / 23/05/1998 / Leg. P. Grootaert, (IRSCN); (3 spec.): wl: Thailand, Chiang Mai, / Mae Rim, 24-26.V.2014, K. Takahashi leg., (KMTJ, VNPC); (1 spec.): wl: Thailand, Chiang Mai, / Chiang Dao Hill / Resort, 4-6.VI.2014, K. Takahashi leg., (VNPC); (2 spec.): wl: Thailand, Chiang Mai, / Chiang Dao Hill / Resort, 30.V.-2.VI.2017, K. Takahashi leg., (VNPC); (1 spec.): wl: THAILAND bor. / FANG / Hot Spring / 25. 5. 1997 / Lgt. M. Snížek, (VNPC); **Cambodia:** (7 spec.): yl: Coll. I.R.Sc.N.B. / CAMBODIA / Kirirom N.P. / Light Trap Pine forest / 21 IV 2005 / Leg Smets&I.Var, (IRSCN, VNPC); **Vietnam:** (16 spec.): wl: VIETNAM V.84 / Buon Ha Thod / prov. Dak - Lak [hb], (VNPC). The types are provided with one printed red label: Cistelomorpha / primula sp. nov. / HOLOTYPUS [resp. PARATYPUS] / V. Novák det. 2018.

Description of holotype. Habitus as in Fig. 91, body relatively small, elongate oval, convex, from ochre yellow to black, dorsal surface setose, with punctuation and microgranulation, rather matte. BL 9.70 mm. Widest near elytral two thirds; BL/EW 2.58.

Head (Fig. 94) ochre yellow, with reddish brown spots between eyes and in anterior part, distinctly longer than wide, slightly narrower than anterior margin of pronotum, dorsal surface with very sparse and short, pale setation, microgranulation and punctuation, punctures medium sized and shallow. Anterior part with a few long, dark setae near clypeus. Clypeus reddish brown with a few long, dark and pale setae. Mandibles ochre yellow with sides and apex darker, shiny. HL (visible part) 1.84 mm; HW 1.36 mm; HW/PW 0.57. Eyes relatively large, transverse, excised, space between eyes relatively wide; wider than diameter of one eye, approximately as wide as length of antennomere 3 and slightly wider than length of anennomere 1; OI equal to 44.34.

Antennae. Relatively long, distinctly exceeding half body length, with punctuation, microgranulation, and short, dark setation, matte, AL 5.32 mm; AL/BL 0.55. Antennomere 1 ochre yellow, antennomeres 2, 3 dark brown, antennomeres 4-11 black. Antennomeres 4-10 slightly serrate and each distinctly shorter than antennomere 3. Antennomere 2 shortest, antennomere 3 and 11 longest.

RLA: 0.80 : 0.38 : 1.00 : 0.85 : 0.80 : 0.87 : 0.86 : 0.92 : 0.87 : 0.86 : 1.00.

RL/WA: 2.38 : 1.44 : 3.19 : 2.43 : 2.46 : 2.78 : 2.74 : 3.16 : 2.78 : 3.22 : 4.53.

Maxillary palpus. Ochre yellow, with pale setae, slightly shiny. Palpomeres 2, 3 distinctly narrowest at base and widest at apex, with a few long, dark setae. Ultimate palpomere slightly darker than penultimate, longly club-shaped.

Pronotum (Fig. 94). Ochre yellow with reddish brown indistinct spots, transverse, wide, widest near half of lateral margins, with pale (near sides) and dark (on disc) setation, dense medium sized, shallow punctuation and fine microgranulation. Interspaces between punctures narrower than diameter of punctures. PL 1.61 mm; PW 2.39 mm; PI equal to 67.36. Border lines complete, lateral margins arcuate, base very finely bisinuate, at base slightly narrower than base of elytra. Anterior margin straight. Posterior angles roundly obtuse, anterior angles indistinct, roundly obtuse.

Ventral side of body ochre yellow with reddish brown spots, with short pale setation. Abdomen (Fig. 96) black with pale setation, very small and dense punctuation and microgranulation, shiny.

Elytron. Ochre yellow, relatively short and wide, oval, convex, with two black spots (as in Fig. 91), widest near two thirds elytra length, dorsal surface with long pale (mainly near sides) and black (mainly near suture) setation (Fig. 95). Rows of small punctures in elytral striae clearly distinct, elytral intervals slightly convex, with small punctures and microgranulaion. EL 6.25 mm; EW 3.76 mm; EL/EW 1.66.

Scutellum. Relatively large, triangular, ochre yellow, slightly shiny, with very small punctures and a few pale and dark setae.

Elytral epipleura. Well developed, ochre yellow, with pale setation, widest near base, regularly narrowing to ventrite 1, then relatively wide leads parallel.

Legs. Femora strong, ochre yellow with narrowly darker apex, slightly shiny, with microgranulation and pale and dark setation. Black or blackish brown tibiae and tarsi with dark setation, microgranulation and distinct punctuation. Inner side of tibiae with strong setae. Tarsal claws pale reddish brown. RLT: 1.00 : 0.77 : 0.89: 0.77 : 3.96 (protarsus); 1.00 : 0.44 : 0.35 : 0.37 : 1.17 (mesotarsus); 1.00 : 0.46 : 0.30 : 0.83 (metatarsus).

Anterior tarsal claws long with 16 visible teeth.

Aedeagus (Figs. 97-100). Pale brown, slightly shiny. Basal piece rounded laterally and slightly narrowing dorsally. Apical piece narrowly triangular dorsally, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece 1: 4.16.

Female. Dorsal surface of elytra with long, errect, black setation, anterior tarsal claws with 13 teeth.

Variability. Black spots on elytral dorsal surface with different size and shape. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n=55). BL 10.02 mm (8.77-10.92 mm); HL 1.84 mm (1.29-1.84 mm); HW 1.39 mm (1.27-1.56 mm); OI 41.67 (37.72-44.34); PL 1.69 mm (1.40- 1.97 mm); PW 2.58 mm (2.23-2.95 mm); PI 65.32 (62.78-67.47); EL 6.50 mm (5.82-7.32 mm); EW 3.78 mm (3.26-4.23 mm).

Differential diagnosis. Most similar species are *Cistelomorpha callida nigropicta* Allard, 1894 and *Cistelomorpha martini* Pic, 1912. The new species *Cistelomorpha primula* sp. nov. clearly differs from the species *C. callida nigropicta* mainly by smaller body (BL 8.77-10.92 mm), dorsal surface of elytra with black, long setation (Fig. 93), elytral interspaces more flat; while *C. callida nigropicta* has larger body (BL 12-13 mm), dorsal surface of elytra without black, long setation and elytral interspaces distinctly convex.

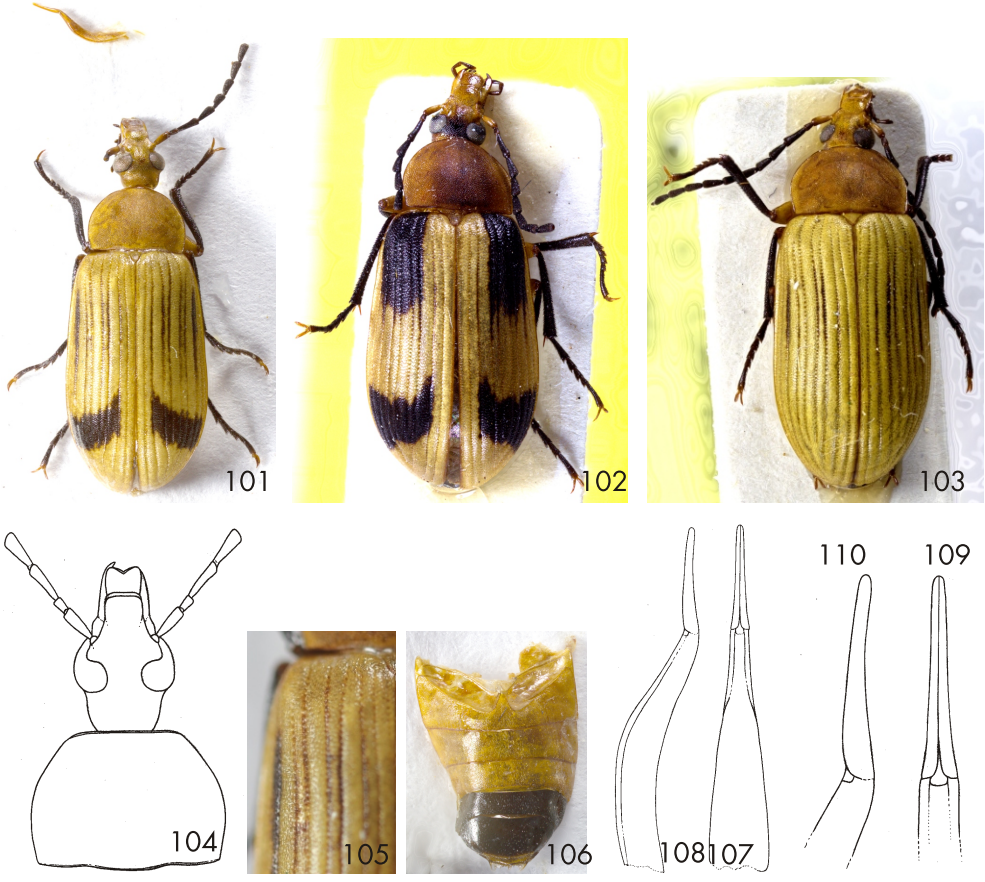
C. primula is distinctly different from a similar species *C. martini* by dorsal surface of elytra with long, black setation, by shape of pronotum (lateral margins more arcuate - Fig. 94) and elytral interspaces more flat; while *C. martini* has dorsal surface of elytra without black, long setation, lateral margins of pronotum only slightly arcuate and elytral interspaces slightly but distinctly convex.

Etymology. The name of the species, a noun in aposition, is the Latin generic name of the flower *Primula veris* (L.).

Distribution. Cambodia, Thailand, Vietnam.

Cistelomorpha pulsatilla sp. nov.

(Figs. 101-110)



Figs. 101-110. *Cistelomorpha pulsatilla* sp. nov.: 101- Habitus of male holotype; 102, 103- habitus of paratype; 104- head and pronotum of male holotype; 105- elytra, dorsal aspect; 106- abdomen, ventral aspect; 107- aedeagus, dorsal view; 108- aedeagus, lateral view; 109- aedeagus (apical piece), dorsal view; 110- aedeagus (apical piece), lateral view.

Type locality. Cambodia, Siem Reap env.

Type material. Holotype (♂): ygl: Coll. I.R.Sc.N.B. / CAMBODIA Siem Reap / 25.V.2005 Light trap / Leg. J. Constant &/ K. Smets, (IRSCN). Paratypes: (6 spec.): same data as holotype, (IRSCN, VNPC); (2 spec.): ygl: Coll. I.R.Sc.N.B. / Cambodia Siem Reap / Beng Melea Temple / 26.X.2003 / IG 30.192 / Leg. Daniel R. Jump, (VNPC); (11 spec.): ygl: Cambodia – 8 KM north / of Sre Noi (road to / Along Vaeng) / Light trap / 29.V.2003 / Leg. J. Constant & / K. Smets, (IRSCN VNPC); (27 spec.): yl: Coll. I.R.Sc.N.B. / CAMBODIA (Siem / Reap Prov) / Kbal Spean,Light trap / 28 V 2005 / Legl. Var&P.Grootaert, (IRSCN, VNPC); (4 spec.): yl: Coll. I.R.Sc.N.B. / CAMBODIA / (Siem Reap prov) / Kbal Spean,Light trap / 28 V 2005 / Leg Var&Grootaert, (IRSCN, VNPC); (3 spec.): ygl: Coll. I.R.Sc.N.B. / CAMBODIA Siem Reap / 25.V.2005 Light trap / Leg. J. Constant & / K. Smets, (IRSCN, VNPC); (3 spec.): yl: Coll. I.R.Sc.N.B. / CAMBODIA / Kirirom N.P. / Light Trap Pine forest / 21 IV 2005 / Leg Smets&I.Var, (IRSCN, VNPC). The types are provided with one printed red label: Cistelomorpha / pulsatilla sp. nov. / HOLOTYPUS [resp. PARATYPUS] / V. Novák det. 2018.

Description of holotype. Habitus as in Fig. 101, body relatively small, elongate oval, convex,

from yellow to black, dorsal surface setose, with punctuation, microgranulation and microrugosities, slightly shiny. BL 9.15 mm. Widest near two thirds elytra length; BL/EW 2.68.

Head (Fig. 104) ochre yellow, shiny, long, distinctly longer than wide, approximately as wide as anterior margin of pronotum, dorsal surface glabrous with punctuation. Posterior part with dense punctuation, interspaces between punctures small, punctuation of anterior part slightly sparser and shallower than in posterior half, interspaces between punctures wider, apical part with distinct microgranulation. Clypeus pale brown with microgranulation and very small punctures. Mandibles ochre yellow, shiny with reddish brown sides and apex. HL (visible part) 1.78 mm; HW 1.23 mm; HW/PW 0.56. Eyes large, transverse, excised, space between eyes narrow; approximately as wide as diameter of one eye, distinctly narrower than length of antennomere 3 and approximately as wide as length of antennomere 1; OI equal to 35.33.

Antennae. Relatively long, with pale setation, punctuation and microgranulation, AL(1-8) 3.90 mm; AL/BL(1-8) 0.43. Antennomeres 1-4 slightly shiny, antennomeres 4-8 rather matte and distinctly serrate. Antennomere 1 pale brown, antennomere 2 brown, antennomeres 3-8 dark brown or black. All antennomeres with a few dark setae on apex. Antennomere 2 shortest, antennomere 3 probably longest.

RLA(1-8): 0.79 : 0.44 : 1.00 : 0.88 : 0.72 : 0.77 : 0.84 : 0.85.

RL/WA(1-8): 2.58 : 1.75 : 2.93 : 2.38 : 1.97 : 2.21 : 2.28 : 2.44.

Maxillary palpus. Brown, with sparse pale setation, small punctures and microgranulation, shiny. Palpomeres 2, 3 distinctly narrowest at base and widest at apex. Ultimate palpomere long, club-shaped.

Pronotum (Fig. 104). Yellow or ochre yellow with indistinct pale brown spots, transverse, wide, widest near half of lateral margins, with short, dark setation, dense shallow, small sized punctuation, interspaces between punctures very narrow, microgranulation not clearly distinct. PL 1.53 mm; PW 2.19 mm; PI equal to 69.86. Border lines complete, lateral margins arcuate, base very finely bisinuate, slightly narrower than base of elytra. Anterior margin straight. Posterior and anterior angles obtuse.

Ventral side of body ochre yellow. Prothorax with short dark setae. Abdomen shiny, with short pale setation, very fine microgranulation and very small punctures. Ventrites 1-3 ochre yellow, ventrites 4 and 5 black (Fig. 106). Ultimate ventrite narrowly ochre yellow in apex.

Elytron. Elongate oval, yellow or ochre yellow with black spots (as in Fig. 101), widest near two thirds elytra length, dorsal surface with short, dark setation (Fig. 105). Rows of small punctures in elytral striae distinct, somewhere brown, darker than elytron itself, elytral intervals with microgranulation and small punctures. EL 5.84 mm; EW 3.42 mm; EL/EW 1.71.

Scutellum. Longly triangular, ochre yellow, shiny, with short dark setae.

Elytral epipleura. Well developed, ochre yellow, relatively narrow, with pale setae and small punctures, widest near base, regularly narrowing to ventrite 1, then leads parallel.

Legs. Long and narrow, slightly shiny, with dark setation. Femora ochre yellow, tibiae and tarsi black. Tibiae with dense punctuation and not clearly distinct microgranulation, with strong setae in outer side. Tarsi with distinct microgranulation. Claws pale brown. RLT: 1.00 : 0.53 : 0.60: 0.62 : 2.65 (protarsus); 1.00 : 0.50 : 0.41 : 0.37 : 1.44 (mesotarsus); 1.00 : 0.63 : 0.46 : 1.04 (metatarsus).

Anterior tarsal claws long with 22 visible teeth.

Aedeagus (Figs. 107-110). Basal piece rounded laterally and regularly narrowing dorsally. Apical piece long and narrow dorsally and laterally. Ratio of length of apical piece to length of basal piece 1: 2.53.

Female. Without distinct differences, anterior tarsal claws with 11 teeth.

Variability. Type specimens vary in shape of spots on elytral dorsal surface (see Figs. 101-103), the type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Specimens (n=57). BL 9.95 mm (8.73-11.07 mm); HL 1.77 mm (1.66-1.84 mm); HW 1.32 mm (1.23-1.46 mm); OI 34.85 (31.96-40.66); PL 1.64 mm (1.34-1.88 mm); PW 2.59 mm (2.19-3.07 mm); PI 63.30 (55.83-69.86); EL 6.54 mm (5.73-7.43 mm); EW 3.84 mm (3.42-4.27 mm).

Differential diagnosis. A unique species. The new species *Cistelomorpha pulsatilla* sp. nov. distinctly differs from other species mainly by elytral interspaces 2, 4 and 6 distinctly narrower than elytral interspaces 3, 5 and 7 and by short dark setation of dorsal surface of elytra.

Etymology. The name of the species, a noun in aposition, is the Latin generic name of the flower *Pulsatilla pratensis* (L.).

Distribution. Cambodia.

***Cistelomorpha quadrinotata* Borchmann, 1934**
(Figs. 111-114)

Cistelomorpha quadrinotata Borchmann, 1934: 14.


111

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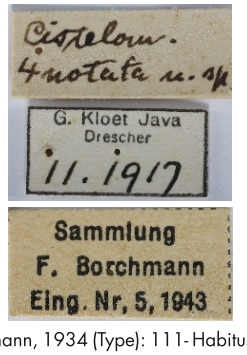



113


114

Figs. 111-114. *Cistelomorpha quadrinotata* Borchmann, 1934 (Type): 111- Habitus; 112- labels; 113- elytra, dorsal aspect; 114- abdomen, lateral aspect.

Type locality. Indonesia, Island Java, G. Kloet.

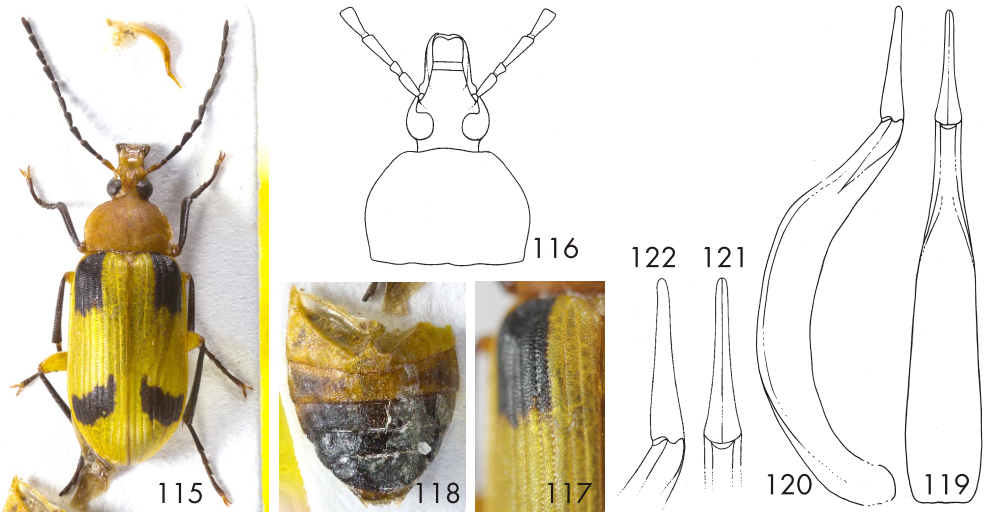
Type material. (1 syntype): wl: Cistelom. / 4notata n. sp. [pb] // wl with bf: G. Kloet Java / Drescher [pb] / II. 1917 [hb] // wl: Sammlung / F. Borchmann / Eing. Nr, 5, 1943, (ZMUH).

Remark. The dorsal surface from ochre yellow to black, habitus as in Fig. 111, head pale brown with black spot between eyes. Antenna black, antennomere 1 pale brown. Pronotum pale brown with darker, not clearly distinct small spots, lateral margins with angle in the middle. Posterior angles rectangular. Elytron ochre yellow with two large black spots and irregular darker places in elytral interspaces as in Fig. 111. The dorsal surface of elytron with short black setation near suture and pale setation near sides. Ventral side of body yellow, ultimate and penultimate ventrites black.

Distribution. Indonesia (Island Java).

Cistelomorpha ranunculus sp. nov.

(Figs. 115-122)



Figs. 115-122. *Cistelomorpha ranunculus* sp. nov.: 115- Habitus of male holotype; 116- head and pronotum of male holotype; 117- elytra, dorsal aspect; 118- abdomen, ventral aspect; 119- aedeagus, dorsal view; 120- aedeagus, lateral view; 121- aedeagus (apical piece), dorsal view; 122- aedeagus (apical piece), lateral view.

Type locality. Thailand, Loei province, Na Haeo.

Type material. Holotype (♂): yl: Coll. I.R.Sc.N.B. / THAILAND (Loei) / Na-Haeo / Light Trap River Bank / 15-V-2003 / Leg. J. Constant, / K.Smets& P. Grootaert, (IRSCN). Paratypes: **Thailand:** (3 spec.): yl: same data as holotype, (IRSCN, VNPC); (4 spec.): yl: Coll. I.R.Sc.N.B. / THAILAND (Loei) / Na-Haeo Light Trap / River Bank / 15-V-2003 / Leg. P. Grootaert / J.Constant,K.Smets, (IRSCN, VNPC); (5 spec): ygl: Coll. I.R.Sc.N.B. / THAILAND (loei) / Na-Haeo (field res stat) / 15-19.V.2003 Light trap / Leg. & P. Grootaert, (IRSCN); (4 spec.): ygl: Coll. I.R.Sc.N.B. / Thailande (Loei) / Na Haeo (bio. station) / 05-12.V.2001 / Light trap / Leg. Constant & Grootaert, (IRSCN, VNPC); (1 spec.): ygl: Coll. I.R.Sc.N.B. / Thailand, Loei / Na Haeo 22.V.2000/ Station 20007 / Leg.: P.Grootaert, (IRSCN); (3 spec): yl: Coll. R.I.Sc.N.B. / THAILAND (Loei) / Na Haeo / Light Trap clearing / 16 V 2003 / Leg J Constant / & K Smets, (IRSCN, VNPC); (1 spec.): yl: Coll. I.R.Sc.N.B. / Thailand, Prov. Loei, / Na Haeo, field Res st. / day catch / 15-19.V.2003 / / Leg J Constant / & K Smets, (IRSCN). The types are provided with one printed red label: Cistelomorpha / ranunculus sp. nov. / HOLOTYPUS [resp. PARATYPUS] / V. Novák det. 2018.

Description of holotype. Habitus as in Fig. 115, body relatively small, elongate oval, convex,

from yellow to black, dorsal surface setose, with punctuation, microgranulation, slightly shiny. BL 9.68 mm. Widest near two thirds elytra length; BL/EW 2.68.

Head (Fig. 116) pale reddish brown, shiny, long, distinctly longer than wide, slightly narrower than anterior margin of pronotum, dorsal surface with punctuation. Posterior part with dense punctuation, interspaces between punctures small, punctuation of anterior part slightly sparser and shallower than in posterior half, interspaces between punctures wider, apical part with a few pale setae. Clypeus pale brown, shiny with a few pale setae, microgranulation and small, shallow punctures. Mandibles ochre yellow, shiny with reddish brown sides and apex. HL (visible part) 1.73 mm; HW 1.40 mm; HW/PW 0.62. Eyes large, transverse, excised, space between eyes narrow; approximately as wide as diameter of one eye, distinctly narrower than length of antennomere 3 and approximately as wide as length of antennomere 1; OI equal to 33.65.

Antennae. Relatively long, with dark, short setation, punctuation and microgranulation, AL 5.39 mm; AL/BL 0.56. Antennomere 1 pale brown and shiny, antennomere 2 shortest, dark brown, antennomeres 3-11 black, antennomeres 4-10 slightly serrate. Antennomeres 4-11 each distinctly shorter than longest antennomere 3.

RLA: 0.73 : 0.38 : 1.00 : 0.85 : 0.77 : 0.78 : 0.79 : 0.86 : 0.81 : 0.81 : 0.96.

RL/WA: 2.71 : 1.64 : 3.33 : 2.60 : 2.43 : 3.11 : 3.15 : 3.10 : 2.92 : 3.04 : 3.72.

Maxillary palpus. Brown, with sparse pale setation, shiny. Palpomeres 2, 3 distinctly narrowest at base and widest at apex. Ultimate palpomere long, longer than penultimate, club-shaped.

Pronotum (Fig. 116). Orange, transverse, wide, widest near half of lateral margins, with short, dark setation, dense shallow, small sized punctuation, interspaces between punctures very narrow, microgranulation not clearly distinct. PL 1.53 mm; PW 2.49 mm; PI equal to 61.45. Border lines complete, lateral margins arcuate, base very finely bisinuate, slightly narrower than base of elytra. Anterior margin straight. Posterior angles slightly and anterior angles strongly obtuse.

Ventral side of body ochre yellow with dense punctuation, punctures very small. Abdomen (as in Fig. 118) rather matte, with pale setation, very fine microgranulation and very small punctures. Ventrites 1 and 2 ochre yellow with darker spot near sides, ventrites 3-5 black. Ultimate ventrite shiny.

Elytron. Elongate oval, bicolour, yellow with black spots (as in Fig. 115), widest near two thirds elytra length, dorsal surface with short, dark setation (Fig. 117). Rows of very small punctures in elytral striae distinct, elytral intervals with microgranulation and small punctures. EL 6.42 mm; EW 3.61 mm; EL/EW 1.78.

Scutellum. Longly triangular, yellow, shiny, with very small punctures and microgranulation.

Elytral epipleura. Well developed, basal half ochre yellow, with pale and few dark setae, widest near base, regularly narrowing to ventrite 1, then leads parallel. Apical half yellow with pale setae.

Legs. Long and narrow, slightly shiny, with short, dark setation. Femora yellow with slightly darker apex, tibiae and tarsi black. Tibiae with dense punctuation and microgranulation, with strong setae in outer side. Tarsi with distinct microgranulation. Claws pale brown. RLT: 1.00 : 0.61 : 0.60: 0.57 : 3.40 (protarsus); 1.00 : 0.49 : 0.42 : 0.42 : 1.12 (mesotarsus); 1.00 : 0.38 : 0.32 : 0.82 (metatarsus)

Anterior tarsal claws long with 21 visible teeth.

Aedeagus (Figs. 119-122). Pale brown, shiny. Basal piece rounded laterally and slightly narrowing dorsally. Apical piece long and narrow dorsally and laterally. Ratio of length of apical piece to length of basal piece 1: 3.30.

Female. Without distinct differences, anterior tarsal claws with 11 teeth.

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Specimens (n=22). BL 9.95 mm (8.91-10.90 mm); HL 1.59 mm (1.50-1.73 mm); HW 1.42 mm (1.27-1.52 mm); OI 37.02 (32.11-41.82); PL 1.64 mm (1.51-1.79 mm); PW 2.68 mm (2.47-3.09 mm); PI 61.04 (57.93-63.37); EL 6.73 mm (5.88-7.40 mm); EW 3.87 mm (3.52-4.22 mm).

Differential diagnosis. Similar species are *Cistelomorpha primula* sp. nov., *Cistelomorpha callida nigropicta* Allard, 1894 and *Cistelomorpha martini* Pic, 1912. *Cistelomorpha ranunculus* sp. nov. is clearly different from the species *C. primula* mainly by dorsal surface of elytra without long, black setation, by narrower shape of pronotum (Fig. 116) and by shape of aedeagus (Figs. 119-122); while *C. primula* has dorsal surface of pronotum with long, black setation, pronotum is wider (Fig. 94) and aedeagus as in Figs. 97-100.
C. ranunculus distinctly differs from the species *C. callida nigropicta* by smaller body (BL 8.91-10.90 mm) and by flat elytral interspaces; while *C. callida nigropicta* has larger body (12-13 mm) and elytral interspaces distinctly convex.
C. ranunculus is clearly different from the species *C. martini* mainly by lateral margins of pronotum strongly arcuate and by black ventrites 3-5; while *C. martini* has lateral margins of pronotum slightly arcuate and black ventrites are ultimate and penultimate.

Etymology. The name of the species, a noun in aposition, is the Latin generic name of the flower *Ranunculus acer* L.

Distribution. Thailand.

Cistelomorpha renardii Fairmaire, 1894

Cistelomorpha renardii Fairmaire, 1894: 29.

Type locality. India, Bengal, Barway.

Remark. The type specimen was not found. The species is similar to *Cistelomorpha axillaris* Fairmaire, 1894 but it has a large black triangular spot on elytra.

Distribution. India, Bengal.

Cistelomorpha semirubra Pic, 1915
(Figs. 123, 124)

Cistelomorpha semirubra Pic, 1915: 8.

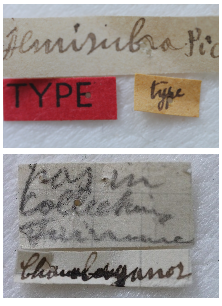
Type locality. India, Chambaganor.

Type material. (Holotype): wl: Chambaganor [hb] // wl: pas in / collectio / Fairmaire [hb] // pgl: semirubra Pic [hb] // rl: TYPE [pb] // yl: type [hb], (MNHN).

Remark. Habitus as in Fig. 123. A unique species with orange red elytron with one humeral black spot and two smaller longitudinal spots in apical third. Scutellum, pronotum and head,

antennomeres 1-3 and legs ochre yellow. Antennomeres 4-11 black. Labels as in Fig. 124.

123



124

Figs. 123, 124. *Cistelomorpha semirubra* Pic, 1915: 123- Habitus of holotype; 124- labels.

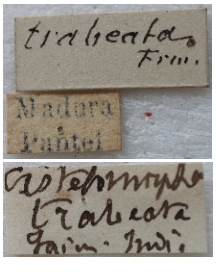
Distribution. India.

***Cistelomorpha trabeata* Fairmaire, 1894**

(Figs. 125, 126)

Cistelomorpha trabeata Fairmaire, 1894: 29.

125



126

Figs. 125, 126. *Cistelomorpha trabeata* Fairmaire, 1894: 125- Habitus of holotype; 126- labels.

Type locality. India, Madura, Puntel.

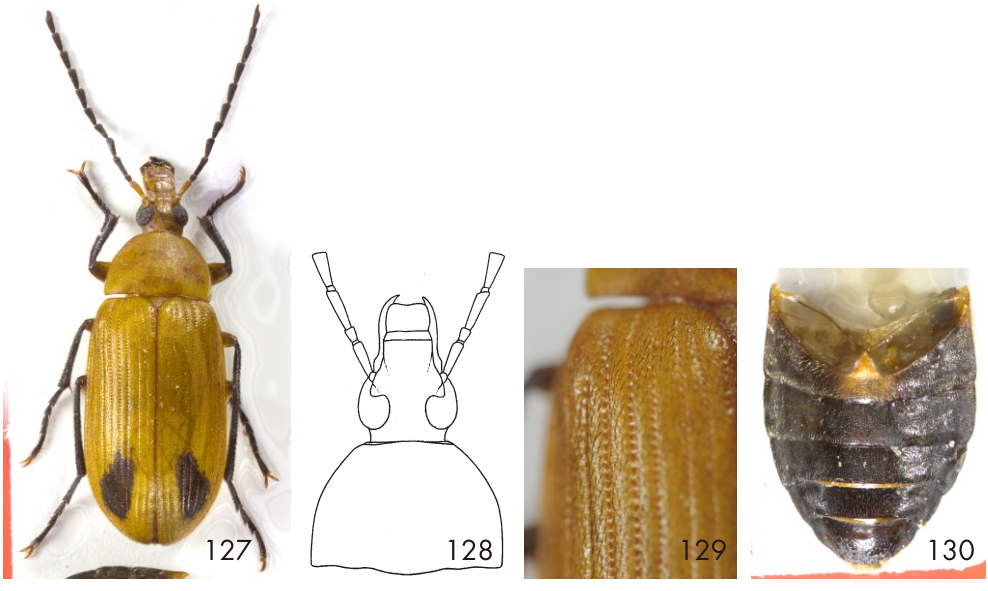
Type material. Type specimen: pbl: Madura / Puntel [pb] // pgl: trabeata / Frm. [hb], (MNHN).

Remark. The habitus as in Fig. 125, dorsal surface yellow or ochre yellow, elytron with large black spots as in Fig. 125, pronotum and head pale brown. Labels as in Fig. 126.

Distribution. India.

Cistelomorpha tussilago sp. nov.

(Fig. 127-130)



Figs. 127-130. *Cistelomorpha tussilago* sp. nov.: 127- Habitus of female holotype; 128- head and pronotum of female holotype; 129- elytra, dorsal aspect; 130- abdomen, ventral aspect.

Type locality. Laos, Champasak province, Bolavens Plateau, Tad Katamtok, 15°08.1´N, 106°38.8´E, 415 m.

Type material. Holotype (female): wl: **LAOS,** Champasak prov. / Bolavens Plateau, waterfall ca. / 2 km E Tad Katamtok, 415 m / 15°08.1´N, 106°38.8´E / Jiří Hájek leg. 10.-12.v.2010, (NMPC). Paratypes: wl: (3 spec.): same data as holotype, (NMPC, VNPC); (1 spec.): wl: **LAOS,** Sekong prov. / ca 12 km S Sekong / Tad Faek waterfalls (at light) / 15°14.7´N, 106°45.1´E, 118 m / Jiří Hájek leg. 8.+12.v.2010, (VNPC). The types are provided with one printed red label: Cistelomorpha / tussilago sp. nov. / HOLOTYPUS [resp. PARATYPUS] / V. Novák det. 2018.

Description of female holotype. Habitus as in Fig. 127, body relatively small, elongate oval, convex, from ochre yellow to black, dorsal surface setose, with punctuation, microrugosities and microgranulation, rather matte. BL 8.76 mm. Widest near two thirds elytra length; BL/EW 2.74.

Head (Fig. 128) pale brown, slightly darker than pronotum or elytron, shiny, long, distinctly longer than wide, approximately as wide as anterior margin of pronotum, dorsal surface with sparse pale setae, punctuation, microgranulation and microrugosities. Posterior part with dense

punctuation, punctures medium sized, interspaces between punctures narrow, punctuation of anterior part slightly sparser and shallower than in posterior half, interspaces between punctures wider, apical part with a few long and dark setae. Clypeus pale reddish brown with microgranulation, surface with long, dark setae and shallow punctures distinctly smaller than in posterior part. Apex of clypeus with dense, yellow setation. Mandibles pale brown, shiny, with reddish brown sides and apex. HL (visible part) 1.87 mm; HW 1.18 mm; HW/PW 0.54. Eyes large, transverse, excised, space between eyes narrow; slightly wider than diameter of one eye, distinctly narrower than length of antennomere 3 and approximately as wide as length of antennomere 1; OI equal to 38.15.

Antennae. Relatively long, with dark setation, punctuation and microgranulation, distinctly exceeding half body length, AL 4.73 mm; AL/BL 0.54. Antennomeres 1-4 slightly shiny, antennomeres 4-11 black, rather matte, antennomeres 4-10 distinctly serrate. Antennomere 1 pale brown, antennomere 2 brown, antennomere 3 dark brown. Antennomere 2 shortest, antennomere 3 longest, distinctly longer than each of antennomeres 4-10.

RLA: 0.78 : 0.36 : 1.00 : 0.78 : 0.81 : 0.89 : 0.89 : 0.93 : 0.85 : 0.87 : 0.99.

RL/WA: 3.03 : 1.50 : 3.87 : 2.31 : 2.35 : 2.74 : 2.79 : 3.11 : 2.67 : 2.67 : 3.10.

Maxillary palpus. Brown, with pale and dark setation, microrugosities and microgranulation, slightly shiny. Palpomeres 2, 3 distinctly narrowest at base and widest at apex. Ultimate palpomere slightly darker than penultimate, long, club-shaped.

Pronotum (Fig. 128). Ochre yellow, slightly transverse, widest in base, with short, dark setation, dense shallow, small sized punctuation and fine microgranulation, interspaces between punctures very narrow. PL 1.29 mm; PW 2.20 mm; PI equal to 58.64. Border lines complete, lateral margins slightly arcuate, base very finely bisinuate, as wide as base of elytra. Anterior margin straight. Posterior angles rectangular, anterior angles obtuse.

Ventral side of body ochre yellow. Prothorax with short dark setae. Meso- and metathorax with short pale setae. Abdomen (as in Fig. 130) black, shiny, with dense pale setation, fine microgranulation and small-sized punctures. Middle of ventrite 1 ochre yellow.

Elytron. Elongate oval, ochre yellow with black spot (as in Fig. 127), widest near two thirds elytra length, dorsal surface with short, dark setation (Fig. 129). Rows of small punctures in elytral striae distinct, elytral intervals with microgranulation and small punctures. EL 5.60 mm; EW 3.20 mm; EL/EW 1.75.

Scutellum. Longly triangular, ochre yellow, shiny, with short dark setae, microgranulation and shallow punctures.

Elytral epipleura. Well developed, ochre yellow, relatively narrow, with dark setae in basal half and pale setae in apical half. Widest near base, regularly narrowing to ventrite 1, then leads parallel.

Legs. Long and narrow, slightly shiny, with dark setation. Femora ochre yellow, tibiae and tarsi black. Tibiae with dense punctuation and microgranulation, with strong setae in outer side. Tarsi with distinct microgranulation. Claws pale reddish brown. RLT: 1.00 : 0.51 : 0.55: 0.63 : 2.38 (protarsus); 1.00 : 0.45 : 0.42 : 0.34 : 1.28 (mesotarsus); 1.00 : 0.40 : 0.32 : 0.81 (metatarsus).

Anterior tarsal claws long, with 12 visible teeth.

Male. Unknown.

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Females (n=5). BL 8.85 mm (8.54-9.52 mm); HL 1.79 mm

(1.73-1.87 mm); HW 1.20 mm (1.18-1.25 mm); OI 38.50 (35.35-40.82); PL 1.42 mm (1.29-1.62 mm); PW 2.29 mm (2.19-2.55 mm); PI 62.07 (58.64-63.53); EL 5.64 mm (5.37-6.15 mm); EW 3.22 mm (3.12-3.44 mm).

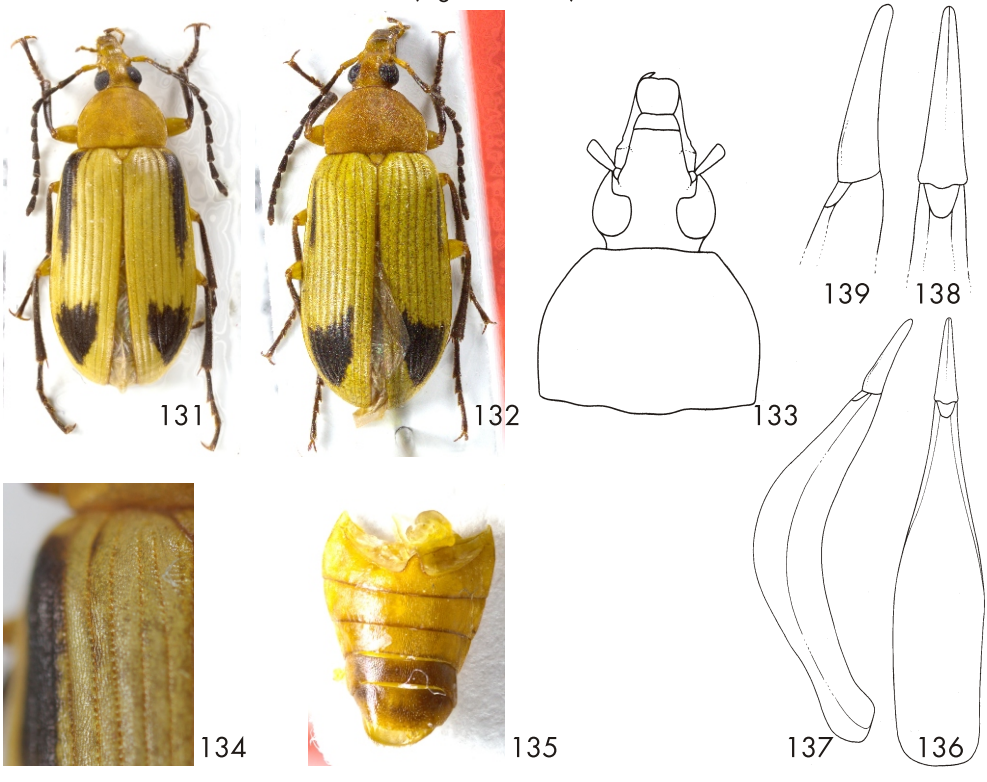
Differential diagnosis. The most similar species is *Cistelomorpha anemone* sp. nov. *Cistelomorpha tussilago* sp. nov. distinctly differs from *C. anemone* mainly by shape of pronotum, which is longer and narrower than in *C. anemone* (Fig. 128), by abdomen almost completely black (middle of ventrite 1 pale brown) as in Fig. 130 and by pale antennomere 1; while *C. anemone* has only ultimate and penultimate ventrites black, pronotum wider and shorter (Fig. 56) and pale antennomeres 1 and 2.

Etymology. The name of the species, a noun in aposition, is the Latin generic name of the flower *Tussilago farfara* L.

Distribution. Laos.

Cistelomorpha verbascum sp. nov.

(Figs. 131-139)



Figs. 131-139. *Cistelomorpha verbascum* sp. nov.: 131- Habitus of male holotype; 132- habitus of paratype; 133- head and pronotum of male holotype; 134- elytra, dorsal aspect; 135- abdomen, ventral aspect; 136- aedeagus, dorsal view; 137- aedeagus, lateral view; 138- aedeagus (apical piece), dorsal view; 139- aedeagus (apical piece), lateral view.

Type locality. Nepal, Mahakali, Kanchapur vicinity, Dsauda river Nature Reserve, N28°53´51´´, E80°13´39-89´´, 160-180 m.

Type material. Holotype (♂): wl: NEP:Mahakali/Kanchanpur vic. / Nature Res.,Dsauda river, LFF / N28°53´51´´, E80°13´89´´, 160m / 1.VII.2017, leg.A.Kopetz 17-19, (NMEG). Paratypes: (3 spec.): wl: NEP:Mahakali/Kanchanpur vic. / Mahandranagar,Shuklaphanta / Nature Res.,Dsauda river, LFF / N28°53´51´´, E80°13´39´´, 180m / 1.VII.2017, leg.A.Kopetz 17-19, (NMEG, VNPC); (1 spec.): NEPAL P: Mahakali/D: Kan- / chanpur Mahendranagar / Hotel Sweet Dream // N28°58´13´´, E81°11´01´´, / 210m, 02.VII.2009 / leg. A. Kopetz LF 60, (NMEG). The types are provided with one printed red label: Cistelomorpha / verbascum sp. nov. / HOLOTYPUS [resp. PARATYPUS] / V. Novák det. 2018.

Description of holotype. Habitus as in Fig. 131, body relatively small, elongate oval, convex, from yellow to black, dorsal surface setose, with punctuation, microgranulation and rugosities, slightly shiny. BL 9.28 mm. Widest near two thirds elytra length; BL/EW 2.69.

Head (Fig. 133) ochre yellow, shiny, long, distinctly longer than wide, approximately as wide as anterior margin of pronotum, dorsal surface with punctuation, fine microgranulation and short and sparse, pale setation. Posterior part with denser punctuation, interspaces between punctures small, punctuation of anterior part slightly sparser and shallower than in posterior half, interspaces between punctures wider, apical part with a few long, pale setae. Clypeus pale brown with microgranulation, small and shallow punctures and long, pale setae. Mandibles ochre yellow, shiny with distinctly darker sides and apex. HL (visible part) 1.76 mm; HW 1.20 mm; HW/PW 0.55. Eyes large, transverse, excised, space between eyes narrow; slightly narrower than diameter of one eye, distinctly narrower than length of antennomere 3 and slightly wider than length of antennomere 1; OI equal to 37.64.

Antennae. Relatively long, reaching half of body length, with punctuation and microgranulation, AL 4.65 mm; AL/BL 0.50. Antennomeres 1-3 slightly shiny with pale setation, antennomeres 4-11 rather matte with pale and dark setation, antennomeres 4-10 distinctly serrate. Antennomere 1 pale brown, antennomere 2 shortest, pale reddish brown, antennomeres 3-11 black. All antennomeres with a few dark setae on apex. Antennomere 3 longest, distinctly longer than each of antennomeres 4-11.

RLA: 0.69 : 0.33 : 1.00 : 0.89 : 0.72 : 0.70 : 0.68 : 0.81 : 0.83 : 0.81 : 0.93.

RL/WA: 2.33 : 1.51 : 3.47 : 2.64 : 2.07 : 2.28 : 2.41 : 2.54 : 2.78 : 2.87 : 3.17.

Maxillary palpus. Pale brown, with sparse pale setation, small punctures, shiny. Palpomeres 2, 3 distinctly narrowest at base and widest at apex. Ultimate palpomere long, club-shaped, with distinctly darker apical half.

Pronotum (Fig. 133). Ochre yellow, transverse, wide, widest near half of lateral margins, with short, pale setation, dense, shallow, small sized punctuation, interspaces between punctures very narrow, microgranulation not clearly distinct. PL 1.48 mm; PW 2.20 mm; PI equal to 67.27. Border lines complete, lateral margins straight in basal half, slightly arcuate in apical half, base very finely bisinuate, slightly narrower than base of elytra. Anterior margin straight. Posterior slightly and anterior angles more obtuse.

Ventral side of body. Prothorax ochre yellow with short dark setae and small punctures. Meso- and metathorax yellow with short, pale setae. Abdomen (as in Fig. 135) shiny, with short pale setation, very fine microgranulation and very small and dense punctuation. Ventrites 1-3 ochre yellow, ventrites 4 and 5 reddish brown.

Elytron. Elongate oval, yellow with two black spots (as in Fig. 131), widest near two thirds elytra length, dorsal surface with short, dark (on disc) and pale (near sides) setation (Fig. 134). Rows of very small punctures in elytral striae distinct, elytral intervals with rugosities, microgranulation and small punctures. EL 6.04 mm; EW 3.45 mm; EL/EW 1.75.

Scutellum. Triangular, yellow, with sides darker, dark and pale setae and small punctures.

Elytral epipleura. Well developed, yellow, with short, pale setae, widest near base, regularly narrowing to metathorax, then leads parallel.

Legs. Long and narrow, femora yellow, slightly shiny, with dark setation and fine microgranulation. Tibiae and tarsi black. Tibiae with punctuation and pale and dark setation, with a few strong setae in outer side. Tarsi with distinct microgranulation. Claws pale reddish brown. RLT: 1.00 : 0.66 : 0.63: 0.63 : 2.00 (protarsus); 1.00 : 0.50 : 0.49 : 0.46 : 1.57 (mesotarsus); 1.00 : 0.42 : 0.34 : 0.83 (metatarsus).

Anterior tarsal claws long with 25 visible teeth.

Aedeagus (Figs. 136-139). Ochre yellow, sides of basal piece and apical piece reddish brown. Basal piece rounded laterally and parallel in basal half, regularly narrowing dorsally in apical half. Apical piece narrow, longly triangular dorsally and beak shaped laterally. Ratio of length of apical piece to length of basal piece 1: 4.35.

Female. Without distinct differences, anterior tarsal claws with 11 teeth.

Variability. The type specimens somewhat vary in colouring of dorsal surface of elytra (Figs. 131, 132) and in size; each character is given as its mean value, with full range in parentheses. Specimens (n=5). BL 9.92 mm (9.15-10.83 mm); HL 1.62 mm (1.43-1.76 mm); HW 1.33 mm (1.20-1.47 mm); OI 36.85 (35.04-38.10); PL 1.69 mm (1.48-1.84 mm); PW 2.44 mm (2.12-2.78 mm); PI 69.71 (66.19-76.42); EL 6.60 mm (6.04-7.28 mm); EW 3.84 mm (3.45-4.17 mm).

Differential diagnosis. The most similar species is *Cistelomorpha callida nigropicta* Allard, 1894. *Cistelomorpha verbascum* sp. nov. distinctly differs from the species *C. callida nigropicta* mainly by smaller body (BL 9.15-10.83 mm), by abdomen ochre yellow, ultimate and penultimate ventrites brown and antennomeres 1 and 2 ochre yellow; while *C. callida nigropicta* has larger body (BL 12-13 mm), ultimate ventrite black and only antennomere 1 yellow.

Etymology. The name of the species, a noun in aposition, is the Latin generic name of the flower *Verbascum thapsiforme* Schrad.

Distribution. Nepal.

Cistelomorpha viola sp. nov.

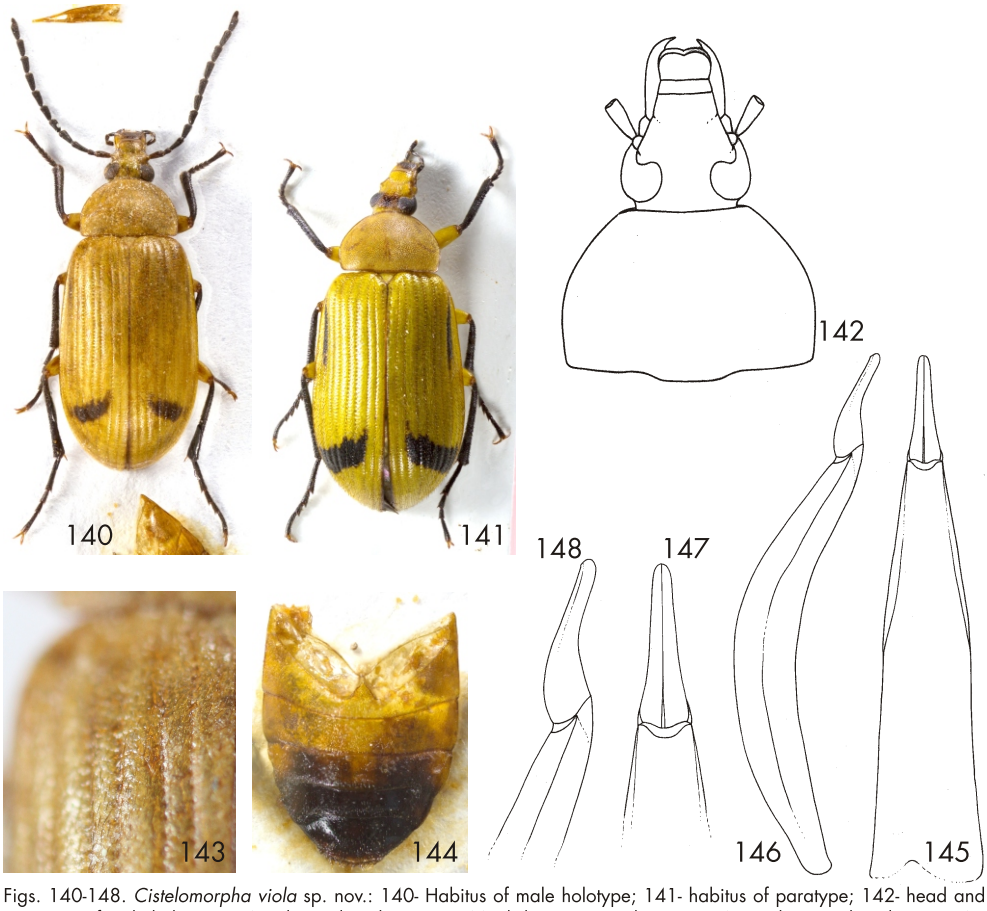
(Figs. 140-148)

Type locality. Western Malaysia, Kelantan province, 40 km N of Gua Musang, Gunung Berangkat, Kampong Riek, 1100 m.

Type material. Holotype (♂): wl: MALAYSIA: KELANTAN, / Pergau Dam, 101°43´50´´E / 5°35´54´´ N, 750 m / 1.V.2009 J.Ng! // wl: Museo Zoologico / "La Specola" / num. Mag. 2884, (MNFI). Paratypes: (4 spec.): wl: MALAYSIA W, Kelantan, / 40 km N of Gua Musang, / 1100m, Gunung Berangkat / Kampong Riek, 15.v.-8.vii. / 2017, P. Čechovský lgt., (VNPC). The types are provided with one printed red label: Cistelomorpha / viola sp. nov. / HOLOTYPUS [resp. PARATYPUS] / V. Novák det. 2018.

Description of holotype. Habitus as in Fig. 140, body small, elongate oval, convex, from ochre yellow to black, dorsal surface setose, with punctuation and microgranulation, rather matte. BL 8.46 mm. Widest near two thirds of elytra length; BL/EW 2.54.

Head (Fig. 142) long, distinctly longer than wide, dorsal surface with microgranulation and coarse punctuation, punctures medium sized. Posterior and anterior part ochre yellow, clypeus distinctly darker, brown, with long, dark and pale setae, distinctly excised in the middle of apex. Mandibles ochre yellow with darker margins and apex. HL (visible part) 1.50 mm; HW 1.24 mm; HW/PW 0.55. Eyes relatively large, transverse, distinctly excised, space between eyes relatively wide; wider than diameter of one eye, slightly wider than length of antennomere 3; OI equal to 40.57.



Figs. 140-148. *Cistelomorpha viola* sp. nov.: 140- Habitus of male holotype; 141- habitus of paratype; 142- head and pronotum of male holotype; 143- elytra, dorsal aspect; 144- abdomen, ventral aspect; 145- aedeagus, dorsal view; 146- aedeagus, lateral view; 147- aedeagus (apical piece), dorsal view; 148- aedeagus (apical piece), lateral view.

Antennae. Relatively long, slightly exceeding half body length, black, with microgranulation and punctuation, short and dense, dark and pale setation, rather matte. Antennomere 1 dark brown. AL 4.34 mm; AL/BL 0.53. Antennomeres 4-10 slightly serrate, distinctly widest in apex. Antennomere 2 shortest, antennomeres 8-11 each distinctly longer than antennomere 3, antennomere 11 longest.

RLA: 0.80 : 0.43 : 1.00 : 1.03 : 0.94 : 0.94 : 0.92 : 1.16 : 1.14 : 1.15 : 1.33.

RL/WA: 3.40 : 1.93 : 2.35 : 2.00 : 2.06 : 2.23 : 2.34 : 2.41 : 2.53 : 2.73 : 3.32.

Maxillary palpus. Dark brown, with pale setation and punctuation (punctures very small), slightly shiny. Palpomeres 2, 3 distinctly narrowest at base and widest at apex, with a long pale setae. Ultimate palpomere long, widest in apex, club-shaped.

Pronotum (Fig. 142). Ochre yellow, transverse, wide, widest near half of lateral margins, with dark and pale setation, dense, shallow, medium sized punctuation and fine, not clearly distinct microgranulation. Interspaces between punctures narrower than diameter of punctures. PL 1.37 mm; PW 2.25 mm; PI equal to 60.89. Border lines complete, lateral margins arcuate, base straight, slightly narrower than base of elytra. Anterior margin straight. Posterior angles slightly obtuse, anterior angles roundly obtuse.

Ventral side of body ochre yellow, with short and sparse pale setation and punctuation. Abdomen (as in Fig. 144), ventrites 1and 2 pale brown with middle ochre yellow, ventrite 3 black, in middle and near sides pale brown, ventrites 4 and 5 black.

Elytron. Bicolour, ochre yellow with two black spots (one elongate in humeral part near lateral margin, the second transverse in apical third (as in Fig. 140), relatively short and wide, oval, convex, widest near two thirds elytra length. Dorsal surface with long, dark setation (Fig. 143). Rows of small punctures in elytral striae distinct, elytral intervals distinctly convex, with microgranulation and sparse, small, shallow punctures. EL 5.59 mm; EW 3.33 mm; EL/EW 1.68.

Scutellum. Longly triangular, ochre yellow as elytron itself, rather matte, with fine microgranulation, long, darker setae and a few punctures.

Elytral epipleura. Well developed, ochre yellow, with pale setae, widest near base, regularly narrowing to ventrite 1, then leads parallel.

Legs. Long and narrow, slightly shiny, with short, dark setation. Femora ochre yellow with slightly darker apex, tibiae and tarsi black. Tibiae with dense and coarse punctuation and microgranulation, with strong setae in outer side. Tarsi with distinct microgranulation. Claws ochre yellow. RLT: 1.00 : 0.60 : 0.51: 0.71 : 2.80 (protarsus); 1.00 : 0.43 : 0.46 : 0.48 : 1.33 (mesotarsus); 1.00 : 0.41 : 0.36 : 0.82 (metatarsus).

Anterior tarsal claws long with 15 visible teeth.

Aedeagus (Figs. 145-148). Pale brown, shiny. Basal piece rounded laterally and narrowing dorsally. Apical piece elongate, narrowly triangular dorsally, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece 1: 4.11.

Female. Without distinct differences, anterior tarsal claws with 10 teeth.

Variability. The type specimens somewhat vary in colouring of dorsal surface of elytra (Figs. 140, 141) and in size; each character is given as its mean value, with full range in parentheses. Specimens (n=5). BL 9.02 mm (8.46-9.35 mm); HL 1.36 mm (1.20-1.50 mm); HW 1.21 mm (1.11-1.26 mm); OI 43.03 (40.57-45.10); PL 1.49 mm (1.37- 1.64 mm); PW 2.47 mm (2.25-2.61 mm); PI 60.49 (58.00-62.84); EL 6.18 mm (5.59-6.53 mm); EW 3.72 mm (3.33-3.89 mm).

Differential diagnosis. The most similar species is *Cistelomorpha binotata* Pic, 1908. *Cistelomorpha viola* sp. nov. clearly differs from the species *C. binotata* (Figs. 71, 73) by smaller body, by shape of black apical spot and by dorsal surface of elytra with short, black setation; while *C. binotata* has larger body, shape of small apical spot as in Fig. 71 and dorsal surface of elytra covered by short pale setation.

Etymology. The name of the species, a noun in aposition, is the Latin generic name of the flower *Viola odorata* (L.).

Distribution. Malaysia.

LIST OF *CISTELOMORPHA* L. REDTENBACHER SPECIES WITH BICOLOUR DORSAL SURFACE

***Cistelomorpha atriceps* group**

Cistelomorpha atriceps Pic, 1915	Vietnam
Cistelomorpha adonis sp. nov.	Cambodia
Cistelomorpha borchmanni sp. nov.	Laos, Vietnam
=*quadriplagiata* Borchmann unpublished name	
Cistelomorpha gagea sp. nov.	Laos

***Cistelomorpha atricollis* group**

Cistelomorpha atricollis Pic, 1924	The Philippines
Cistelomorpha basalis Borchmann, 1934	Indonesia (Island Java)
Cistelomorpha inusitatis Borchmann, 1934	Indonesia (Island Java)
Cistelomorpha nuphar sp. nov.	Thailand

***Cistelomorpha nigrolineata* group**

Cistelomorpha bruneolineata Pic, 1924	The Philippines
Cistelomorpha nigrolineata Allard, 1894	Indie
Cistelomorpha semilineata Pic, 1912	The Philippines

***Cistelomorpha nigrosparsa* group**

Cistelomorpha nigrosparsa Fairmaire, 1899	China (Yunnan)

***Cistelomorpha martini* group**

Cistelomorpha agrymonia sp. nov.	Cambodia, Thailand
Cistelomorpha anemone sp. nov.	Cambodia, Laos, Thailand
Cistelomorpha bina Fairmaire, 1899	China (Taiwan)
Cistelomorpha binotata (Pic, 1908)	Vietnam
Cistelomorpha bisbimaculata Pic, 1913	Indonesia (Island Sumbava)
Cistelomorpha bisbinotata bisbinotata Pic, 1909	Himalaya
Cistelomorpha bisbinotata subobliterata Pic, 1909	Himalaya
Cistelomorpha calida calida Allard, 1894	India
Cistelomorpha calida nigromaculata Allard, 1894	India
Cistelomorpha calida nigropicta Allard, 1894	India
Cistelomorpha celebensis Pic, 1912	Indonesia (Island Celebes)
Cistelomorpha humeralis humeralis Allard, 1894	India
Cistelomorpha humeralis bimaculata Pic, 1907	India
Cistelomorpha martini Pic, 1912	Indonesia (Molucas, Island Buru)
=*signata* Borchmann unpublished name	
Cistelomorpha primula sp. nov.	Cambodia, Thailand, Vietnam
Cistelomorpha pulsatilla sp. nov.	Cambodia
Cistelomorpha quadrinotata Borchmann, 1934	Indonesia (Island Java)
Cistelomorpha renardii Fairmaire, 1894	India
Cistelomorpha ranunculus sp. nov.	Thailand
Cistelomorpha semirubra Pic, 1915	India
Cistelomorpha trabeata Fairmaire, 1894	India

Cistelomorpha tussilago sp. nov.	Laos
Cistelomorpha verbascum sp. nov.	Nepal
Cistelomorpha viola sp. nov.	Malaysia

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