# New genera of Alleculinae (Coleoptera: Tenebrionidae: Alleculinae) from Palaearctic and Oriental Regions. Part V - *Mycetocula* gen. nov.

## Vladimír NOVÁK

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

Taxonomy, description, redescription, new species, new genus, new combinations, key, Coleoptera, Tenebrionidae, Alleculinae, Mycetocula, Palaearctic and Oriental Regions

**Abstract.** A new genus of Alleculinae, *Mycetocula* gen. nov. is described to include three new species: *Mycetocula cameronica* sp. nov. and *M. viktorai* sp. nov. from Malaysia, *M. hainanica* sp. nov. from China (isl. Hainan). *Mycetocula bipartita* (Pic, 1934) comb. nov. from Vietnam (Tonkin: Lao Kay) and *Mycetocula subcruciata* (Pic, 1922) comb. nov. from China (Yunnan), India, Laos, Nepal, Thailand and Vietnam (Tonkin: Hoa Binh) are transferred from the genus *Mycetocharina* Seidlitz, 1891. The new genus is compared with a similar genus *Mycetocharina*. All the new species are illustrated and keyed together. Redescription and new data on distribution of *M. subcruciata* are added – China (Yunnan), India, Laos, Nepal, Thailand.

#### INTRODUCTION

The genus Mycetocharina Seidlitz, 1891 was established by Seidlitz (1891) with type species Allecula orientalis Faust, 1877. Borchmann (1910) knew 10 species, Mader (1928) 12 species and Novák & Pettersson (2008) listed in two subgenera 25 species of Mycetocharina in this Palaearctic genus. Later Pic (1922 and 1934) described two new species from the Oriental Region (Vietnam: Tonkin) as Mycetocharina subcruciata Pic, 1922 and Mycetocharina bipartita Pic, 1934. Both two species differ in basic characters from the Palaearctic genus Mycetocharina and are transferred to the newly described genus Mycetocula gen. nov. as Mycetocula subcruciata (Pic, 1922) comb. nov. as the type species and Mycetocula bipartita (Pic, 1934) comb. nov. Species of Mycetocula differ from species of Mycetocharina mainly by its metatarsomere 1 distinctly longer than metatarsomeres 2-4 together, by protarsomere and mesotarsomere 3 and 4 and metatarsomere 3 distinctly widened and lobed, by metatibia stronger and shorter and anterior tarsal claws with many teeth; while species of Mycetocharina have metatarsomere 1 distinctly shorter than metatarsomeres 2-4 together, distinctly widened and lobed only penultimate tarsomere of each tarsi, metatibia longer and narrower and anterior tarsal claws with only a few teeth. The new species Mycetocula cameronica sp. nov. and Mycetocula viktorai sp. nov. from Malaysia and Mycetocula hainanica sp. nov. from China (Hainan) are described, illustrated and keyed.

Redescription and new data on distribution of *M. subcruciata* are added - China (Yunnan), India, Laos, Nepal, Thailand.

### MATERIAL AND METHODS

Two important morphometric characteristics used for the descriptions of the species of the subfamily Alleculinae, the 'ocular index' dorsally (Campbell & Marshall 1964), is calculated by measuring the minimum distance between the eyes and dividing this value by the maximum dorsal width across eyes, the quotient resulting from this division is converted into an index by multiplying by 100, and 'pronotal index' (Campbell 1965) expresses the ratio of the length of the pronotum along the midline to the width at the basal angles, this ratio is multiplied by 100 for

convenience in handling, are used in this paper as well.

The following codens are used in the paper:

DHBC private collection of David Hauck, Brno, Czech Republic;
KMTJ private collection of Kimio Masumoto, Tokio, Japan;
MNHN Muséum National d'Histoire naturelle, Paris, France;
NHMB Naturhistorisches Museum, Basel, Switzerland;
NMPC National Museum, Praha, Czech Republic;

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

Measurements were made with Olympus SZ 40 stereoscopic microscope with continuous magnification and with Soft Imaging System AnalySIS. Measurements of body parts and corresponding abbreviations used in the text are as follows:

AL - total antennae length; BL - maximum body length; EL - maximum elytral length; EW - maximum elytral width; HL - maximum length of head (visible part); HW - maximum width of head; OI - ocular index dorsally; PI - pronotal index dorsally; PL - maximum pronotal length; PW - pronotal width at base; RLA - ratios of relative lengths of antennomeres 1-11 from base to apex (3=1.00); RL/WA - ratios of length / maximum width of antennomeres 1-11 from base to apex; RLT - ratios of relative lengths of tarsomeres 1-5 respectively 1-4 from base to apex (1=1.00).

Other abbreviations used: bf= black frame; gl= grey label; hb= handwritten black; pb= printed black; pl= pink label; wl= white label; rl= red label.

Moreover, a double slash (//) separates data on different labels and a slash (/) data in different lines.

#### **TAXONOMY**

# Mycetocula gen. nov.

(Figs. 1-18)

Type species: Mycetocula subcruciata (Pic, 1922) **comb. nov.** Mycetocharina subcruciata Pic, 1922: 102.

**Description.** General shape as in Figs. 1, 9 and 14, body elongate, parallel, narrow, Mycetocharina-shaped, dorsal surface somewhat shiny, with pale setation, punctuation and microgranulation. Head (as in Figs. 2, 10 and 15) widest through the eyes, only slightly narrower than base of pronotum, with punctuation, microgranulation and pale setation, anterior part and clypeus paler than posterior part. Eyes very large, transverse, deeply excised by gena, space between eyes very narrow, distinctly narrower than diameter of one eye. Maxillary palpus with fine microgranulation and pale setation. Palpomeres 2 and penultimate palpomere distinctly widest at apex, penultimate palpomere relatively short, palpomere 2 long and narrow, ultimate palpomere large, broadly triangular, axe-shaped. Antenna (as in Figs. 3, 11 and 16) relatively short, reaching approximately half body length. Antennomeres 3-10 distinctly widest at apex, slightly serrate, with dense pale setation, fine microgranulation and small punctures. Antennomeres 2 shortest. Pronotum (as in Figs. 2, 10 and 15) square-shaped, slightly transverse, widest at the middle of side margins, slightly narrower than elytra at base, with microgranulation, dense punctuation and pale setation. Posterior angles slightly roundly obtuse-angled, anterior angles indistinct. Anterior margin more or less straight or very slightly arcuate. Lateral margins more or less parallel in basal half, arcuate in apical part. Elytra elongate, parallel, narrow, with pale setation, slightly shiny. Elytral striae with distinct rows of punctures, elytral interspaces flat or slightly rounded, with microgranulation and very small or small punctures. Elytral epipleura welldeveloped, regularly narrowing to ventrite 1, then leading parallel, with pale setation. Legs long, and narrow, with microgranulation, punctuation and dense, pale setation. Protarsomeres and mesotarsomeres 3 and 4 and metatarsomere 3 widened with membraneous lobes. Metatarsomere 1 distinctly longer than length of metatarsomeres 2-4 together. Aedeagus pale as in Figs. 4, 5, 12, 13, 17 and 18.

**Female.** General shape as in Fig. 6, head and pronotum as in Fig. 7, antenna as in Fig. 8, space between eyes slightly narrower than in male, each of antennomeres 3-11 distinctly shorter than those in male. Body narrow, elongate, parallel, *mycetocharina*-shaped. Anterior tarsal claws with less teeth.

**Differential diagnosis.** Species of *Mycetocula* gen. nov. clearly differ from the species of the closest genus *Mycetocharina* mainly by metatarsomere 1 distinctly longer than metatarsomeres 2-4 together, by protarsomere and mesotarsomere 3 and 4 and metatarsomere 3 distinctly widened and lobed, by metatibia stronger and shorter and anterior tarsal claws with many teeth; while species of the genus *Mycetocharina* have metatarsomere 1 distinctly shorter than metatarsomeres 2-4 together, distinctly widened and lobed only penultimate tarsomere of each tarsus, metatibia longer and narrower and anterior tarsal claws with a few teeth.

**Etymology.** Compound name marking similarity to the genus *Mycetocharina* (*Myceto*-) and genus *Allecula* (-cula). Gender feminine.

**Distribution.** China (Hainan, Yunnan), India, Laos, Malaysia, Nepal, Thailand, Vietnam (Tonkin).

#### **KEY TO THE SPECIES**

- 2 (1) Surface of head and pronotum with dense punctuation.
- 4 (3) Elytra unicolor. 5

- 7 (8) Antennomere 3 distinctly shorter than antennomere 4; space between eyes relatively wide, approximately as wide as diameter of one eye. Habitus as in Fig. 14, head and pronotum as in Fig. 15, antenna as in Fig. 16, aedeagus (Figs. 17 and 18). Malaysia. ........... Mycetocula viktorai sp. nov.

## Mycetocula bipartita (Pic, 1934) comb. nov.

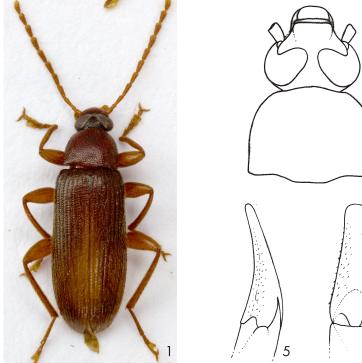
Mycetocharina bipartita Pic, 1934: 24.

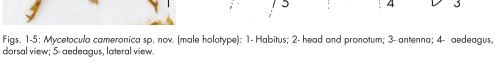
**Type locality.** Vietnam north (Tonkin), Lao Kay.

**Original description of Pic (1934):** 'Mycetocharina bipartita n. sp. [Hétéromère]. Elongatus, subparallelus, luteo pubescens, nitidus, niger, elytris apice late et pedibus testaceis, abdomine apice rufo; capite breve et lato, non dense punctato; antennis crassis; thorace capitepaulo latiore, breve et lato, antice attenuato, sat fortifer et sparse punctato; elytris thorace non latioribus, elongatis, subparallelis, apice attenuatis, minute striatis et fortifer punctatis, intervallis subdepressis, minute punctatis; pedibus sat brevibus, parum validis. Long. 8 mill. Tonkin: Lao Kay. – Caractérisé par sa particulière coloration élytrale. Plus grand et autrement coloré que subcruciata mihi, du Tonkin, qui est testacé avec l'avant-corps roux; les élytres jaunes ont la suture, sauf postérieument, une bande transversale postmédiane et une autre raccourcie antéapicale noires.'

# Mycetocula cameronica sp. nov.

(Figs. 1-5)





**Type locality.** Malaysia, Cameron Highlands, Tanah Rata, Mt. Gunung Jasar.

**Type material.** Holotype (1  $\delta$ ): W Malaysia / Cameron Highlands / Tanah Rata – Mt. Gunung Jasar / 30.1. – 24.2.2008 / P. Viktora Igt., (VNPC). The type is provided with printed red label: Mycetocula cameronica sp. nov. / HOLOTYPUS / V. Novák det. 2015.

**Description of holotype.** Habitus of male holotype as in Fig. 1. Dorsal surface with punctuation, microgranulation and pale setation. Body relatively small, narrow, parallel, elongate, from pale brown legs to black head, BL 6.80 mm, widest near the half elytra length, maximum width 2.27 mm, 3.0 times longer than wide.

Head (Fig. 2) transverse, slightly narrower than pronotum, with dense punctuation and microgranulation, punctures medium-sized. Posterior part black, with sparse setation, anterior half and clypeus pale brown with golden yellow setation. Head widest across eyes, HW 1.18 mm, approximately 0.72 times as wide as pronotal base. HL (visible part) 0.66 mm. Eyes large, transverse, deeply excised. Space between eyes very narrow, slightly narrower than length of antennomere 2; OI equal to 8.40.

Antenna (Fig. 3). Unicolored ochre yellow, with microgranulation, relatively long and dense, pale brown setation. AL 4.12 mm, i.e. reaching 0.61 body length. Antennomeres 1-3 slightly shiny, antennomeres 4-11 more matte, with distinct punctuation. Antennomeres 3-10 distinctly widest at apex. Antennomere 2 shortest, antennomeres 4-11 each longer than antennomere 3. RLA (1-11) equal to 0.62: 0.43: 1.00: 1.19: 1.03: 1.19: 1.19: 1.21: 1.17: 1.07: 1.24. RL/WA (1-11) equal to 1.56: 1.13: 2.89: 2.82: 2.44: 2.82: 2.53: 2.33: 2.50: 2.12: 2.70.

Maxillary palpus pale brown, with microgranulation and pale brown setation. Palpomeres 2-4 distinctly widest at apex, penultimate palpomere shorter than palpomere 2 and ultimate palpomere. Ultimate palpomere in form of long triangle, axe-shaped.

Pronotum (Fig. 2) square-shaped, reddish brown, in base slightly narrower than elytron in base, with golden yellow setation, very fine microgranulation and very dense punctuation, punctures medium-sized and slightly coarse. Space between punctures very narrow. Slightly wider than head through the eyes, at base 1.39 as wide as head across eyes, longest in middle, PL 1.14 mm and widest at base, PW at base 1.64 mm. Pl equal to 69.59. Borders complete and distinct, only in the middle of anterior margin not clearly conspicuous. Posterior margin bisinuate. Posterior angles slightly obtuse-angled, anterior angles indistinct, arcuate, lateral margins parallel, in anterior third regularly rounded. Anterior margin more or less straight.

Elytra brown, near suture distinctly paler, narrow, more or less parallel, elongate with dense, golden yellow setation, EL 5.00 mm; EW 2.27 mm, in base distinctly wider than pronotum in base, widest near the half of elytra length. EL/EW ratio equal to 2.20. Elytral striae with distinct rows of medium-sized punctures, slightly smaller than those on pronotum. Elytral intervals slightly convex, surface with microgranulation and sparse punctuation, punctures small and shallow, slightly shiny.

Elytral epipleura well-developed, with sparse pale setation and punctures, brown as elytron itself in basal half, evenly narrowing to ventrite 1, in apical half distinctly paler and parallel-sided. Scutellum small, brown pentagonal, with a few punctures, setae and fine microrugosities.

Legs narrow, unicolored pale brown, with dense, pale brown setation and fine microgranulation. Tibia long and narrow, slightly dilated anteriorly. Femora stronger, thicker than tibia. Protarsomere and mesotarsomere 3 and 4 and metatarsomere 3 of each tarsus distinctly widened with membranous lobes. RLT 1-5 and 1-4 equal to 1.00: 0.68: 0.80: 0.89: 1.48 (protarsus), 1.00: 0.37: 0.41: 0.54: 0.92 (mesotarsus), and 1.00: 0.27: 0.27: 0.51

(metatarsus).

Both anterior tarsal claws with 23 visible teeth.

Ventral side of body reddish brown, with sparse pale setation and punctuation, punctures medium-sized. Abdomen brown, with pale setation, microgranulation, microrugosities and shallow punctuation, punctures small. Ultimate ventrite finely impressed in the middle.

Aedeagus (Figs. 4, 5) ochre yellow, slightly shiny. Basal piece distinctly rounded laterally and in apical half narrowing dorsally, 5.91 times longer than apical piece. Apical piece beak-shaped in lateral and dorsal view with rounded apex dorsally.

Female. Unknown.

**Differential diagnosis.** (For further details see the key above). Mycetocula cameronica sp. nov. differs from a similar species Mycetocula bipartita (Pic, 1934) mainly by dense punctuation of head and pronotum; while M. bipartita has the punctuation of head and pronotum sparse. M. cameronica is clearly different from a similar species Mycetocula subcruciata (Pic, 1922) mainly by its unicolor elytra; while M. subcruciata has the elytra bicolor. M. cameronica differs from a similar species Mycetocula hainanica sp. nov. mainly by its dark elytra; while M. hainanica has the elytra yellow. M. cameronica is clearly different from a similar species Mycetocula viktorai sp. nov. mainly by its narrow space between eyes, which is approximately as wide as length of antennomere 2; while M. viktorai has the space between eyes distinctly wider than the length of antennomere 2, approximately as wide as diameter of one eye.

**Etymology.** Toponymic, named after the type locality – Cameron Highlands.

**Distribution.** Malaysia.

# Mycetocula hainanica sp. nov.

(Figs. 6-8)

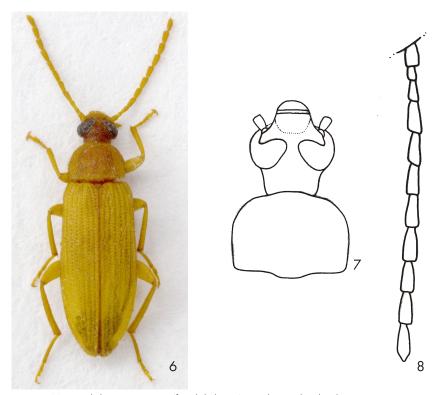
Type locality. China, Hainan isl., Jiangfengling Mts., Tiachi Lake env., Bishu Villa, 18°44′40′′N, 108°50′41′′E; 950 m.

Type material. Holotype (1 ♀): CHINA, Hainan Isl., 9.-11.v.2011 / Jiangfengling Mts., Tiachi Lake env. / BISHU VILLA (at light) / 18°44′40′′N, 108°50′41′′E; 950 m / M.Fikáček, V.Kubeček & L.Li leg., (NMPC). The type is provided with printed red label: Mycetocula hainanica sp. nov. / HOLOTYPUS / V. Novák det. 2015.

**Description of holotype.** Habitus of female holotype as in Fig. 6. Dorsal surface with punctuation, microgranulation and yellow setation. Body small, narrow, elongate, from yellow to reddish brown, BL 5.61 mm, widest near the half elytra length, maximum width 1.82 mm, 3.08 times longer than wide.

Head (Fig. 7) relatively small, transverse, matte. Posterior half reddish brown, with sparse pale setation, microgranulation and dense punctuation, punctures shallow, medium-sized. Anterior half and clypeus ochre yellow with dense microgranulation. Head widest across eyes, HW 0.93 mm, approximately 0.67 times as wide as pronotal base. HL (visible part) 0.54 mm. Eyes large, transverse, deeply excised. Space between eyes very narrow, approximately as wide as antennomere 2 long, distinctly narrower than length of antennomere 3, OI equal to 18.42.

Antenna (Fig. 8) unicolored yellow, relatively short, (2.77 mm, i.e. reaching 0.49 body length), with yellow setation and microgranulation. Antennomeres 1-3 slightly shiny, antennomeres 4-11



Figs. 6-8: Mycetocula hainanica sp. nov. (female holotype): 6-Habitus; 7-head and pronotum; 8-antenna.

more matte. Antennomeres 3-10 distinctly widest in apex, antennomere 2 shortest, antennomeres 4–11 each longer than antennomere 3. RLA (1-11) equal to 0.88:0.55:1.00:1.33:1.28:1.38:1.34:1.41:1.36:1.41:1.42. RL/WA (1-11) equal to 1.75:1.40:2.49:2.66:2.65:2.59:2.46:2.65:2.90:3.60:3.25.

Maxillary palpus yellow, with microgranulation and yellow setation. Palpomeres 2–4 distinctly widest at apex, penultimate palpomere shorter than palpomere 2 and ultimate palpomere. Ultimate palpomere in form of long triangle, axe-shaped.

Pronotum (Fig. 7) ochre yellow, pale reddish brown on disc, at base slightly narrower than elytron at base, with sparse pale setation, microgranulation and dense punctuation, punctures small-sized and very shallow. At base 1.50 as wide as head across eyes, longest at middle, PL 0.91 mm and widest at base, PW at base 1.39 mm. PI equal to 65.47. Borders complete and distinct only in lateral margins and partly at base and anterior margin. Posterior margin very finely bisinuate. Posterior angles slightly obtuse-angled, anterior angles indistinct, arcuate. Lateral margins widest at the middle, straight in basal half, arcuate in anterior part.

Elytra unicolor, yellow, with dense, yellow setation, EL 4.16 mm; EW 1.82 mm, at base slightly wider than pronotum at base, widest near the half elytra length. EL/EW ratio equal to 2.29. Suture distinctly darker. Elytral striae with distinct rows of medium-sized punctures. Elytral intervals flat, surface of elytral intervals with microgranulation and sparse punctuation, punctures very small and shallow, more matte.

Elytral epipleura well-developed, yellow as elytron itself, with one row of punctures in basal half, slightly narrowing to ventrite 1, in apical half parallel-sided, ending before rounded apex of elytron.

Scutellum small, yellow pentagonal, as colour as elytron itself, with sides darker, with fine microgranulation and a few punctures.

Legs yellow, narrow, with yellow setation, fine microgranulation and punctuation, punctures very small. Tibia narrow, slightly dilated anteriorly. Femora thicker than tibiae. Protarsomere and mesotarsomere 3 and 4 and metatarsomere 3 of each tarsus distinctly widened with membranous lobes. Metatarsomere 1 distinctly longer than length of metatarsomeres 2-4 together. RLT 1-5 and 1-4 equal to 1.00: 0.52: 0.56: 0.69: 1.22 (protarsus), 1.00: 0.31: 0.24: 0.23: 0.51 (mesotarsus), and 1.00: 0.29: 0.26: 0.36 (metatarsus).

Both anterior tarsal claws with 7 visible teeth.

Ventral side of body pale brown, with punctuation, punctures medium-sized, punctures of prothorax small-sized. Abdomen ochre yellow, with pale setation, microgranulation and shallow punctuation, punctures small-sized.

Male. Unknown.

**Differential diagnosis.** (For further details see the key above). Mycetocula hainanica sp. nov. differs from a similar species Mycetocula bipartita (Pic, 1934) mainly by its dense punctuation of the head and pronotum; while M. bipartita has the punctuation of head and pronotum sparse. M. hainanica is clearly different from a similar species Mycetocula subcruciata (Pic, 1922) mainly by its unicolor elytra; while M. subcruciata has the elytra bicolor. M. hainanica clearly differs from a similar species Mycetocula cameronica sp. nov., and Mycetocula viktorai sp. nov. mainly by its yellow elytra; while M. cameronica, and M. viktorai has the elytra dark.

**Etymology.** Toponymic, named after the type locality - isl. Hainan (China).

**Distribution.** China (Hainan).

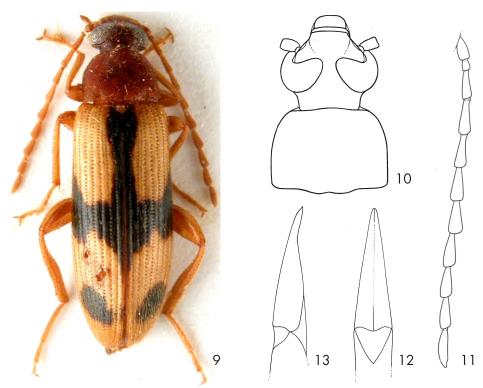
# Mycetocula subcruciata (Pic, 1922) comb. nov.

(Figs. 9-13)

Mycetocharina subcruciata Pic, 1922: 102.

**Type locality.** Tonkin, Hoa Binh.

Other material examined. (6 \$\delta\$): NE INDIA, Meghalaya, 2002, / 3 km E TURA, 1150m, / 25°30′N, 90°14′E, 6.-12.v. / M. Trýzna & P. Benda Igt., (DHBC, VNPC); (1 \$\delta\$): YUNNAN 1500-2500m / 25°22N 98°49E 17-24.5 / GAOLIGONG mts. / Vít Kubáň Ieg., 1959, (VNPC); (1 \$\alpha\$): NW Thailand, 7.-12.5. / Mae Hong Son distr., 1996 / Soppong-Pai, 19°27′, 98°20′ / J.Horák Ieg., 1500m, (VNPC); (1 \$\alpha\$): NW Hailand, NW / Mae Hong Son prov. / pass Soppong – Pai, / 20 km from Soppong / 29.4. -17.5. 2007 / P. Viktora Igt., (VNPC); (1 \$\alpha\$): NW THAILAND / 1.-6.5. 1991 / SOPPONG-PAI 1800m / LEG. PACHOLÁTKO, (NHMB); (1 \$\alpha\$): NE Thailand, 1-15. / 1991, Mae Hong Son / Ban Huai Po, 800- / 1600m, S.Bílý Ieg., (NMPC); (2 \$\alpha\$): Thailand, Chiang Rai, / Wing Pa Pao, / 27.V-1.VI.2014, / K. Takahashi Ieg., (KMTJ); (2 \$\alpha\$): Thailand, Chiang Rai, / Doi Tung, 20.V.2015, / K. Masumoto & T.-C. / Wang Ieg., [LFIIT], (KMTJ, VNPC); (1 \$\alpha\$): Phulvari / Waku 1200-1600m / 9.VI.1985 // E-Nepal / Koshi / M.Brancucci, (NHMB); (2 \$\alpha\$): Tumlingtar 450- / Khandbari 1100m / 27.V.83 // E-Nepal / Arun V. / M.Brancucci, (NHMB, VNPC); (1 \$\alpha\$): LAO, Phongsaly prov., / 21°41-2′N 102°06-8′E, / 28.v-20.vi.2003, / PHONGSALY env., / ~1500m, Brancucci Ieg., (NHMB); (1 \$\alpha\$): LA O S north, 13-24.V.1997, / 15 km NW Louang Namtha, / N21°07.5, E 101°21.0, / alt.750±100 m, / M. Štrba & R. Hergovits Ieg., (NHMB).



Figs. 9-13: Mycetocula subcruciata (Pic, 1922) comb. nov. (male): 9- Habitus; 10- head and pronotum; 11- antenna; 12- aedeagus, dorsal view; 13-aedeagus, lateral view.

**Redescription.** Habitus of male holotype as in Fig. 9. Dorsal surface with punctuation, fine microgranulation and dense, yellow setation. Body narrow, elongate, parallel, from yellow to black, BL 6.68 mm, widest near the half of elytra length, maximum width 2.06 mm, 3.24 times longer than wide.

Head (Fig. 10) reddish brown, relatively small, slightly transverse, with short and sparse yellow setation, punctuation, punctures medium-sized, and fine microgranulation, anterior half and clypeus distinctly paler than posterior part. Head widest across eyes, HW 1.21 mm, approximately 0.77 times as wide as pronotal base. HL (visible part) 0.49 mm. Eyes large, transverse, distinctly excised. Space between eyes very narrow, narrower than diameter of one eye, approximately as wide as antennomere 2 long, OI equal to 16.04.

Antenna (Fig. 11). Relatively long, (4.10 mm, i.e. reaching 0.61 body length), ochre yellow, with short and dense, yellow setation and fine microgranulation, antennomere 1 slightly darker. Antennomeres 1-3 slightly shiny, antennomeres 4-11 more matte, antennomeres 4-10 distinctly serrate. Antennomere 2 shortest, antennomeres 4-11 each longer than antennomere 3. RLA (1-11) equal to 0.93: 0.42: 1.00: 1.44: 1.25: 1.37: 1.37: 1.37: 1.30: 1.24: 1.50. RL/WA (1-11) equal to 2.28: 1.33: 2.82: 3.37: 3.33: 3.36: 2.91: 2.62: 2.66: 2.64: 4.65.

Maxillary palpus ochre yellow, with microgranulation, punctuation and sparse, yellow setation. Palpomeres 2-4 distinctly widest at apex, penultimate palpomere shorter than palpomere 2 and ultimate palpomere. Ultimate palpomere in form of long triangle, axe-shaped.

Pronotum (Fig. 10) pale reddish brown, at base slightly, but distinctly narrower than elytra at base, with long, yellow setation, fine microgranulation and dense punctuation, punctures medium-sized, space between punctures narrow, distinctly narrower than diameter of punctures. At base 1.31 as wide as head across eyes, longest in middle, PL 1.09 mm, widest at the middle of side margins, PW at base 1.58 mm. Pl equal to 68.72. Borders complete and distinct, only in the middle of anterior margin inconspicuous. Posterior margin slightly bisinuate. Posterior angles roundly obtuse-angled, anterior angles indistinct, rounded, lateral margins arcuate in anterior half. Anterior margin straight.

Elytra bicolour, yellow, with black spots (as in Fig. 9) and dense yellow setation. EL 5.10 mm; EW 2.06 mm, at base slightly wider than pronotum base, widest near the half elytra length. EL/EW ratio equal to 2.48. Elytral striae with distinct rows of medium-sized punctures, separated by less than one diameter. Surface of elytral intervals with fine microgranulation and sparse punctuation, punctures small and shallow, slightly shiny.

Elytral epipleura well-developed, yellow as elytron itself, with a few yellow setae and row of punctures in basal half, narrowing to ventrite 1, in apical half yellow setation denser, parallel-sided.

Scutellum small, ochre yellow pentagonal, slightly darker than yellow elytron itself, with small punctures and fine microgranulation, slightly shiny.

Legs. Ochre yellow with ochre yellow setation, fine microgranulation and punctuation, punctures small. Metatibia stronger than protibia and mesotibia, but narrow near base. Metatarsomere 1 long, distinctly longer than length of metatarsomeres 2-4 together. Femora strong, thicker than tibia. Protarsomere and mesotarsomere 3 and 4 and metatarsomere 3 of each tarsus distinctly widened with membranous lobes. RLT 1-5 and 1-4 equal to 1.00: 0.46: 0.56: 0.66: 1.13 (protarsus), 1.00: 0.28: 0.21: 0.30: 0.50 (mesotarsus), and 1.00: 0.30: 0.18: 0.44 (metatarsus).

Both anterior tarsal claws with 15 visible teeth.

Ventral side of body reddish brown, with short pale setation and punctuation, punctures of prosternum small-sized, punctures of mesosternum and metasternum medium-sized. Abdomen ochre yellow, with sparse and long, pale setae and fine microgranulatin.

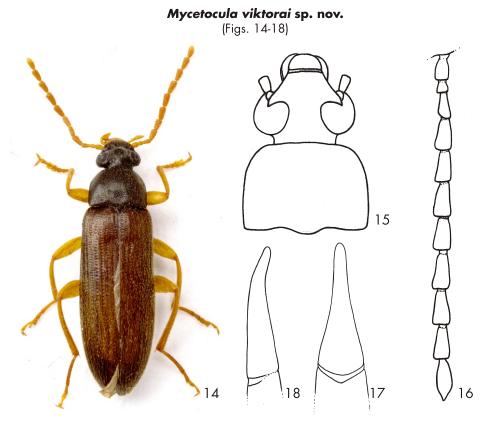
Aedeagus (Figs. 12, 13). Ochre yellow, with fine microgranulation, slightly shiny. Basal piece distinctly and regularly narrowing dorsally, 4.10 times longer than apical piece. Apical piece slightly beak-shaped laterally and elongate triangular in dorsal view.

**Female.** Antenna slightly shorter than in male; space between eyes distinctly wider than in male, wider than length of antennomere 2. Elytra widest near two thirds elytra length. Anterior tarsal claws with 8 visible teeth.

**Variability.** Black spots on elytra variable: specimens from Thailand and one male specimen from India (Meghalaya) have separated spot in middle.

**Differential diagnosis.** (For further details see the key above). *Mycetocula subcruciata* (Pic, 1922) differs from a similar species *Mycetocula bipartita* (Pic, 1934) mainly by its dense punctuation of the head and pronotum; while *M. bipartita* has punctuation of head and pronotum sparse. *M. subcruciata* is clearly different from other similar species mainly by its bicolor elytra; while *Mycetocula cameronica* sp. nov., *Mycetocula hainanica* sp. nov. and *Mycetocula viktorai* sp. nov. have the elytra unicolor.

**Distribution.** China (Yunnan), India, Laos, Nepal, Thailand, Vietnam (Tonkin).



Figs. 14-18: Mycetocula viktorai sp. nov. (male holotype): 14-Habitus; 15-head and pronotum; 16-antenna; 17- aedeagus, dorsal view; 18-aedeagus, lateral view.

**Type locality.** Malaysia West, Cameron Highlands, Tanah Rata, Mt. Gunung Jasar.

**Type material.** Holotype (♂): W Malaysia / Cameron Highlands / Tanah Rata – Mt. Gunung Jasar / 30.1. – 24.2.2008 / P. Viktora lgt., (VNPC). The type is provided with printed red label: Mycetocula viktorai sp. nov. / HOLOTYPUS / V. Novák det. 2015.

**Description of holotype.** Habitus of male holotype as in Fig. 19. Dorsal surface with punctuation, microgranulation and dense, golden yellow setation. Body relatively small, narrow, parallel, elongate, from yellow legs to black pronotum, BL 6.19 mm, widest near the half elytra length, maximum width 1.81 mm, 3.42 times longer than wide.

Head (Fig. 20) black, transverse, slightly narrower than pronotum, with dense punctuation and microgranulation, punctures medium-sized. Setation of posterior part very sparse, anterior half and ochre yellow clypeus with dense yellow setation. Head widest across eyes, HW 0.65 mm, approximately 0.79 times as wide as pronotal base. HL (visible part) 1.06 mm. Eyes large, transverse, distinctly excised. Space between eyes narrow, very slightly narrower than diameter of one eye, distinctly wider than length of antennomere 3, approximately as wide as antennomere 4 long; OI equal to 30.77.

Antenna (Fig. 21). Unicolored ochre yellow, with relatively long, ochre yellow setation and microgranulation, AL 3.06 mm, i.e. reaching 0.49 body length. Antennomeres 1-3 slightly shiny, antennomeres 4-11 more matte, with sparse punctuation. Antennomeres 3-10 distinctly widest at apex. Antennomere 2 shortest, antennomeres 4-11 each longer than antennomere 3. RLA (1-11) equal to 0.95:0.57:1.00:1.40:1.37:1.61:1.65:1.77:1.60:1.66:1.60. RL/WA (1-11) equal to 1.74:1.25:1.88:2.23:1.89:2.04:2.17:2.44:2.15:2.24:2.42.

Maxillary palpus ochre yellow, with microgranulation and ochre yellow setation. Palpomeres 2-4 distinctly widest at apex, penultimate palpomere shorter than palpomere 2 and ultimate palpomere. Ultimate palpomere in form of long triangle, axe-shaped.

Pronotum (Fig. 20) square-shaped, black, at base slightly narrower than elytron at base, with dense and short, pale setation, very fine microgranulation and very dense punctuation, punctures medium-sized and slightly coarse. Space between punctures very narrow. Slightly wider than head through the eyes, at base 1.27 as wide as head across eyes, longest at middle, PL 0.93 mm and widest at base, PW at base 1.35 mm. Pl equal to 68.89. Borders complete and distinct, only in the middle of base and anterior margin indistinct. Posterior margin bisinuate. Posterior angles roundly rectangular, anterior angles indistinct, arcuate, lateral margins parallel, in anterior third regularly rounded. Anterior margin more or less straight.

Elytra brown, narrow, parallel, elongate with dense, golden yellow setation, EL 4.61 mm; EW 1.81 mm, at base distinctly wider than pronotum at base, widest near the half elytra length. EL/EW ratio equal to 2.55. Elytral striae with distinct rows of medium-sized punctures. Elytral intervals slightly convex, surface with microgranulation and sparse punctuation, punctures very small and shallow, slightly shiny.

Elytral epipleura well-developed, brown as elytron itself, with punctures and pale setae, slightly narrowing to ventrite 1 in basal half, in apical half parallel-sided.

Scutellum small, black, triangular, with a few punctures and setae, slightly impressed.

Legs narrow, unicolored ochre yellow with dense, ochre yellow setation and fine microgranulation. Tibia long and narrow, slightly dilated anteriorly. Femora stronger, thicker than tibia. Protarsomere and mesotarsomere 3 and 4 and metatarsomere 3 of each tarsus distinctly widened with membranous lobes. RLT 1-5 and 1-4 equal to 1.00: 0.54: 0.69: 0.81: 1.56 (protarsus), 1.00: 0.36: 0.33: 0.37: 0.65 (mesotarsus), and 1.00: 0.29: 0.23: 0.43 (metatarsus).

Both anterior tarsal claws with 24 visible teeth.

Ventral side of body reddish brown, with short pale setation and punctuation, punctures small-sized. Abdomen brown, with pale setation, microgranulation, microrugosities and shallow punctuation, punctures small.

Aedeagus (Figs. 22, 23) ochre yellow, with fine microgranulation. Basal piece distinctly rounded laterally and near apex narrowing dorsally, 3.68 times longer than apical piece. Apical piece beak-shaped in lateral view and longitudinally triangular dorsally.

#### Female. Unknown.

**Differential diagnosis.** (For further details see the key above). *Mycetocula viktorai* sp. nov. differs from a similar species *Mycetocula bipartita* (Pic, 1934) mainly by its dense punctuation of the head and pronotum; while *M. bipartita* has the punctuation of the head and pronotum sparse. M. *viktorai* is clearly different from a similar species *Mycetocula subcruciata* (Pic, 1922) mainly by its unicolor elytra; while M. *subcruciata* has the elytra bicolor. M. *viktorai* differs from a similar species *Mycetocula hainanica* sp. nov. mainly by its dark elytra; while M. *hainanica* has the elytra yellow. M. *viktorai* is clearly different from similar species *Mycetocula cameronica* sp. nov. mainly

by its space between eyes relatively wide, as wide as diameter of one eye; while M. cameronica has the space between eyes narrow, distinctly narrower than diameter of one eye.

**Etymology.** New species is dedicated to the collector - Petr Viktora, my friend and specialist in beetle family Cerambycidae.

## Distribution. Malaysia.

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#### **REFERENCES**

BORCHMANN F. 1910: Pars 3: Alleculidae. In: JUNK W. & SCHENKLING S. (eds.): Coleopterorum Catalogus. Berlin: W. Junk, 80 pp.

CAMPBELL J. M. 1965: A revision of the genus Charisius (Coleoptera: Alleculidae). The Coleopterist's Bulletin 19: 41-56.

CAMPBELL J. M. & MARSHALL J. D. 1964: The ocular index and its applications to the taxonomy of the Alleculidae (Coleoptera). The Coleopterist's Bulletin 18: 42.

MADER L. 1928: Alleculidae. Columns 901-913. - In: WINKLER A. (ed.) 1924-1932: Catalogus coleopterorum regionis palaearcticae. Wien: Winkler & Wagner. 1698 pp.

NOVÁK V. & PETTERSSON R. 2008: Alleculinae. Pp. 319-339. In: LÖBL I. & A. SMETANA (eds.): Catalogue of Palaearctic Coleoptera, Vol. 5. Tenebrionoidea. Stenstrup: Apollo Books, 670 pp.

PIC M. 1922: Coléoptères hétéromères exotiques nouveaux. Bulletin de la Société zoologique de France 47: 100-102.

PIC M. 1934: Nouveautés diverses. Mélanges Exotico-entomologiques 64: 1-36.

SEIDLITZ G. C. M. von 1891: Fauna Baltica. Die Kaefer (Coleoptera) der deutschen Ostseeprovinzen Russlands. Zweite neu bearbeitete Auflage. Königsberg: Hartungsche Verlagsdruckerei, 10 + lvi + 192 + 818 pp., 1 pl.