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NOTES ON THE LITTLE-KNOWN CAUCASIAN COMB-CLAWED BEETLE *MYCETOCHARA HIRSUTA* PIC, 1925 (COLEOPTERA: TENEBRIONIDAE: ALLECULINAE)

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ЗАМЕЧАНИЯ ПО МАЛОИЗВЕСТНОМУ КАВКАЗСКОМУ ВИДУ ЖУКОВ-ПЫЛЬЦЕЕДОВ *MYCETOCHARA HIRSUTA* PIC, 1925 (COLEOPTERA: TENEBRIONIDAE: ALLECULINAE)

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Abstract. A redescription of a male and female of the rare Caucasian comb-clawed beetle *Mycetochara hirsuta* Pic, 1925 (Coleoptera: Tenebrionidae: Alleculinae) is presented. This taxon was originally described from Borjomi (Georgia) as a Transcaucasian variety of the widespread European *M. maura* (Fabricius, 1792). Later it was synonymized with the latter and recently resurrected as a valid species. The species is known from Georgia and Abkhazia and most similar to the North-Caucasian *M. ingushetica* Nabozhenko et Gadaborsheva, 2024. High qualitative images of a female (holotype) and a male are presented as well as comparative diagnosis.

Аннотация. Дано переописание самца и самки редкого кавказского жука-пыльцееда *Mycetochara hirsuta* Pic, 1925 (Coleoptera: Tenebrionidae: Alleculinae). Первоначально таксон был описан из Боржоми (Грузия) как закавказский вариетет широко распространенного европейского вида *M. maura* (Fabricius, 1792), позже был синонимизирован с последним названием и недавно восстановлен как валидный вид. *Mycetochara hirsuta* известен из Грузии и Абхазии и наиболее близок к северокавказскому *M. ingushetica* Nabozhenko et Gadaborsheva, 2024. Представлены качественные изображения самки (голотипа) и самца и сравнительная характеристика.

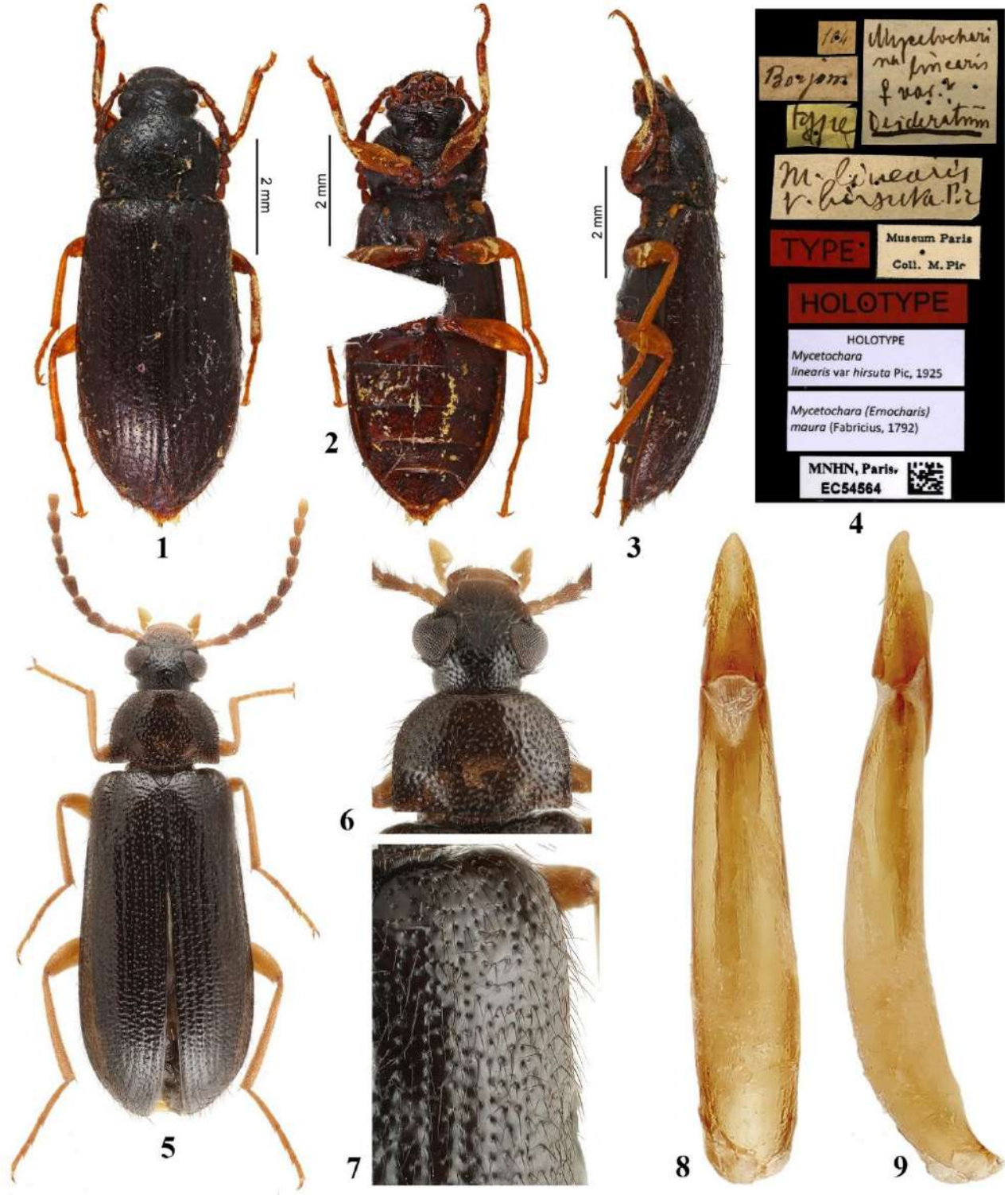
Keywords: rare comb-clawed beetle, *Mycetochara*, Caucasus, holotype, redescription, comparison.

Ключевые слова: редкий пыльцеед, *Mycetochara*, Кавказ, голотип, переописание, сравнение.

Members of the genus *Mycetochara* Guérin-Méneville, 1827 are well studied on the Caucasus after several works of Novák [1, 2] and Nabozhenko with co-authors [3–5]. To the present time, 13 species are known from the Caucasus and Ciscaucasia, belonging to the subgenera *Ernocharis* C.G. Thomson, 1859, *Oculochara* Novák, 2020 and *Pterna* Reitter, 1884 [5].

One of them, *M.* (*Ernocharis*) *hirsuta* Pic, 1925, was erroneously interpreted by some authors and then placed to the junior synonym of European *M. maura* (Fabricius, 1792). Dubrovina with coauthors [6] interpreted the recently described *M. ingushetica* Nabozhenko et Gadaborsheva, 2024 as *M. hirsuta*. Novák with co-authors [7–9] listed *M. hirsuta* as a junior synonym of *M. maura*. Unfortunately, we were unable to find earlier papers and the author of this synonymy. Nabozhenko [4, 10] suggested that one large specimen of *Mycetochara* collected in Abkhazia belongs to *M. abschasica* Pic, 1925. Examination of the holotype of *M. abschasica* shown, that it is strongly different from the mentioned Abkhazian specimen and belongs to a separate species having *M. strejceki* Novák, 2022 as a presumptive junior synonym [5]. Nabozhenko et al. [5] resurrected *M. hirsuta* as a valid name, because *M. maura* is absent on the Caucasus, where it is replaced by a similar species *M. zolotareffi* Reitter, 1896. The mentioned above Abkhazian specimen, collected in 2022 was interpreted as *M. hirsuta* [5]. We received qualitative image of the holotype of *M. hirsuta*, described from Borjomi [11] and the hypothesis

was confirmed. Both specimens, the holotype from Georgia and the male from Abkhazia, belong to the same Transcaucasian species, *M. hirsuta*. Female of this species was unknown, and male original description is very short (only one sentence). Brief redescription of male and female is presented below.



Figs 1–10. *Mycetochara* (*Ernocharis*) *hirsuta*, habitus, details. 1–4 – holotype, female (credit for images is MNHN/Maxime Boutin); 5–9 – male; 1 – habitus, dorsal view; 2 – habitus, ventral view; 3 – habitus, lateral view; 4 – labels; 5 – habitus, dorsal view; 6 – head and pronotum, dorsal view; 7 – puncturation of elytron; 8 – aedeagus, dorsal view; 9 – aedeagus, lateral view

Material and methods

The material (including collected by authors) deposited in the following collection:

MNHN – Muséum national d'Histoire naturelle (Paris, France); ZIN – Zoological institute of the Russian Academy of Sciences (St Petersburg, Russia); ZMMU – Zoological museum of Moscow State University (Moscow). Credit for images of the holotype of *Mycetochara hirsuta* (Figs 1–4) is "MNHN/Maxime Boutin".

Specimens were studied using binocular microscopes Micromed MC-4 Zoom LED (Nablyudatelnye pribory, St Petersburg, Russia). Beetle images were taken with a Canon EOS 5D Mark IV Body, Canon MP-E65MM F2.8 Macro lens and Canon Macro Twin Lite MT-26X-RT flash bulb (Japan), and stacking was done using Stack-shot 3X with enlarged macro rails s/n 3734 (Cognisys Inc. Traverse City, MI, USA); the photosystem is installed on a Kaiser Copy Stand RS 1 reproduction machine (Kaiser Fototechnik GmbH & Co. KG, Buchen, Germany). Images were stacked in Helicon Focus 7.7.4 Pro (Kharkov, Ukraine).

Measurements: ocular index OI = (100 × minimum distance between eyes dorsally) / maximum width of head at eye level [12]; pronotal index PI = (100 × length of pronotum in the middle) / width of pronotum at the level of posterior angles [13].

Results

Mycetochara (*Ernocharis*) *hirsuta* Pic, 1925
(Figs 1–9)

Mycetochara linearis v. nov. *hirsuta* Pic, 1925: 1 [11]. Type locality: "Caucase : Borjom"

Mycetochara (*Ernocharis*) cf. *abschasica*: Nabozhenko, 2022: 40, fig. 1E [10]

Mycetochara abschasica: Nabozhenko, Gadaborsheva, 2024: 337, figs 8, 11, 14 (in comparative diagnosis of *M. ingushetica*) [4].

Type material. Holotype, ♀: "104", "Borjom", "type" (yellow, handwritten by Pic), "*Mycetocharina linearis* ♀ var. ? Deideratum" (handwritten by Pic), "*M. linearis* v. *hirsuta* Pic" (handwritten by Pic), "TYPE" (red, print), "HOLOTYPE" (red, print), "Museum Paris coll. M. Pic" (print), "HOLOTYPE *Mycetochara linearis* var. *hirsuta* Pic, 1925" (white, print), "*Mycetochara* (*Ernocharis*) *maura* (Fabricius, 1792)", "MNHN Paris EC54564 [+QR-code]". M. Pic did not mention how many species were included in the type series, but in a case of one type specimen he added the label "type", therefore, we consider this specimen as a holotype by monotypy.

Material examined. 1♂ (ZIN), Abkhazia, Lidzava part of Pitsunda-Myussera State Nature Reserve, 43°12′03″N, 40°19′02″E, 60 m, on old *Carpinus betulus*, 4.05.2022 (leg. M.V. Nabozhenko); 1♀ (ZMMU), Georgia, Telavi, 10.05.1907 (collector unknown); 1♀ (ZMMU), Georgia, Borjomi, plateau, 28.06.1977 (N. Dubrovin).

Description of male. Comparatively large species, length 7.8 mm. Body slender, narrow, shiny, dark-brown, elytra black, legs and mouthparts antennomeres 3–9 light-brown, other antennomeres ocher (Fig. 5). Body covered with suberected long dark-brown setae.

Head (Fig. 6). Anterior margin of epistoma slightly rounded, lateral margin of genae slightly rounded, strongly converging from eyes to anterior margin of epistome. Frons with sparse coarse puncturation (interpuncture distance near twice as long as puncture diameter), epistome with much smaller punctures; each puncture bears long suberected setae. Head ventrally and laterally with long smooth wrinkles along posterior edge of eyes, with very sparse and fine puncturation. Eyes moderate in size, interocular space 1.18 times as long as transverse section of one eye. OI = 39.57.

Prothorax. Pronotum transverse (1.24 times as wide as long), widest at base, 1.32 times as wide as head; PI = 68.64 (Fig. 6). Lateral margins rounded at anterior two thirds and almost straight at basal third, converging from base to anterior margin. Anterior margin slightly rounded, base bisinuate, middle portion slightly protruded. Anterior angles not expressed, pronotum widely rounded antero-laterally; posterior angles acute. Edges of pronotum not margined. Disc slightly convex with two oblique impressions at base laterally. Puncturation of disc coarse and sparse, punctures round, interpuncture distance subequal to puncture diameter; each puncture bears long subrecumbent light-reddish seta. Prothoracic hypomera and prosternum shiny, with fine and sparse puncturation and setae shorter than on disc.

Pterothorax. Elytra elongate, widened after middle when completely closed, 1.4 times wider at base (immediately behind humeral angles) than base of pronotum (Fig. 5). Humeral angles widely rounded. Striae consist of coarse round dense punctures, each interstria contains one irregular row of large coarse punctures;

strial punctures slightly larger than interstrial ones (Fig. 7); each puncture bears subrecumbent black setae. Mesoventrite and metepimera with dense and coarse puncturation; mesepisterna and mesepimera with sparse irregular puncturation; metaventrite convex, coarsely punctured at anterior portion and sparser punctured at basal half.

Legs slender, long, ochre; profemora shortest, metafemora longest; all tibiae straight; each protarsal claw with 7/8 teeth on inner side.

Abdomen. Abdominal ventrites punctured by sparse and moderately coarse raduliform punctures and covered with recumbent dark setae. Aedeagus with basal piece 3.15 times longer than parameres. Parameres thickened dorso-ventrally, dorsally with evenly rounded lateral margins, acute at apex, slightly S-shaped laterally, with rows of strong spines laterally (Figs 8, 9). Penis smooth, without sculpture (Fig. 9).

Description of female (except for sexual dimorphism) (Figs 1–3). Body length 8 mm. Body more robust, large, with strongly elongate elytra, widest after middle; legs and antennae reddish, with darkened middle antennomeres, antennomeres 4–8 strongly widened. Punctures in interstriae the same as in male, coarse and large. Pronotum widest at middle or slightly before middle, postero-lateral angles acute; lateral margins of pronotum widely emarginated at basal two thirds.

Comparison. This species is most similar to *M. ingushetica*. Comparative diagnosis of males of *M. zolotareffi*, *M. ingushetica* and *M. hirsuta* (as *M. abschasica*) were presented in Nabozhenko and Gadaborsheva [4]. Two latter species are the most similar in the large size and comparatively (with prothorax) long elytra. Females of *M. ingushetica* and *M. hirsuta* are different in the shape of the antennomeres 4–8, which are much more widened in *M. hirsuta*.

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