

**NEW AND LITTLE KNOWN CERAMBYCIDAE
FROM CENTRAL ASIA
(Coleoptera, Cerambycidae)**

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Abstract. *Turkaromia gromenkoi* sp. n. (from Uzbekistan and Tadzhikistan) and *Agapanthia obydovi* sp. n. (from Kazakhstan) are described. The review of similar species is proposed. A female of *Aromia moschata vetusta* is figured and redescribed.

The publication is dedicated to the description of a new *Turkaromia* from Gissar mountain ridge with a short review of its Central Asian relatives, as well as to the description of a new *Agapanthia* from Kazakhstan, previously known as *A. detrita*.

Turkaromia gromenkoi sp. n. (figs. 1-2)

Description. Body totally metallic bronze or greenish-bronze, antennae and legs with bluish lustre.

Head with short moderately dense pubescence, in male pubescence denser; median furrow distinct; interantennal tubercles large strongly raised, dentiform; frons and vertex with irregular punctuation, which is very coarse, partly contiguous on vertex. Hypostoma clearly margined, covered with dense long pubescence. Maxillary and labial palpi dark brown; apical joints of maxillary palpi nearly parallelsided, from 2.4 (male) to 2.2 (female) times longer than wide; apical joints of labial palpi longer, distinctly dilated distally, from 2.3 (male) to 1.8-2 (female) times longer than apical width.

Antennae covered with short, but very distinct and dense pubescence, first 5 joints with strong obliquely raised setae; male antennae surpassing elytral apices by three apical segments, in females distinctly shorter, about as long as body, or slightly longer. 1st antennal joint in male about 2 times longer than wide, in female - about 1.9 times; with small irregular punctuation, with reduced lateral furrow, its poor traces are visible only epically; apical lateral angle of 1st joint well developed, acute. In male 1st joint about 1.8 times shorter than 3d and about 1.7 times shorter than 4th; in females 1st joint also about 1.8 times shorter than 3d, but about 1.4 times shorter than 4th. Lateral outer angles of 3d-10th joints slightly exposed.

Prothorax in male about as long as its basal width, in females about 1.1 times shorter than basal width; with relatively long lateral tubercles. Pronotum with large irregular punctuation, partly contiguous, partly vermiculate; four pronotal tubercles distinct, posterior pair more raised; anterior and posterior transverse wrinkles poorly developed. Ventrally prothorax dull with fine sculpture and very dense fine pubescence.

Scutellum triangular, wider than long, covered with very short dense pubescence, only apex glabrous.

Elytrae parallelsided in male, or slightly widened after middle in females; in male 2.8 times longer than wide, in females from 3 (large specimen) to 2.9 times longer than wide. Elytral surface with small, very dense, irregular punctuation; anteriorly with micro-vermiculate sculpture; covered with very short fine pubescence, nearly indistinct in females.

Legs covered with very dense fine pubescence, femurs moderately widened, posterior tibiae strongly flattened and curved, specially in females; 1st joint of hind tarsus in male about as long as 3d-5th combined, in females relatively longer.

Meso-, metathorax and abdomen ventrally densely covered with moderately long pale pubescence with scattered erect strong brown setae. Last abdominal sternites in

male deeply emarginated, pygidium rounded, postpygidium narrowly truncate; in females tergites and sternites rounded.

According to the communication of A. GROMENKO, forms with red prothorax were observed in nature.

Body length in male: 29.0mm, width: 7.2mm; body length in females: 28.0-53.5mm, width near hummeri: 7.2-8.2mm.

Remark. The new species differs from *T. pruinosa* (Reitter, 1903) by less developed body pubescence: elytral pubescence in females nearly indistinct, in male - also much shorter; pronotal sculpture more rough: anterior pair of tubercles distinct; elytral sculpture also well developed; posterior tibiae much flatter and strongly curved; postpygidium truncate, while in *T. pruinosa* distinctly notched.

T. gromenkoi sp.n. differs from two subspecies of *Aromia moschata* (L.) known from Central Asia (*A. m. vetusta* Jankowski, 1934 and *A. m. cruenta* Bogatchev, 1962) by all generic characters (Danilevsky, 1993): elytrae and pronotum covered with more or less distinct pubescence; ventral body pubescence moderately long and very dense; longitudinal groove of 1st antennal joint absent; hypostoma with well developed margined hairy field; pronotal basal and apical transverse wrinkles poorly developed.

Materials. Holotype ♂, Uzbekistan, Iakkabag reg., Kaltakol, 2.7.1994, A. Gromenko leg. (author's collection); 3 paratypes: 2 ♀♀ with same labels (collection of A. Klimenko, Tver); 1 ♀, Tadzhikistan, Iskander-Kul lake, Khozor-Mech river, 25.7.1947, Kirichenko leg. (Zoological Institute, S.-Petersburg).

Distribution. *T. gromenkoi* sp. n. is distributed in the western half of Gissar mountain ridge in Uzbekistan and Tadzhikistan. Two known localities are: Iskander-Kul - central Gissar (Tadzhikistan) and Kaltakol - the westernmost Gissar slope (Uzbekistan).

Among Central Asian subspecies of *A. moschata* (L., 1758), *A. m. cruenta*, described from Kondara, is rather common in Tadzhikistan (Gissar mountain ridge: Kondara, Takob, Ramit). It is characterized by totally or partly red legs and antennae, partly red pronotum and often partly red head and ventral side of body.

The status of *Aromia moschata* populations from Fergana and Chatkal mountain ridges is not clear. According to Plavilstshikov (1940), specimens from the region do not differ from *A. m. ambrosiaca* (Stevens, 1809). I have studied unique specimen (female) from Arslanbob, mentioned by Jankowski (1934), and preserved in Zoological Institute in S.-Petersburg. This specimen is really very similar to *A. m. ambrosiaca* because of predominantly brightly red pronotum and metallic blue legs and antennae. Still it is characterized by poorly pronounced pronotal anterior belt of transverse wrinkles, as well as not very rough pronotal punctuation, and relatively short palpal joints. Such characters could be the base for the description of separate subspecies, if they would be constant for the whole population. This taxon can be distributed in Kirgizia along south and west slopes of the mountains surrounding Fergana valley from about Kara-su valley in Chatkal ridge to Arslanbob in Fergana ridge (the specimen from Kara-su valley was also mentioned by Jankowski, 1934).

I have also studied a pair of *Aromia moschata* (collection of A. Klimenko, Tver) similar to *A. m. cruenta* (with red legs and antennae) allegedly collected near Dzhahalabad (Fergana ridge), but without full collecting data. I regard such locality data as doubtful, and can suppose that the specimens were in fact collected in Gissar ridge.

Aromia moschata is also distributed in Kopet-Dag mountain ridge (first record of the species for Turkmenia). Only one male from near Ai-Dere is known (author's collection). This specimen is similar to *A. moschata* s.str. because of totally metallic-green prothorax and metallic-blue legs and antennae. The subspecific attribution of the Kopet-Dag population needs further materials.

Aromia m. vetusta rests nearly unknown, so some additional information can be published.

Aromia moschata vetusta Jankowski, 1934 (fig. 3)

Aromia moschata ambrosiaca var. *vetusta* Jankowski, 1934: 107 (Kzyl-Orda env.)

Aromia moschata ambrosiaca var. (natio?) *vetusta*: Plavilstshikov, 1940: 202.

Aromia moschata vetusta: Bogatchev, 1962: 92.

Aromia moschata vetusta: Lobanov et al., 1982: 254.

Males are unknown. No new materials appeared after the description of the taxon. I could not find the holotype (monobasic). But I have found the female from P.P. Okunev's collection (mentioned by I.V. JANKOWSKI, 1934: 106) preserved in Zoological Institute in St-Petersburg. The specimen was never described as the short diagnosis of N.N. Plavilstshikov was based on the holotype only.

Description. Body predominantly metallic green with red lateral parts of pronotum; ventral part of prothorax, trochanters, and femora bases slightly reddish; red lateral parts of pronotum with distinct greenish lustre; antennae metallic blue.

Head with short moderately dense pubescence; median furrow distinct; interantennal tubercles large strongly raised, dentiform; frons and vertex with irregular punctuation, which is very rough and contiguous on vertex. Hypostoma not margined, covered with longer pubescence. Maxillary and labial palpi light-brown; apical joints of maxillary palpi nearly parallelsided, about 2 times longer than wide; apical joint of labial palpi longer, distinctly dilated distally, also about 2 times longer than apical width.

Antennae covered with very short, poorly visible very dense ground pubescence, first 5 joints with strong obliquely raised strong setae; hardly surpassing elytral apices. 1st antennal joint with deep, dense, coarse, irregular punctuation, about 1.8 times longer than wide; lateral furrow distinct, but shallow and interrupted near apex; lateral apex as right angle; about 2.0 times shorter than 3d and about 1.3 times shorter than 4th. Lateral outer angles of 3d-10th joints slightly exposed.

Prothorax about as long as its basal width; with relatively short lateral tubercles. Pronotum with large irregular punctuation, partly contiguous, with several smooth areas; only posterior pair of pronotal tubercles distinct, anterior pair reduced and replaced by smooth areas; anterior and posterior belts of transverse wrinkles well developed. Ventrally prothorax with fine transverse wrinkles covered with fine pubescence in posterior half.

Scutellum triangular, as long as wide, glabrous, smooth and shining.

Elytrae parallelsided, slightly widened after middle, about 2.8 times longer than basal width. Elytral surface glabrous, with small, irregular vermiculate sculpture, which is much finer posteriori.

Legs covered with very dense fine pubescence, femurs moderately widened, posterior tibiae strongly flattened and slightly curved; 1st joint of hind tarsus about as long as 3d-5th combined.

Meso-, metathorax and abdomen ventrally densely covered with very short pale pubescence with scattered erect strong brown setae. Last abdominal sternite rounded, last tergite slightly emarginated.

Body length: 27.5mm, width: 6.9mm

Materials. ♀ with two labels: 1st label: "Khantag narrow, Akkuz, Karatau, 7-8.5.1910 Trizna"; 2nd label: "*Aromia moschata* sbsp. *montana* a. *anceps* m. typus, P. Okunev det." (Zoological Institute, Sankt-Petersburg).

Distribution. According to JANKOWSKI (1934) the taxon is distributed only along Syr-Daria river from about Kazalinsk to Chiili. The specimen described above allows to include Karatau Mountains in the subspecies area.

The subspecies is characterized by strong green lustre of red pronotal areas masking its colour.

Agapanthia obyдови sp. n. (figs. 4-5)

Description. Body black (elytrae and apices of antennal joints often dark-brown), with basally reddish 3d-12th antennal joints, sometimes apical parts of tibiae also reddish, anterior tibiae can be nearly totally reddish.

Head strongly, contiguously punctate; genae very narrow, much shorter than lower eye lobe; frons with very dense, erect, yellow pubescence and longer black setae; vertex nearly glabrous with very short indistinct setae with wide medial stripe of yellow pubescence.

Antennae surpassing elytral apex in males by 3 or 5 apical joints, in females - by 2 or 3 joints; 1st joint about as long as 4th and about 1.3-1.4 times shorter than 3d; two basal joints totally black with black pubescence, 1st joint with a strip of yellow pubescence externally; all other joints mostly pale, reddish with dark (black or dark-brown) apical parts; 3d joint with about apical 5th dark, 8th and 9th joints about half pale - half dark, apical joint with dark apex or sometimes totally pale; basal joint (usually 1st-5th) with more or less numerous, more or less erect, long, black setae internally; 3d joint without apical hair tuft.

Prothorax usually 1.3-1.4 times wider than long, sometimes longer: about 1.2 times wider than long or wider about 1.6 times wider than long; slightly widened near middle, then strongly narrowed anteriorly; pronotum with three (medial and two lateral) dense yellow hair stripes; in between shining, densely roughly punctate, with numerous long, black erect setae. Scutellum transverse, oval with dense yellow pubescence.

Elytrae 2.6-2.8 times longer than wide in both sexes, with acute apices, with very dense, transversely conjugated, rough punctuation, covered with more or less dense short adpressed or semierect yellow spotty (nearly even) pubescence, with dense lateral yellow hair stripes along curved margin; long black setae are usually adpressed all over elytrae with several erect hairs near base; pale humeral hair stripe always absent.

Legs usually black, sometimes anterior tibiae with pale apex, or anterior tibiae with pale apical half and middle tibiae with pale apex, or anterior tibiae totally pale, middle tibiae with pale apical half and posterior tibiae with pale apex; all legs densely covered with short adpressed yellow pubescence, with longer erect or semierect black setae; setae brushes of middle and posterior tibiae brown or yellow-brown; 1st joint of posterior tarsus about as long as 2nd-3d together.

Ventral side of body with moderately dense short yellow pubescence, with double punctuation: very dense fine punctuation and scattered large punctuation bearing long erect setae, which are sometimes indistinct. Males with slightly emarginated pygidium, postpygidium truncate or nearly evenly rounded; last abdominal sternite with very shallow emargination, nearly straight. Females with last abdominal tergite truncate or slightly emarginated, last sternite deeply emarginated.

Aedeagus moderately pointed epically, with apex not bent dorsally; parameres relatively short and wide with short apical setae.

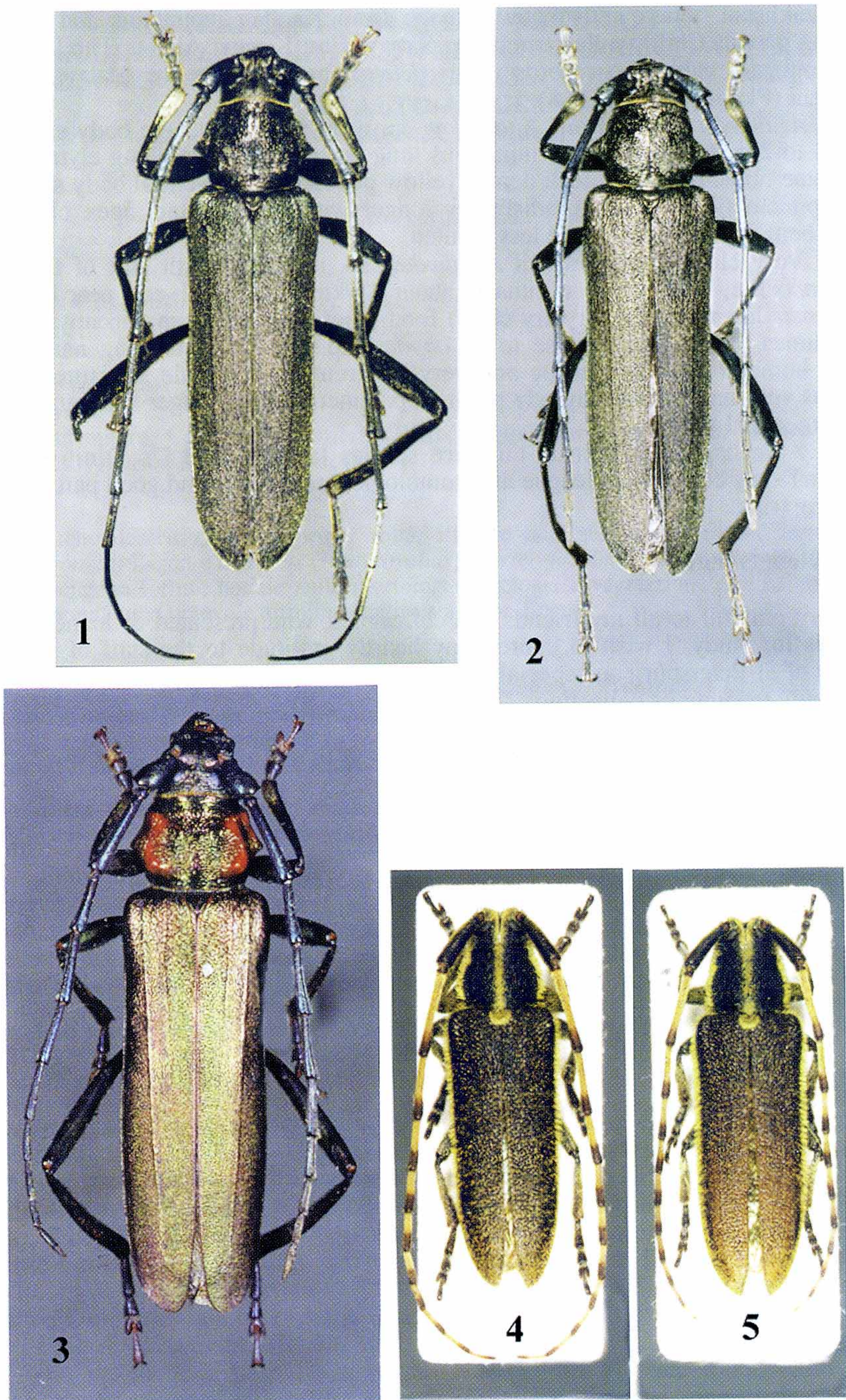
Body length in males: 10.7-14.5mm, in females: 12.1-15.0mm; body width in males: 2.9-4.0mm, in females: 3.2-4.4mm.

Materials. Holotype ♂, Kazakhstan, Kolshengel, 300m, 13.5.1996, M. Danilevsky leg. Paratypes: 29 ♂♂ and 15 ♀♀ with same label; 2 ♂♂, Kolshengel, 4.5.1990, G. Dunaj leg. (all materials in author's collection).

Distribution. Kazakhstan, Taukum desert near Kolshengel village; only one population is known.

Bionomy. All beetles were collected on *Eremurus* sp. among sandy dunes.

Remark. *A. obyдови* sp.n. is very close to *A. detrita* Kraatz, 1882 (Heyden, Kraatz, 1882) and replaces it to the north-eastwards of its area in sandy desert southwards Balkhash lake. *A. detrita* was described from near Samarkand and widely distributed in Tadzhikistan (valleys and moderately high mountains all around the country), Uzbekistan (Samarkand environs, Tashkent environs: Chirchik valley, Pskem valley, Chingan Mt.; Fergana valley), Kirgizia (mountains around Fergana valley: Sary-Chelek, Arslan-Bob, Alai ridge; Kirgizsky ridge and Issyk-Kul depression)



Figs. 1-2. *Turkaromia gromenkoi* sp. n. : 1. ♂, holotype; 2. ♀, paratype (from type locality).
 Fig. 3. *Aromia moschata vetusta*, ♀. Figs. 4-5. *Agapanthia obydoivi* sp. n. : 4. ♂, holotype; 5. ♀, paratype.

and Kazakhstan, where it is known to me from Karatau mountains and also from mountain part of Chilik valley from near Saty in East Kungei Alatau. The last locality makes rather reliable the records of *A. detrita* for Dzhungarsky Alatau from near Dzharkent (Plavilstshikov, 1968).

A. detrita differs from *A. obyдови* sp. n. by bigger average body size (length from 13 to 21mm), presence of numerous long erect black setae along elytral surface; black setae tibiae brushes; much denser yellow pubescence on ventral body side, totally hiding punctuation; parameres distinctly longer with longer setae; apex of aedeagus slightly bent dorsally and a little less pointed.

Very close to the area of *A. obyдови* sp. n. is the north part of the area of *A. auliensis* Pic, 1907, which is situated about 120km to the south-east near Kapchagai. *A. auliensis* has the same (or very close) food plant - *Eremurus* sp., occupying similar sandy dunes, but it is not close to *A. obyдови* sp.n., because of long narrow body, distinct humeral grey hair stripe and very different genital male structures: apex of aedeagus very narrow and strongly pointed, parameres much longer and narrower with very long apical setae.

I am happy to dedicate this nice species to my friend Dr. Dmitry OBYDOV (Moscow) - my constant colleague in entomological researches and good partner in long collecting trips.

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References

- BOGATCHEV A.V., 1962. [Tadzhik "Musk"-beetle *Aromia moschata cruenta*, subsp. nova A. Bog.]- *Proceedings of the Department of Biological Sciences of Academy of Sciences of Tadzhik Soviet Socialist Republic*, 3 (10): 96-98 [in Russian].
- DANILEVSKY M.L., 1993. Taxonomic and Zoogeographical Notes on the Family Cerambycidae (Coleoptera) of Russia and Adjacent Regions.- *Russian Entomol. J.*, 1(2): 37-39.
- HEYDEN L.v., G. KRAATZ, 1882. Käfer um Samarkand, gesammelt von Haberhauer.- *Deutsche Entomol. Zeit.*, 26(2): 297-338.
- JANKOWSKI I.V., 1934. Material zur Kenntniss der Bockkäfer Mittelasiens.- [*Bulletin des Mittelasiens Staatlichen Universitat*], 19, 16: 95-115. [in russisch.]
- LOBANOV A.L., M.L. DANILEVSKY, S.V. MURZIN, 1982. Systematic list of Longicorn beetles (Coleoptera, Cerambycidae) of the USSR. II.- *Rev. d'Ent. de l'URSS*, 61, 2: 252-277.
- PIC M., 1907. Description de plusieurs Longicornes rentrant dans la faune paléarctique.- *Mat. serv. l'étude Long.*, 6ème cahier, 2: 9-13.
- PLAVILSTSHIKOV N.N., 1940. Cerambycidae (P.2).- *Faune de l'URSS, Insectes Coléoptères*, v. 22. Moscou - Leningrad: 784pp.
- PLAVILSTSHIKOV N.N., 1968. [Review of the genus *Agapanthia* Serv. (Coleoptera, Cerambycidae) of the USSR fauna].- In: *Archives of Zool. Mus. Moscow State Univ.*, v.11: 113-168 [in Russian].