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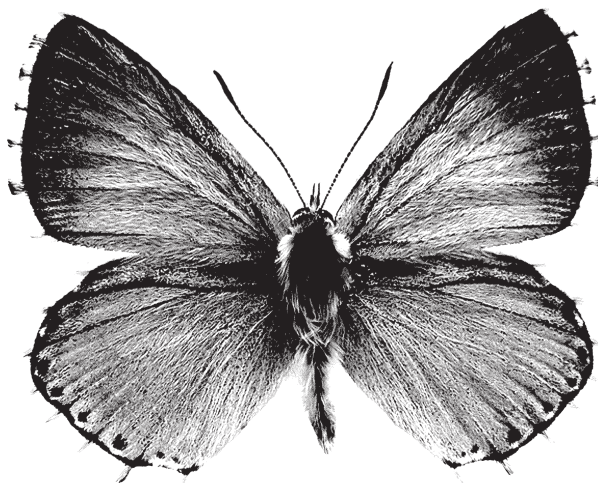
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## Taxonomic notes on the genus *Catomus* Allard, 1876 (Coleoptera, Tenebrionidae: Helopini) with description of a new species from Afghanistan

## Таксономические замечания по роду *Catomus* Allard, 1876 (Coleoptera, Tenebrionidae: Helopini) с описанием нового вида из Афганистана

M.V. Nabozhenko  
M.B. Набоженко

Southern Scientific Centre, Russian Academy of Sciences, Tchekhov str., 41, Rostov-on-Don 344000 Russia  
Южный научный центр РАН, ул. Чехова, 41, Ростов-на-Дону 344000 Россия. E-mail: nalassus@mail.ru

**Key words:** Tenebrionidae, Helopini, *Catomus*, taxonomy, new species, Afghanistan.

**Ключевые слова:** Tenebrionidae, Helopini, *Catomus*, таксономия, новый вид, Афганистан.

**Abstract.** The name *Catomodontus* Koch, 1935 is not available. The subgenus *Catomodontus* Löbl & Merkl, 2003 (genus *Catomus* Allard, 1876) is valid and included 1 species. The new species *Catomus kabakovi* sp. n. from the subgenus *Montanocatomus* Nabozhenko, 2006 is described from Southern Hindukush (Afghanistan). The key to the species and map of distribution of *Montanocatomus* are given.

**Резюме.** The name *Catomodontus* Koch, 1935 is considered as unavailable. The subgenus *Catomodontus* Löbl & Merkl, 2003 (genus *Catomus* Allard, 1876) is valid and includes one species. The new species, *Catomus kabakovi* sp. n., from the subgenus *Montanocatomus* Nabozhenko, 2006 is described from Southern Hindukush (Afghanistan). The key to species and map of the distribution of *Montanocatomus* are given.

### Introduction

In the recent revision [Nabozhenko, 2006] of *Catomus* Allard, 1876 three subgenera of this genus are cited: *Catomus* s. str., *Montanocatomus* Nabozhenko, 2006 and *Sinocatomus* Nabozhenko, 2006. Koch [1935] described *Catomodontus* as a subgenus of the genus *Catomus*, but without designation of type species. *Catomodontus* Koch, 1935 is an unavailable name according to the article 13.3 of ICZN [1999]. Löbl & Merkl [2003] designated *Catomus coronatus* Koch, 1935 as the type species of the subgenus *Catomodontus*. As a result, *Catomodontus* Löbl & Merkl, 2003 is the valid subgenus. Therefore, *Catomus* includes 4 subgenera. Koch [1935] also included *C. ovatus* Koch, 1935 и *C. torretossoi* Koch, 1935 (both from Libya) in his subgenus *Catomodontus*. However Löbl & Merkl did not include these species in *Catomodontus* Löbl & Merkl, 2003 and wrote the following: «Koch [1935: 108] described *Catomodontus* as a subgenus of *Catomus* Allard, 1876 to unclude three new species, *C. coronatus*, *C. ovatus* and *C. torretassoi*. A type species was not designated. The original description given by Koch [1935: 108] characterizes the group. We designated here as the type species *Catomus coronatus* Koch, 1935». Thus, only one species is in the subgenus. It should be noted, that this subgenus possibly

is a synonym of the genus *Ectromopsis* Antoine, 1949 [Nabozhenko, 2005], as was supposed by Antoine (1949).

*Catomus kabakovi* sp. n. is a new species, which is described after studying the material collected by O.N. Kabakov from Afghanistan. The new species is included in the subgenus *Montanocatomus*, representatives of which are distributed in Tien-Shan, Pamir and Alai. *C. kabakovi* sp. n. was found in Southern Hindukush. Thus the distribution of *Montanocatomus* is considerably wider (fig. 1), and this subgenus at present includes 6 species from Kazakhstan, Kyrgyzstan, Tadzhikistan and Afghanistan.

### Materials and methods

The paper is based on the material from the collections of the Zoological Institute, Russian Academy of Sciences (Saint-Petersburg, Russia) (ZISP), Zoological Museum of the Institute for Biodiversity and Ecosystem Dynamics (Amsterdam, Netherlands) (ZMIB), Deutsches Entomologisches Institute (Müncheberg, Germany) (DEI).

*Catomus (Montanocatomus) kabakovi* Nabozhenko, sp. n.  
(Fig. 2-13)

**Description.** Male. Body dark brown, almost black, weakly glossy, glabrous, antennae and legs dark brown. Anterior margin of clypeus straight, with long reddish hairs. Labium very densely and coarsely punctuated, covered with dense reddish hairs. Head widest at level of eyes. Eyes large, weakly convex, bean-shaped. Ratio of head width (at level of eyes) to distance between eyes – 1.5-1.65. Genae strongly rounded and projected outside and upward. Ratio of head width at level of eyes to its width at level of genae – 1.03. Joint of outer margin of clypeus and gena with deep, widely smoothed or clear emargination. Clypeus deeply rectangularly depressed. Temples behind eyes straightly converging to neck constriction. Punctuation of head very coarse and dense. Punctures rounded, interval between punctures 2 times as small as diameter of punctures. Head with short recumbent setae ventrally. Outer margin of gular emargination with obtuse dent, which is directed down and forward. Antennae very long, their five apical segments extending beyond base of pronotum, reaching middle of elytra. Apical part of 1-7 segments with longer, erected hairs on outer side. Proportions of the antennal segments are given in the Table 1. Length to width ratio of antennal segments 2-11, respectively: 1.17,



Fig. 1. Distribution of the subgenus *Montanocatomus* Nabozhenko, 2006  
 Рис. 1. Распространение подрода *Montanocatomus* Nabozhenko, 2006

3.5, 2.5, 2.75, 3.3, 3.2, 3.05, 2.6, 2.4, 3.3. 3rd segment of antennae 3.2 times as long as 2nd, and 1.5 times as long as 4th. 11th segment of antennae narrow, very long, asymmetric, banana-shaped, 1.25 times as long as 10th.

Pronotum weakly longitudinal (1.02-1.1 times as long as

wide), widest in the middle or in its anterior part. Width on the level of anterior margin such as width on the level of base. Outer margins of pronotum weakly rounded, straight from base to widest part. Anterior margin very weakly rounded, base rounded with small emargination in the middle. Anterior and posterior angles

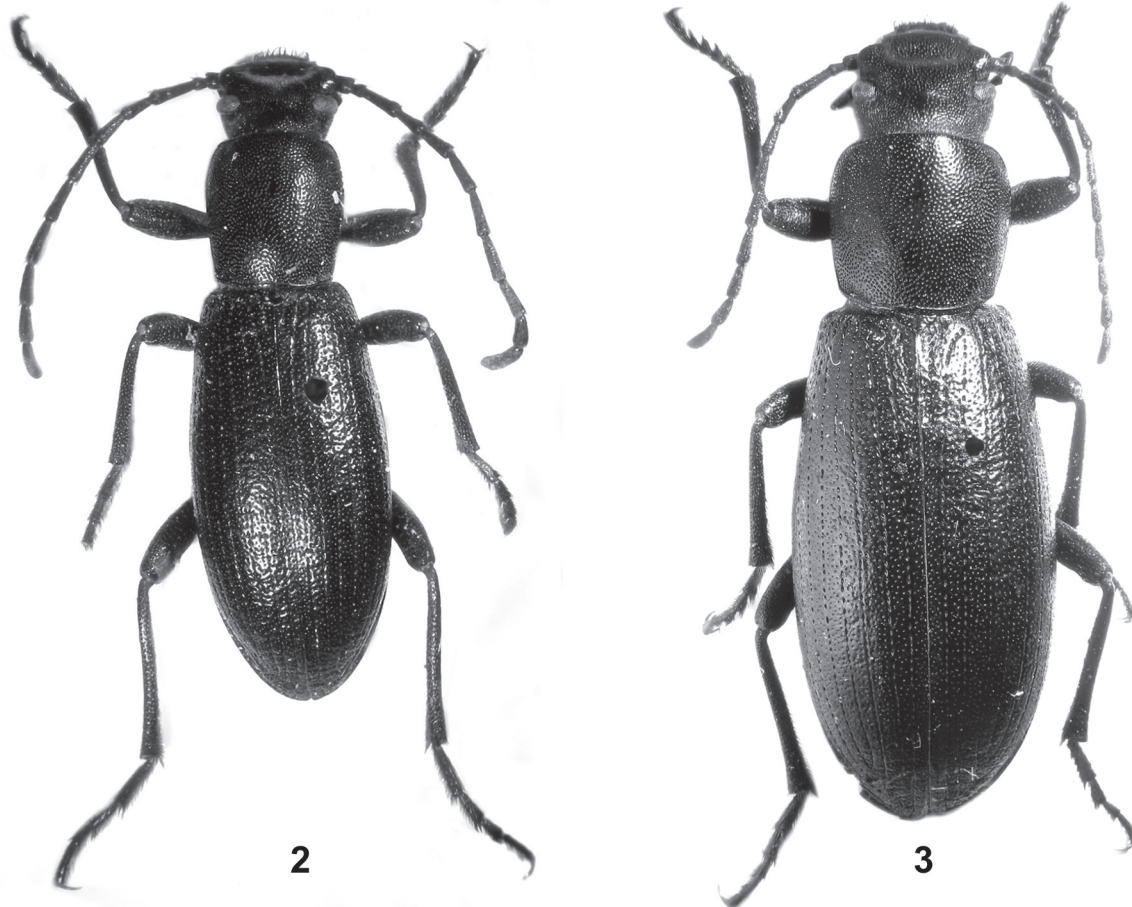


Fig. 2-3. *Catomus kabakovi* sp. n., common view  
2 – male (holotype); 3 – female  
Рис. 2-3. *Catomus kabakovi* sp. n., общий вид  
2 – самец (голотип); 3 – самка

Table 1. Length and width ratio of antennal segments.  
Таблица 1. Длина и ширина члеников усиков

Antennal segment	2	3	4	5	6	7	8	9	10	11
Length	2	6.4	4.3	4.4	5	5.1	5.5	4.7	4.8	6
Width	1.7	1.8	1.7	1.6	1.5	1.6	1.8	1.8	2	1.8

weakly rounded. Posterior angles more distinct. All margins of pronotum narrowly bordered, the border obliterated only in the middle part of anterior margin. Disc of pronotum evenly longitudinally convex. On sides of disc without deep depression. Punctuation of disc very coarse and dense (as on head); punctures big, rounded, deep. Punctuation of propleura and prothorax as on head and pronotum.

Elytra elongated (2-2.07 as long as wide), moderately convex, widest in the middle, their outer margin evenly rounded. Elytra 1.37-1.45 times as wide and 2.7 times as long as pronotum. Base of elytra straight, humeral angles rounded. Vertical border of elytral base visible near humeral angles. Elytra very coarsely punctured. Punctures in striae of elytra large, weakly elongated, merged in short furrows. Intervals flat, their punctuation as on pronotum. One interval includes 1-2, rarely 3 punctures. Suture with fine edging from apex to 1/3 of elytral length. Epipleura with coarse punctuation. Mesothorax with dense, moderately coarse punctuation and recumbent reddish hairs in the middle.

Abdominal sternites with dense punctuation. 1-3 sternites with moderately coarse punctuation, 4-5 sternites with fine and dense punctuation. 1-2 sternites with longer and denser hairs. Anal sternite bordered on apex and with long suberected hairs.

Legs long and narrow. Fore and middle tibiae straight, hind tibia weakly concave. Tarsi very elongated. Middle tibia 1.17 times as long as middle tarsus, hind tibia times 1.1 as long as hind tarsus. Length of middle tibia equals length of hind tarsus. Ungular plate on all tarsi wide and widely rounded.

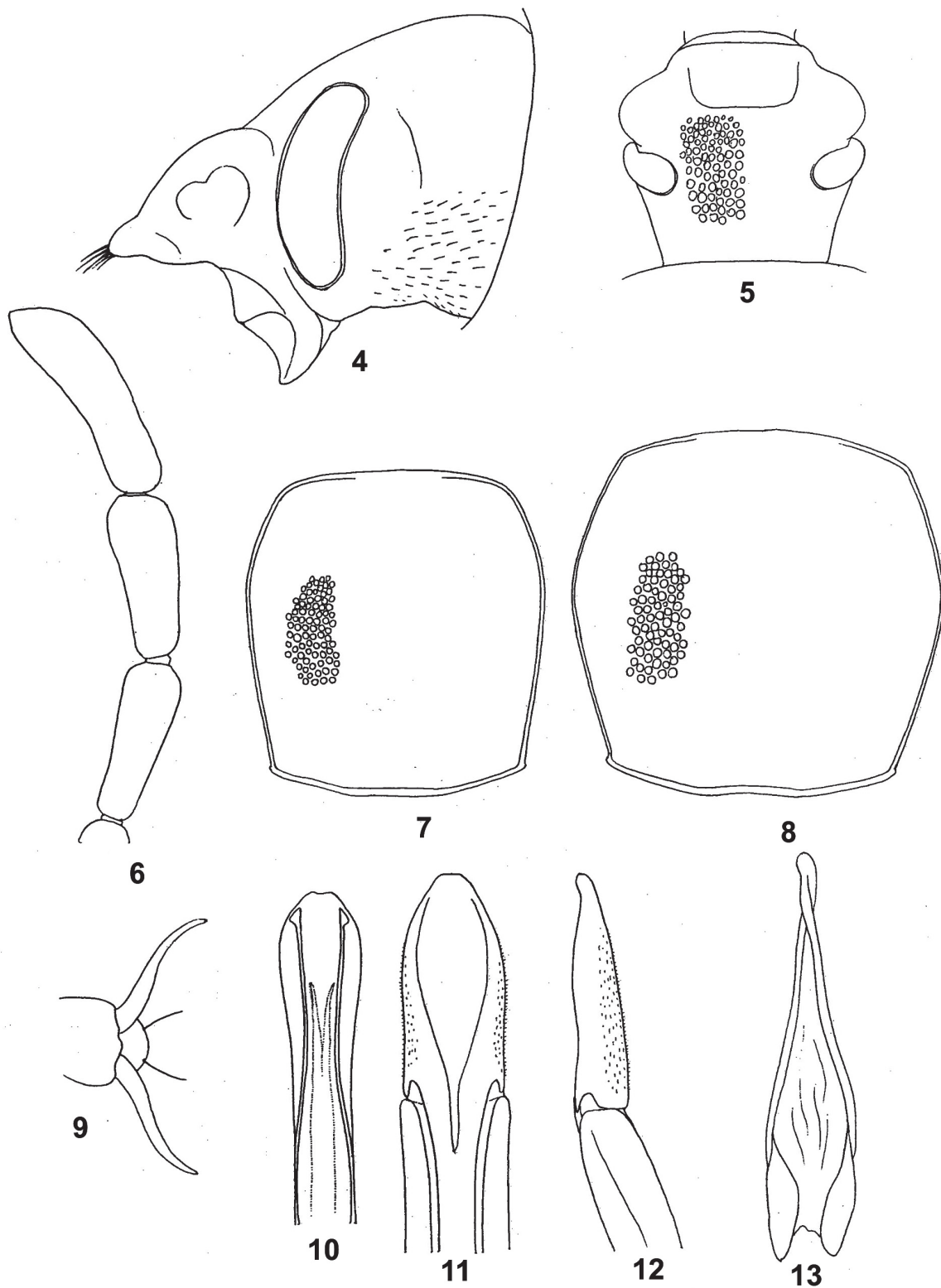
Aedeagus long, parameres spear-shaped, narrowly rounded on the apex. Penis as in Fig.10.

Body length – 10-12 mm, body width – 3.2-3.8 mm.

Females differ from males in more robust body. Antennae shorter, their three apical segments extending beyond base of pronotum. Length of pronotum 1.03-1.04 times as long as width.

Body length – 12-14 mm, width – 3.6-4.6 mm.

**Material.** Holotype, ♂ and paratypes (1♂, 2♀) with label: «Afghan. Nurestan, SO Čapa Dara, 1800 m, 25.5.1971. Kabakov».



Figs. 4-13. *Catomus kabakovi* sp. n., male, details of structure:  
 4 – head without oral structures (lateral view); 5 – head (dorsal view); 6 – apical part of antenna; 7 – pronotum (holotype); 8 – the same (paratype); 9 – clava with claval plate; 10 – penis; 11 – parameres (ventral view); 12 – the same (lateral view); 13 – gastral spicula.

Рис. 4-13. *Catomus kabakovi* sp. n., самец, детали строения:  
 4 – голова без ротовых органов (вид сбоку); 5 – голова (вид сверху); 6 – верхняя часть усика; 7 – переднеспинка (голотип); 8 – то же (паратип); 9 – коготки с подкоготковой пластинкой; 10 – пенис; 11 – парамеры (вентральная сторона); 12 – то же (вид сбоку); 13 – гастральная спикула.

One female with the data: «2000 m, 26.5.1971». All types are at the Zoological institute of the Russian Academy of Sciences (St.-Petersburg).

**Etymology.** The species named in honour of the well-know specialist on Scarabaeidae Dr. Oleg Nikolaevich Kabakov.

**Differential diagnosis.** The new species is closely related to *C. badachschanicus* G. Medvedev, 1970. Differences are in the key to species.

#### Key to species of the subgenus *Montanocatomus*

1(4). Elytral intervals with rasp-shaped punctuation, on margin of elytra with fine granulation. Surface of elytra moderately densely covered with erected light-colored hairs.

2(3). Punctuation of pronotum very coarse and dense, punctures strongly elongated, merged in long furrows on sides of disc. Outer margins of pronotum strongly rounded.....  
.....*C. pilosulus* (Kraatz, 1886)

3(2). Punctuation of pronotum moderately coarse, dense only on sides of disc, punctures rounded, not merged. Outer margins of pronotum weakly rounded.....  
.....*C. reinigi* (Schuster in Reinig, 1931)

4(1). Punctuation of elytral intervals not rasp-shaped, without fine granules. Surface of elytra glabrous.

5(9). Outer margin of gular emargination with obtuse dent, which is directed down and forward.

7(8). Body brown, elytra with parallel sides. Punctuation of head moderately coarse, not dense (interval between punctures equals to, or 1.5 times as long as diameter of punctures). Punctures in rows on elytra merged to form entire furrows.....  
.....*C. badachschanicus* G. Medvedev, 1970

8(7). Body black or black-brown, elytral sides evenly rounded. Punctuation of head very coarse and dense (diameter of punctures 1.5-2 times as long as interval between punctures). Punctures in rows on elytra with short separate furrows.....  
.....*C. kabakovi* sp. n.

9(5). Outer margin of gular emargination without dent.

10(11). Body black or dark-brown. Outer margins of pronotum visibly rounded. Posterior angles of pronotum acute

or rectangular, pointed on apex. Punctures on sides of disc not elongated and not merged. Propleura without recumbent pubescence.....*C. grandis* G. Medvedev, 1978

11(10). Body reddish-brown. Margins of pronotum weakly rounded only in apical part, and straight from the widest part of pronotum to its base. Posterior angles obtuse, rounded. Punctures on sides of pronotum disc elongated, sometimes merged. Pubescence of propleura with fine recumbent setae.....  
.....*C. fabiani* Nabozhenko, 2006

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