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**New taxa of the genus *Dorcadion* Dalman, 1917 (Coleoptera,
Cerambycidae) from Kirgizia**

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Abstract: *Dorcadion (Cribridorcadion) semenovi aleksandrae* **ssp. n.** is described from the eastern most area of Issyk-Kul depression. The new taxon is close to *D. (C.) s. hauseri* Reiter, 1895, but differs by very stable external appearance without dorsal elytral lines. *D. (Acutodorcadion) darjae kungeyensis* **ssp. n.** is described from the left side of Chong-Kemin Canyon. It differs from the nominative subspecies by rather wide body. *D. (A.) d. keminum* **ssp. n.** is described from the right side of Chong-Kemin Canyon. It differs from the nominative subspecies by wider body and less convex prothorax. *D. (A.) kastekum kichikeminum* **ssp. n.** is described from south slope of Zailiysky Alatau above Kichi-Kemin village. It differs from the nominative subspecies by less wide body. *D. (A.) k. aktyuzum* **ssp. n.** is described from the highest-level Ak-Tyuz Canyon on south slope of Zailiysky Alatau. The new subspecies differs by a number of small characters: black 1st antennal joint, poor fine pubescent of basal antennal joints and legs, completely white pale dorsal pubescence.

Introduction

Kirgizia rests a very popular area for entomologists up to now. A very lucky beetle-collector A. Rubenyan (Moscow) arranged a short collecting trip to Kirgizia in April-May 2021. His route ran around Issyk-Kul Lake and along two rivers Chong-Kemin and Kichi-Kemin with surrounding mountains. Several series of very interesting *Dorcadion* were collected. Five taxa are described below as new.

Abbreviations of collections:

AR - collection of A.A. Rubenyan (Moscow, Russia)

MD - collection of M.L. Danilevsky (Moscow, Russia)

Results

Dorcadion (Cribridorcadion) semenovi aleksandrae **ssp. n.**

Figs 1-4, Map 1 (1-2)

Description. Body black with completely black antennae; legs black with partly red tibiae: anterior tibiae red with black apices or with black apical half, other tibiae with red basal third; male antennae reaching apical elytral third, female antennae a little surpassing elytral middle; prothorax with acute lateral spines; pronotum more or less convex, glabrous, shining, with very rough sculpture, usually with narrow white central line; elytra smooth, without dorsal carinae, densely uniformly covered with whitish-pale pubescence; without longitudinal dorsal or sutural lines; sometimes ground elytral pubescence yellowish with diffused sutural white line, poor traces of dorsal lines can be visible; short basal rudiments of internal dorsal lines longer or shorter, very rare produced backwards to about middle along slightly raised basal parts of internal dorsal carinae; one male has longer internal dorsal line and carinae to about elytral middle; two females with poor central rudiments of external dorsal elytral lines; black humeral lines very narrow and strongly reduced apically in males, but in females sometimes nearly complete; humeral carinae moderately developed anteriorly and near middle, but obliterated apically; humeral elytral area and curved lateral elytral margin without big punctures; body length in males: 12.3-15.0 mm, width: 4.2-5.3 mm; body length in females: 13.5-15.9 mm, width: 5.5-6.5 mm.

Differential diagnosis. The new subspecies is very close to its geographical neighbor *D. s. hauseri* Reiter, 1895 (Figs 5-12), but differs by exclusively stable habitus. According to Danilevsky (2002: 9), *D. s. hauseri* Reiter, 1895 was described from Karakol environs in Kirgizia. It is characterized by very strong level of individual variability in each population, while *D. s. aleksandrae* **ssp. n.** is

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exceptionally stable. Several males and females of *D. s. hauseri* have complete set of elytral lines as in the nominative subspecies - each elytron with two dorsal lines, or each dorsal line is more or less reduced, or both dorsal lines completely absent; or only external dorsal lines absent, or only internal dorsal lines absent; humeral carinae and humeral black lines in *D. s. hauseri* always well developed, while in *D. s. aleksandrae* ssp. n. both are more or less reduced; humeral elytral area and curved lateral elytral margin anteriorly in *D. s. hauseri* with big punctures; *D. s. hauseri* is usually smaller: body length in males: 11.9-14.7 mm, width: 4.0-5.2 mm; body length in females: 13.0-17.4 mm, width: 5.3-6.6 mm.

Material. Holotype, male, Kirgizia, 4 km NE Dzhergalan, 42°40'25"N, 78°54'5"E, 1970 m, 27.4.2021, A. Rubenyan leg. - MD; 53 paratypes; 27 males, 9 females, with same label - MD & AR; 9 males, 8 females, Kirgizia, 2 km N Ak-Chiy, 42°40'12"N, 78°47'26"E, 1911 m, 27.4.2021, A. Rubenyan leg. - MD & AR.

Material used for comparison. *Dorcadion semenovi hauseri* Reiter, 1895, Map 1 (3-6): 2 males, 4 females, Kirgizia, Karakol, 1700 m, 7.5.2000, S. Toropov leg. - MD; 19 males, 5 females, Kirgizia, 19 km E Karakol, Novovoznesenovka, 42°35'51"N, 78°45'33"E, 1808 m, 27.4.2021, A. Rubenyan leg. - MD & AR; 72 males, 24 females, 15 km S Karakol, Teploklyuchenka, 42°28'16"N, 78°31'44"E, 1904 m, 27.4.2021, A. Rubenyan leg. - MD & AR; 26 males, 9 females, 17 km NW Karakol, Tyup env., 42°44'N, 78°23'49"E, 1620 m, 28.4.2021, A. Rubenyan leg. - MD & AR; 2 males, Kirgizia, 14 km SW Karakol, Djety-Oguz, 42°23'54"N, 78°13'17"E, 1855 m, 26.4.2021, A. Rubenyan leg. - MD; 27 males, 11 females, Kirgizia, NE Issyk-Kul Lake, between Oytal and Oybulak, 42°44'40"N, 78°02'41"E, 1649 m, 28.4.2021, A. Rubenyan leg. - MD, AR.

Distribution. Two populations are known in East Kirgizia: 4 km north-eastwards Dzhergalan, 42°40'25"N, 78°54'5"E, 1970m and 2 km northwards Ak-Chiy, 42°40'12"N, 78°47'26"E, 1911 m.

Remarks. Specimens of *D. s. hauseri* mentioned by Danilevsky (2002: 12) as allegedly from "Dzhergalan (about 50 km eastwards Karakol), 2000m" were definitely wrongly labelled, and were in fact collected in the nearest environs of Karakol in Dzhergalan River Valley (about 1700m). The locality near Dzhergalan (about 50 km eastwards Karakol, 2000 m) was not mentioned for the taxon by

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Toropov & Milko (2013: 47). *D. s. hauseri* was not observed near Dzhergalan by A. Rubenyan in 2021.

Etymology. The new subspecies is named after the wife and reliable travel partner of Artem Rubenyan, Alexandra Sycheva.

Dorcadion (Acutodorcadion) darjae kungeyensis **ssp. n.**

Figs 14-18, Map 2 (2-3)

Description. Body big, short and wide, black, antennae with dark-red basal half of 1st joint; anterior tibiae about completely dark-red, slightly darkened apically; other tibiae and all femora dark-red with black apices; pale pubescence of head, thorax and elytra yellowish (white in *D. darjae darjae*); antennae long, reaching posterior elytral fifth; prothorax strongly transverse, in males about 1.2 times shorter than basal width, lateral spines moderately long, acute, curved backwards (in the holotype of *D. darjae* Danilevsky, 2001 prothorax longer than its basal width); pronotum strongly convex (about as convex as in *D. d. darjae*), without posterior swelling (distinct posterior swelling can be observed in *D. kastekum* Danilevsky, 1996); in males about 3.3 times shorter than elytral length (in *D. d. darjae* - about 3 times); central pronotal stripe relatively wide, especially in female; elytra relatively short and wide (in males about 1.9 times longer than middle width, in males of *D. d. darjae* - about 2.1 times), regularly oval laterally (about parallel sided anteriorly in *D. kastekum*); less convex than in *D. d. darjae*; humeral and external elytral stripes more or less wide; internal elytral lines usually present, usually long and wide, but sometimes in form of hardly visible poor rudiments; internal side of middle and hind tibiae with very dense pale pubescence; only androchromal females known; female elytra exceptionally wide, about 1.5-1.7 times longer than middle width; body length in males: 18.3-22.3 mm; width (at elytral middle): 6.1-7.6 mm; body length in females: 19.2-20.9 mm, width (at elytral middle): 7.8-8.0 mm.

Differential diagnosis. The new taxon differs from *D. d. darjae* Danilevsky, 2001 (Map 2-1) first of all by short and wide body with transverse prothorax, but antennae relatively longer.

Material. Holotype, male, Kirgizia, left slope of Chong-Kemin River Canyon, Kaiyndy environs, 1726 m, 42°44'37"N, 76°10'32"E,

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30.4.2021, A. Rubenyan leg. - MD; 23 paratypes; 14 males, 8 females with same label - MD & AR; 1 male, Kirgizia, Chong-Kemin River, Sholakkaiyndy, 1688 m, 42°44'N, 76°08'34"E, 25.4.2021, A. Rubenyan leg. - MD.

Material used for comparison. Holotype of *Dorcadion darjae* Danilevsky, 2001 (Fig. 13, Map. 2-1), male with the label: "Kirgizia, north slope of Kungei Alatau [wrong label, in fact south slope of Kemin Ridge, 42°43'59"N, 75°58'34"E, 1800m - according to the personal message of S. Toropov], Chong-Kemin River Valley, 1800m, 1-10.6.1994, S. Toropov leg." - MD; 1 paratype, male with the label: "Kirgizia, north slope of Kungei Alatau [in fact south slope of Kemin Ridge - same locality as in holotype], Chong-Kemin River Valley, Ak-Tashkoro River Narrow, Tortkul, 20.5.2000, S. Toropov leg." - MD".

Distribution. Two localities in Kirgizia (north slope of Kungei Alatau, left slope of Chong-Kemin River Canyon) are known: 1 km eastwards Kaindy, 1726 m; 42°44'37"N, 76°10'32"E and east environs of Sholakkaindy, 1688 m, 42°44'N, 76°08'34"E - Map 2 (2-3).

Etymology. The new subspecies is named after Kungei Alatau Mountain Ridge, where the new taxon is distributed.

Dorcadion (Acutodorcadion) darjae keminum **ssp. n.**

Figs 19-22, Map 2 (4-5)

Description. Close to the previous subspecies, with about same color of all parts, but red color is a little lighter; body relatively longer; antennae similarly long; prothorax less transverse, usually as long as its basal width, but in holotype a little longer; pronotum less convex, also without posterior swelling, with narrow central line; in males about 3.3-3.4 times shorter than elytral length; elytra longer, in males about 2 times longer than middle width, elytral sides often nearly parallel anteriorly; humeral and external elytral stripes narrow, sometimes - very narrow; internal elytral lines often completely absent, but usually present in form of several spots and strokes; internal side of middle and hind tibiae with very dense pale pubescence; two androchromal females are known; female elytra about 1.7-1.8 times longer than middle width; body length in males: 20.8-25.0 mm; width (at elytral middle): 6.5-7.6 mm; body length in females: 22.0-22.5 mm, width (at elytral middle): 8.7-8.8 mm.

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Differential diagnosis. The new taxon is also wider than the nominative subspecies, but not so wide as *D. d. kungeyensis* **ssp. n.**; prothorax usually less transverse; male elytra often with nearly parallel sides anteriorly.

Material. Holotype, male, Kirgizia, right slope of Chong-Kemin River Canyon, 3 km eastwards Tegirmenty, 42°45'40"N, 76°12'25"E, 1715 m, 25.4.2021, A. Rubenyan leg. - MD; 20 paratypes; 18 males, 1 female with same label – MD & AR; 1 female with the label (in Russian): Kungey, Novorossiyyka (now Shabdan, about 6 km westwards Tegirmenty), 25.5.1969, Kostin leg. - MD.

Distribution. Two populations known: in the Chong-Kemin River Canyon along its right slope, south slope of Kemin Ridge: 3 km eastwards Tegirmenty, 42°45'40"N, 76°12'25"E, 1715 m and near Novorossiyyka.

Etymology. The new subspecies is named after Kemin Mountain Ridge, where the new taxon is distributed.

Dorcadion (Acutodorcadion) kastekum kichikeminum **ssp. n.**

Figs 23-27, Map 2 (7-9)

Description. Body big in high mountain populations and middle sized in lower populations, just as in *D. (A.) kastekum kastekum* Danilevsky, 1996 (Map 2-6); new subspecies is characterized by a number of small rather variable characters; in general prothorax narrower, less convex posteriorly; elytra usually narrower, general elytral shape more or less oval, though sometimes anterior elytral sides nearly parallel; elytral lines and pronotal white lines usually narrower; red parts of antennae and legs darker; body size in 3 different populations is different: low population (1400 m), body length in males: 19.3-22.5 mm, width (at widest elytral point): 6.0-6.7 mm, body length in females: 20.0-24.5 mm, width (at elytral middle): 7.4-9.0 mm; middle level population (1600 m), body length in males: 20.0-23.5 mm, width: 6.4-7.4 mm, body length in females: 22.3-24.5 mm, width: 8.7-9.0 mm; high population (1670 m), body length in males: 20.0-24.2 mm, width: 6.3-8.0 mm, body length in female: 25.0 mm, width: 8.8 mm.

Material. Holotype, male, Kirgizia, south of Zailiysky Alatau Ridge, right slope of Kichi-Kemin Canyon above Kichi-Kemin village, 42°51'06"N, 75°53'15"E, 1670 m, 30.4.2021, A. Rubenyan leg. - MD;

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40 paratypes; 7 males and 1 female with same label - MD & AR; 11 males, 4 females, Kirgizia, south of Zailiysky Alatau Ridge, right slope of Kichi-Kemin Canyon, 42°49'18"N, 75°53'43"E, 1600 m, 30.4.2021, A. Rubenyan leg. - MD & AR; 8 males, 5 females, Kirgizia, south of Zailiysky Alatau Ridge, right slope of Kichi-Kemin Canyon, 1400 m, 42°47'54"N, 75°54'12"E, 1400 m, 30.4.2021, A. Rubenyan leg. - MD & AR.

Material used for comparison. Holotype and paratypes (24 males, 11 females) of *D. globithorax kastekum* Danilevsky, 1996, Kazakhstan, W Zailiysky Alatau, Kastek Pass, 2300 m (42°57'53"N, 75°46'39"E), 9.5.1991, M. Danilevsky leg. (Map 2-6).

Distribution. Kirgizia, North of Zailiysky Alatau, right slope of Kichi-Kemin Canyon above Kichi-Kemin village from 1400 m to 1670 m.

Etymology. The new subspecies is named after Kichi-Kemin Canyon, where the new taxon is distributed.

Dorcadion (Acutodorcadion) kastekum aktyuzum **ssp. n.**

Figs 28-32, Map 2 (10)

Dorcadion (s. str.) *globithorax kastekum* Danilevsky, 1996: 415, part. - "high mountains in west part of Zailiyski Alatau and eastern part of Zhetyzhel mountain ridge".

Description. The taxon is very similar to the previous one, but 1st antennal joint completely black; fine white pubescence of 1st antennal joint nearly indistinct; fine white femora pubescence less dense; pale elytral and prothorax pubescence white, without tints of yellow; body length in males: 18.7- 24.5 mm; width: 6.5- 8.0 mm; body length in females: 20.8-23.8 mm, width: 7.9-9.0 mm.

Material. Holotype, male, Kirgizia, Zailiysky Alatau, upper level of Ak-Tyuz Canyon near Ak-Tyuz village, 42°53'12"N, 76°7'43"E, 2487 m, 15.5.1997, A. Klimenko leg. - MD; 8 paratypes: 4 males, 4 females with same label - MD.

Distribution. Kirgizia, Zailiysky Alatau, upper level of Ak-Tyuz Canyon near Ak-Tyuz village, 42°53'12"N, 76°7'43"E, 2487 m.

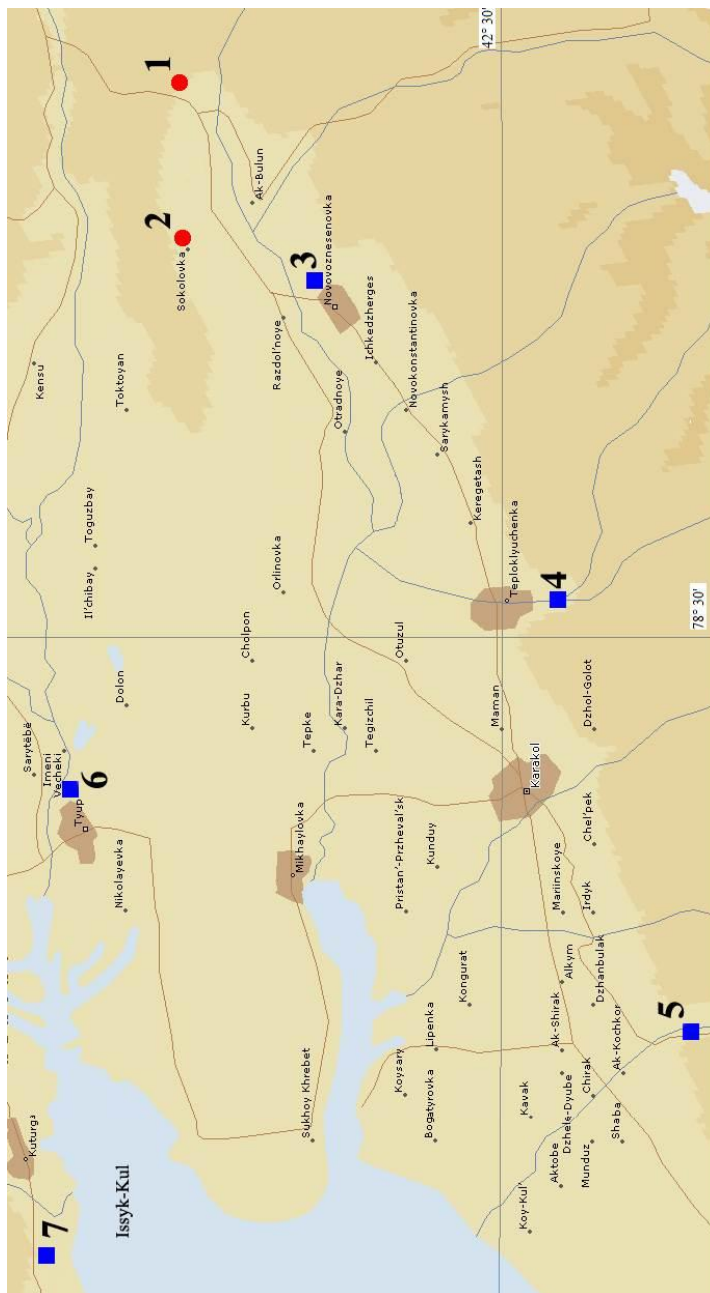
Etymology. The new subspecies is named after Ak-Tyuz Canyon, where the new taxon is distributed.

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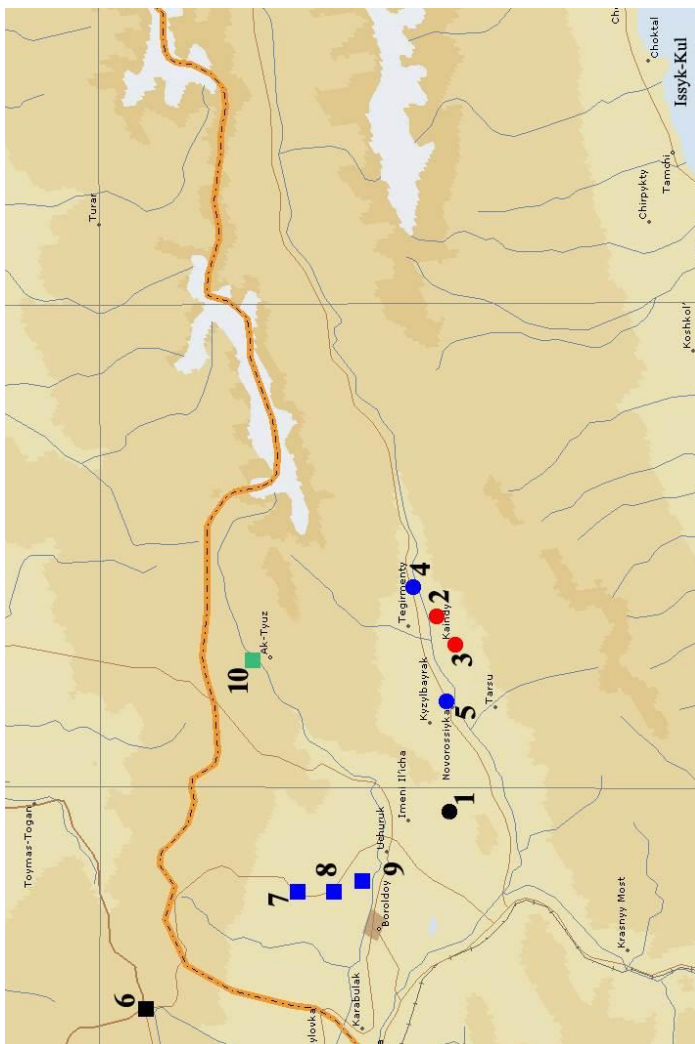
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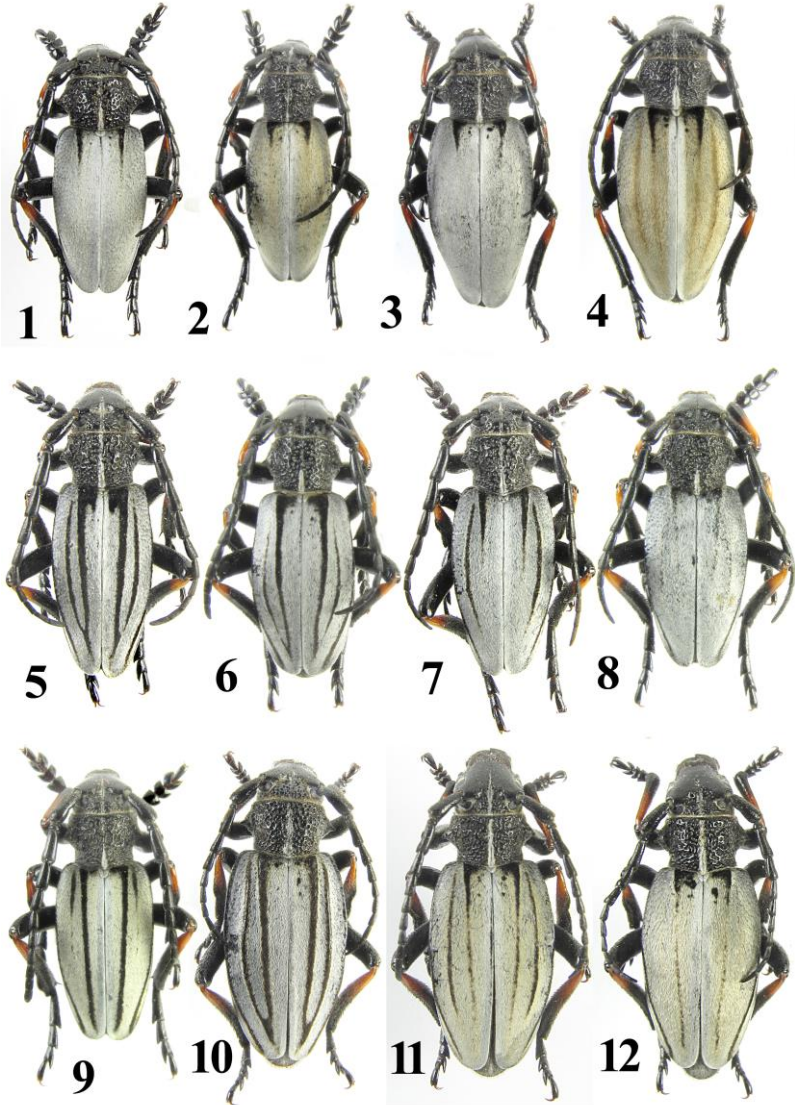
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Map 1. East of Issyk-Kul Lake, localities of *Dorcatodon semenovi*. *D. s. aleksandrae* ssp. n.: 1 - 4 km NE Dzhergalan, 2 - 2 km N Ak-Chiy; *D. s. hauseri*: 3 - Novovoznesenovka, 4 - Teploklyuchenka, 5 - Djety-Oguz, 6 - Tyup, 7 - between Oytal and Oybulak.



Map 2. North-West of Issyk-Kul Lake, localities of *Dorcadion darjae* and *D. kastekum*. *D. d. darjae*: 1 - 4km N Tortkul, 1800 m; *D. d. kungeyensis* **ssp. n.**: 2 - Kaindy, 3 - Sholakkaiyndy; *D. d. keminum* **ssp. n.**: 4 - 3 km E Tegirmenty, 5 - Novorossiyska; *D. k. kastekum*: 6 - Kastek Pass; *D. k. kichikeminum* **ssp. n.**: 7 - 7 km N Kichi-Kemin - 1670 m, 8-3 km N Kichi-Kemin - 1600 m, 9 - 1 km N Kichi-Kemin - 1400 m; *D. k. aktyuzum* **ssp. n.**: 10 - Ak-Tyuz.



Figs 1-4. *Dorcadion semenovi aleksandrae* ssp. n.: 1 - male, holotype; 2 - male, paratype, 4 km NE Dzhergalan; 3 - female, paratype from same locality; 4 - female, paratype, 2 km N Ak-Chiy.

Figs 5-12. *D. s. hauseri*: 5-9 - males, Teploklyuchenka; 10 -female, same locality; 11-12 - females - Tyup.

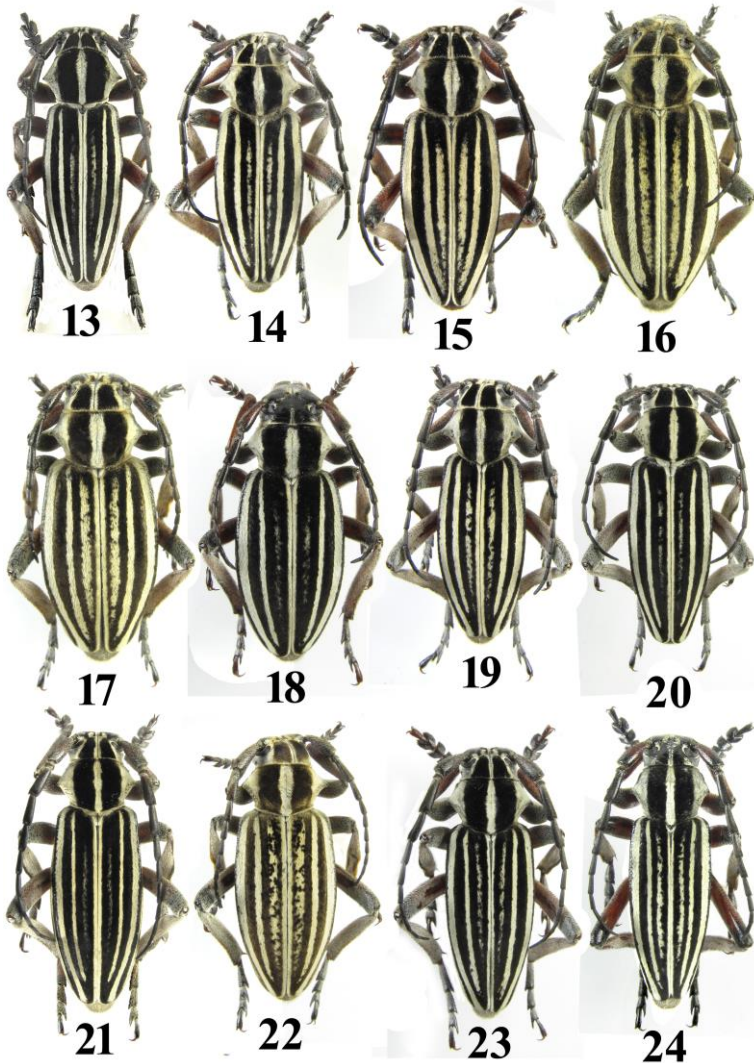
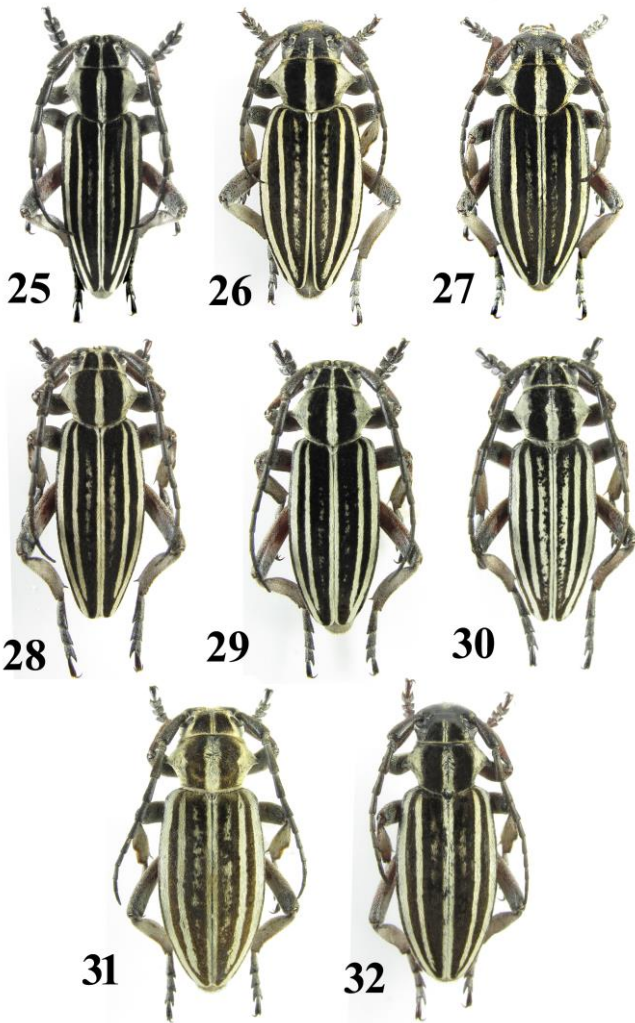


Fig. 13. *D. darjae darjae*: male, holotype.

Figs 14-18. *D. d. kungeyensis* ssp. n.: 14 - male, holotype; 15 - male, paratype, Kaiyndy environs; 16-18 - females, paratypes from same locality.

Figs 19-22. *D. d. keminum* ssp. n.: 19 - male, holotype; 20-21 - males, paratypes, 3 km eastwards Tegirmenty; 22 - female, paratype from same locality.

Figs 23-24. *D. kastekum kichikeminum* ssp. n.: 23 - male, holotype; 24 - male, paratype, 1 km N Kichi-Kemin.



Figs 25-27. *D. kastekum kichikeminum* **ssp. n.:** 25 - male, paratype, 3 km N Kichi-Kemin; 26-27 - females, paratypes from same locality.

Figs 28-32. *D. k. aktyuzum* **ssp. n.:** 28 - male, holotype; 29-30 - males, paratypes, upper level of Ak-Tyuz Canyon near Ak-Tyuz; 31-32 - females, paratypes from same locality.

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