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## New *Dorcadion (Cribridorcadion)* (Coleoptera: Cerambycidae) from Caucasus and Iran

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**Key words:** Taxonomy, zoogeography, new subspecies, Coleoptera, Cerambycidae, Dorcadionini, *Dorcadion (Cribridorcadion)*, Russia, Iran

Abstract: Dorcadion (Cribridorcadion) cinerarium novorossicum ssp. n. is described from north-west Caucasus (Russia, Novorossiysk env., northwards Gayduk, 445 m, 44°48′6′′N, 37°43′26′′E). All 20 subspecies of *D. cinerarium* (Fabricius, 1787) are arranged in 5 geographical groups. *D. glaucum* (Faldermann, 1837) is redescribed; its type locality is supposed. Two new subspecies of *D. glaucum* are described from Iranian Azerbaijan (prov. East Azerbaijan - Āzarbāijān-e Sharqi): *D. g. murzinianus* ssp. n. - Babak-Kale environs, 2050m, 38°50′54″N, 46°59′9″E and *D. g. lassallei* ssp. n. - Aharchai river valley, northwards Ahar, 2000m, about 38°38′4″N, 47°2′56″E.

#### **Abbreviations of collections:**

MD - collection of M. Danilevsky (Moscow)

ML - collection of M. Lazarev (Moscow)

SM - collection of S. Murzin (Moscow)

Dorcadion cinerarium (Fabricius, 1787) is one of the most variable species in the genus. Up to now it includes 20 subspecies distributed in south-east Europe from about Volga River to the east Ukraine and Moldova borders and in North Azerbaijan. All 20 subspecies could be conditionally arranged in 4 geographical groups, which are in fact natural groups of relatives, but each one can be strongly heterogeneous morphologically. One subspecies is described bellow as new.

### 1. Northern group

- 1. D. c. cinerarium (Fabricius, 1787) South of Russia and most of Ukraine
- 2. D. c. macropoides Plavilstshikov, 1932 Kharkov Region
- 3. D. c. zubovi Lazarev, 2011 Moldova

- 2. Crimean group
- 4. D. c. perroudi Pic, 1942 Most of Crimea
- 5. D. c. panticapaeum Plavilstshikov, 1951 Eastern Crimea
- 6. *D. c. bartenevi* Lazarev, 2011 Crimea, cape Tarkhankut 3. Black Sea group
- 7. D. c. demidovi Danilevsky, 2013 Ukraine, Odessa environs
- 8. D. c. gorodinskii Danilevsky, 1996 South Ukraine, Kherson Region
- 9. D. c. skrylniki Lazarev, 2011 South Ukraine, Melitopol environs
- 10. D. c. azovense Lazarev, 2011 South Ukraine, Berdyansk environs
- 11. *D. c. sindorum* Lazarev, 2011 South Russia, Anapa environs 4. Caucasian group
- 12. D. c. novorossicum Lazarev, ssp. n. South Russia, Western most part of Caucasian Ridge
- 13. D. c. veniamini Lazarev, 2011 South Russia, Markotkh Ridge above Novorossiysk
- 14. D. c. papayense Lazarev, 2014 South Russia, West Caucasus, Papay Mt.
- 15. D. c. adygorum Lazarev, 2011 Adygeya, Maykop environs.
- 16. D. c. smetanai Lazarev, 2011 Karachaevo-Cherkessia, Khasaut environs
- 17. *D. c. terkense* Lazarev, 2011 Chechnya, Groznyi 5. Transcaucasian group
- 18. D. c. belousovi Lazarev, 2011 Azerbaijan, Velvechay River Valley.
- 19. D. c. deniz Lazarev, 2011 Azerbaijan, Baku
- 20. D. c. napolovi Lazarev, 2011 Azerbaijan, Shemakha

# Dorcadion (Cribridorcadion) cinerarium novorossicum ssp. n. Figs 1-2

**Type locality.** Russia, Krasnodar Region: Novorossiysk env., northwards Gayduk, 445 m, 44°48′6′′N, 37°43′26′′E.

**Description.** Body big; antennae black with 1st joint usually darkred or nearly black; prothorax lateral tubercles shortly angulated; pronotal longitudinal furrow usually interrupted near middle by small convexity; pronotal longitudinal white stripe moderately narrow and

often not complete, pronotum with sparse big dots (often rather scattered), with fine dense punctation, partly covered with dense black recumbent setae; elytra totally covered with dense black pubescence (only one male from near Gayduk has big glabrous elytral areas); marginal white stripes just a little wider than epipleurae; humeral white stripes in males totally absent; females are always androchromal with black dens elytral pubescence; dorsal elytral white stripes in females usually absent, but sometimes poorly pronounced; humeral white stripes in females always present; longitudinal elytral sculpture (furrows and carinae) hardly visible in males, or better developed in females; anterior part of humeral area with dense big dots disappearing before middle; apical elytral margin usually reddish; legs always dark-red; body length in males: 11.3-15.7 mm, width: 4.2-5.1 mm, in females: 13.0-16.9 mm, width: 5.3-6.5 mm.

**Material.** Holotype, male, "Novorossiysk, N Gayduk, 44°48′6′′N, 37°43′26′′E, 445 m, 26.3 - 30.4.2014, A. Bondarenko leg." - MD; 47 paratypes: 4 males, 6 females, same label - MD; 19 males, 15 females, Novorossiysk, N Gayduk, from 368 m (44°48'9"N, 37°43'5.30"E) to 464m (44°47'52"N, 37°43'56"E), 18-26.5.2015, M.Danilevsky leg. - MD & ML; 3 males, Krasnodar Region, Verkhnebakansky, 290 m, 44°50'14"N, 37°37'56"E, 27.05.2015, M.Danilevsky leg. - MD.

**Distribution.** Two localities known in the south of Krasnodar Region in the western most part of Markhotkh Ridge: Novorossiysk environs, northewards Gayduk, from 368m (44°48'9"N, 37°43'5.30"E) to 464m (44°47'52"N, 37°43'56"E); Krasnodar Region, Verkhnebakansky, 290m, 44°50'14"N, 37°37'56"E. All specimens were collected along the forest roads.

Comparative diagnosis. The subspecies is very close to the neighbor taxon *D. c. veniamini* Lazarev, 2011 known in about 13 km eastwards along Markhotkh Ridge because of similar big size. But *D. c. veniamini* always has totally glabrous male elytra. *D. c. sindorum* Lazarev, 2011 was described westwards the area of *D. c. novorossicum* ssp. n. from Anapa environs and also has totally pubescent male elytra, but that subspecies is very small, looks to be close to *D. c. panticapaeum* Plavillstshikov, 1951.

### Dorcadion (Cribridorcadion) glaucum glaucum Falderman, 1837 Figs 3-5

Dorcadion glaucum Faldermann, 1837: 277 (no locality); Holzschuh, 1993: 46, part. (including "D. glaucum descampsi Villiers, 1967" [= D. semiargentatum Pic, 1905]).

Dorcadion (s. str.) glaucum, Plavilstshikov, 1932: 193 (Transcaucasia).

Dorcadion (Autodorcadion) glaucum, Plavilstshikov, 1948: 135, 146 (as probable for Armenia); 1958: 58, 76, 92, 249, 250, 268 (USSR: south-east Armenia, mountains of south-west Azerbaijan, Talysh. North Iran: Gilan, Iranian Talysh); Lobanov et al., 1982: 263; Danilevsky & Miroshnikov, 1985: 314, 327, 333.

Dorcadion (Pedestredorcadion) glaucum, Breuning, 1962: 488, part. (= faldermanni Ganglbauer, 1884) - "Persien" (as a type locality), "Talysch".

Pedestredorcadion glaucum glaucum, Villiers, 1967: 367 - "Ardebil".

Dorcadion (Cribridorcadion) glaucum, Danilevsky & Murzin, 2009b: 16 (Iran) — "The species must be very common in north Azerbajdzhan in the east part of Karadag mountain system according to numerous materials collected by W. Heinz and Th. Deuve near Kaleybar (38"52'N, 47"01'E). Another population is known nearby northwards Ahar." Danilevsky, 2010: 247 (Azerbaijan, Iran); 2012c: 115 (wrong record for Armenia).

**Type locality.** Iran, East Azerbaijan (Āzarbāijān-e Sharqi), the high eastern area of the Karasu River basin, about 10 km NE Kaleybar, 1900-2100 m, 38°54'55"N, 47°'58"E.

As it was properly published by Danilevsky (2012): "The original description was published without any geographical indication, but according to the title of the publication - "Fauna entomologica Trans-Caucasica" it is possible to accept Trancaucasia as the type locality. But from one side, there were several new taxa in that Faldermann's publication, which definitely absent in Trancaucasia, like Saperda mirabilis Faldermann, 1837 (now in Mallosia), or Dorcadion persicum Faldermann, 1837. From the other side, up to now no specimens of the taxon are definitely known from Transcaucasia. So, most probably the holotype was collected in the east part of Karadag mountain system in North Iran, where the species is rather common."

All populations mentioned by Danilevsky (2012) are rather different, so the designation of the type population is necessary. According to the picture by Faldermann (1837: Tab. 8, fig. 8) the male of his taxon has long acute thoracic spines and does not have

elytral black stripes near humeri. The populations from near Kaleybar are characterized exactly by those features. So, here Kaleybar environs are accepted as type locality. Other known to me populations are described bellow as new subspecies.

**Description**. Pronotum with well developed acute lateral spines; pronotal punctation rather regular, moderately sparse; elytra wide, regularly oval; elytral pubescence very dense, often yellowish; anterior elytral black strokes near humeri very small, often totally absent; certain males with short black strokes near elytral apices; all females with well developed black elytral stripes, which are very similar to black elytral design of *D. laeve* Faldermann, 1837: pale sutural stripe is narrow and never contacts apically with wide pale humeral stripe, dark stripe in between is always complete from anterior elytral margin to elytral apex; dark area anteriorly usually interrupted by several pale spots; dorsal pale stripes widely conjugate anteriorly and posteriorly with humeral pale stripes, so black stroke in between is very short; females with glabrous elytra unknown; body length in males: 10.5-14.0 mm, width: 3.9-5.2 mm, in females: 12.0-16.0 mm, width: 5.4-6.2 mm.

**Material.** 14 males, 7 females, "IR (Azarbaijan) / Pass  $\sim$  1900 m ca. 10 km / n. Kaleybar 30.V.1998 / Heinz leg." - MD; 2 males, "E Azerb. / Kaleybar / 2100 m 25.6.2002 / Th. Deuve leg." - MD.

**Distribution**. Iran, East Azerbaijan (Āzarbāijān-e Sharqi), the high eastern area of the Karasu River basin, about 10 km NE Kaleybar, 1900-2100 m, 38°54'55"N, 47°'58"E.

**Diagnosis**. The taxon is characterized by moderately dense pronotal punctation, strong development of black elytral areas in females, glabrous form in females unknown.

# Dorcadion (Cribridorcadion) glaucum lassallei ssp. n. Fig 6

**Type locality.** Iran, prov. East Azerbaijan (Āzarbāijān-e Sharqi), high northern area of Aharchai river valley, northwards Ahar, 2000m, about 38°38'4"N, 47°2'56"E.

**Description**. Only one male known; lateral spines of pronotum very short, just as small tubercles; pronotal punctation big, irregular, sparse, but partly conjugated; elytra strongly elongated, with sides

more converging posteriorly, than anteriorly; elytral pubescence very dense, light-grey; anterior elytral black strokes long and distinct; black strokes near elytral apices absent; body length: 12.9 mm, width: 4.3 mm.

**Material.** Holotype, male, Iran, prov. East Azerbaijan (Āzarbāijān-e Sharqi), northward Ahar, 2000 m, 38°38'4"N, 47°2'56"E, VI.2003, B.Lassale leg.- MD.

**Distribution.** Iranian Azerbajdzhan, Karadag, high northern area of Aharchai tiver valley, northward Ahar, 2000 m, 38°38'4"N, 47°2'56"E.

**Diagnosis**. The taxon is characterized by long narrow body, big and coarse pronotal punctation.

**Etymology**. The new taxon is dedicated to a well known French entomologist Bernard Lassale, who collected the holotype.

# Dorcadion (Cribridorcadion) glaucum murzinianus ssp. n. Figs 7-11

**Type locality.** Iran, prov. East Azerbaijan (Āzarbāijān-e Sharqi), Babak-Kale environs, 2050 m, 38°50'54"N, 46°59'9"E.

**Description**. Lateral spines of pronotum a little shorter; pronotal punctation rather dense, partly conjugated; elytra more elongated, regularly oval; elytral pubescence less dense, never yellowish; anterior elytral black strokes always distinct; certain males with short black strokes near elytral apices; females usually with same elytral design as in males, without well developed black areas; very rare dorsal internal black elytral stripes nearly complete, sometimes external dorsal stroke distinct; or only anterior and posterior strokes present; females with totally glabrous black elytra are not very rare; body length in males: 10.8-14.9 mm, width: 4.2-5.7 mm, in females: 13.1-16.6 mm, width: 5.2-6.4 mm.

**Material.** Holotype, male, Iran, prov. East Azerbaijan (Āzarbāijān-e Sharqi), Babak-Kale environs, 2050 m, 38°50'54"N, 46°59'9"E, 29.5.2014, S. Murzin leg. - ML; 141 males, 22 females with same label - MD, ML, SM.

**Distribution.** NW Iran, prov. East Azerbaijan (Āzarbāijān-e Sharqi), the high western area of the Karasu River basin, Babak-Kale environs, 2050m, 38°50′54″N, 46°59′9″E.

**Diagnosis**. The taxon is characterized by very dense pronotal punctation, poor development of black elytral areas in females, presence of glabrous form in females.

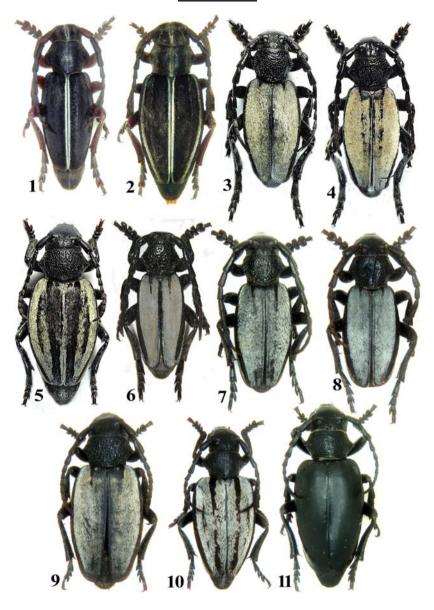
**Etymology**. The new taxon is dedicated to a well known Russian entomologist Sergey Murzin, who collected the type series.

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#### REFERENCES

- Breuning S. 1962. Revision der Dorcadionini (Coleoptera, Cerambycidae). -Entomologische Abhandlungen und Berichte aus dem Staatlichen Museum für Tierkunde in Dresden. 27: 1-665.
- Faldermann F. 1837. Fauna entomologica Trans-Caucasica. Coleoptera. Pars 2. Moscou: l'imprimerie d'Auguste Semen, Imprimeur de l'Academie Impériale Medico-Chirurgicale. 433 p., pl. 1-15.
- Ganglbauer L. 1884. Bestimmungstabellen europäischer Coleopteren: VIII. Cerambycidae. Schluss. Mit Berücksichtigung der Formen Algiers und des paläarktischen Asiens, exclusive jener von Japan. Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien 33 [1883]: 437-586.
- Danilevsky M.L. 2012. Additions and corrections to the new Catalogue of Palaearctic Cerambycidae (Coleoptera) edited by I. Löbl and A. Smetana, 2010. Part. IV. - Humanity Space. International Almanac. Vol. 1. No. 1: 86-136.
- Danilevsky M.L. 2010. tribe Dorcadionini, pp. 241-264. In I. Lobl & A. Smetana (ed.): Catalogue of Palaearctic Coleoptera, Vol. 6. Stenstrup: Apollo Books. 924 p.
- Danilevsky M.L. & Murzin S. V., 2009. A revue of Dorcadion Dalman, 1817 species of "laeve-group". Part 2 (Coleoptera, Cerambycidae, Lamiinae). -Les cahiers Magellanes. 93: 1-22.
- Danilevsky M.L., Miroshnikov A.I., 1985 Timber-Beetles of Caucasus (Coleoptera, Cerambycidae). Key.- Krasnodar: 419 pp. [in Russian]
- Holzschuh C. 1993. Sechzig neue Bockkäfer aus Asien, vorwiegend aus China und Thailand (Col., Cerambycidae), 5-63 S. In: Neue Bockkäfer aus Europa und Asien IV. FBVA Berichte Schriftenreihe der Forstlichen Bundesversuchsanstalt in Wien. 75: 63 + 2.
- Lazarev M.A. 2009. Armenian Dorcadion (Coleoptera: Cerambycidae) of "cinerarium-group". Studies and reports of District Museum Prague-East. Taxonomical Series. 5(1-2): 197-220.
- Lazarev M.A. 2011. A revision of the taxonomic structure of Dorcadion cinerarium (Fabricius, 1787) (Coleoptera: Cerambycidae). Studies and reports of District Museum Prague-East. Taxonomical Series. 7 (1-2): 255-292.

- Lobanov A.L., Danilevsky M.L., Murzin S.V., 1982 Systematic list of longicorn beetles (Coleoptera, Cerambycidae) of the USSR. 2. Revue d'Entomol. 61(2): 252-277 [in Russian]
- Pic M. 1905. Descriptions et notes diverses. Pp. 5-15. Matériaux pour servir à l'étude des longicornes. 5ème cahier, 2ème partie. Saint-Amand (Cher): Imprimerie Bussière. 38 + 1 pp.
- Plavilstshikov N.N. 1932. Timber-beetles Timber Pests. Moscow: Leningrad. 200 p. [in Russian]
- Plavilstshikov N.N. 1948. A Key for Longicorn Beetles of Armenia. Erevan. 232 p. [in Russian]
- Plavilstshikov N.N. 1958. Faune de l'URSS. Insects Coléptères. V.23(1). Cerambycidae (P.3). Sousfamille Lamiinae, p.1. Moscou: Leningrad. 592 p. [in Russian]
- Villiers A. 1967. Contribution à la faune de l'Iran. 1. Coléoptères Cérambycides. Annales de la Société Entomologique de France. (N.S.). 3(2): 327-379.



- **Fig 1-2.** Dorcadion (Cribridorcadion) cinerarium novorossicum **ssp. n.:** 1 Holotype, male, "Novorossiysk, N Gayduk, 44°48′6′′N, 37°43′26′′E, 445 m, 26.3 30.4.2014, A. Bondarenko leg.; 2 Paratype, female, same label.
- **Fig 3-5.** *Dorcadion (Cribridorcadion) glaucum glaucum* Falderman, 1837: 3 male, E Azerb., Kaleybar, 2100 m, 25.6.2002, Th. Deuve leg.; 4 male, IR (Azarbaijan), Pass ~ 1900 m ca. 10 km, n. Kaleybar 30.V.1998, Heinz leg.; 5 females, with same label.
- **Fig 6.** *Dorcadion (Cribridorcadion) glaucum lassallei* **ssp. n.:** Holotype, male, Iran, prov. East Azerbaijan (Āzarbāijān-e Sharqi), northward Ahar, 2000 m, 38°38'4"N, 47°2'56"E, VI.2003, B.Lassale leg.
- **Fig 7-11.** *Dorcadion* (*Cribridorcadion*) *glaucum murzinianus* **ssp. n.:** 7 Holotype, male, Iran, prov. East Azerbaijan (Āzarbāijān-e Sharqi), Babak-Kale environs, 2050 m, 38°50'54"N, 46°59'9"E, 29.5.2014, S. Murzin leg.; 7-8 males, with same label; 9-11 females, with same label.

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