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A new species of *Dorcadion* (*Cribridorcadion*) (Coleoptera: Cerambycidae) in Turkey

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Abstract

A new taxon, *Dorcadion* (*Cribridorcadion*) *postalbosuturale* sp. nov. (Coleoptera: Cerambycidae) close to *D. (Cribridorcadion) infernale* Mulsant & Rey, 1863 is described from Karaman Province, Turkey.

Key Words: *Dorcadion* (*Cribridorcadion*) *infernale*; sutural stripe; Karaman Province

Resumen

Se describe una nueva especie, *Dorcadion* (*Cribridorcadion*) *postalbosuturale* sp. nov. (Coleoptera: Cerambycidae), cerca de *D. (Cribridorcadion) infernale* Mulsant & Rey, de la provincia de Karaman, Turquía.

Palabras Clave: *Dorcadion* (*Cribridorcadion*) *infernale*; raya sutura; provincia de Karaman

Although Turkey is adjacent to large bodies of water to the south, west, and north, it has continental properties. Turkey is the center of origin of many taxa, and its exceptionally diverse topography has provided refugia in which many species have survived in spite of harsh geological and climatic changes. The great biological importance of Turkey is evident from the remarkable variety of arthropods in Turkey. Nevertheless, the fauna of Turkey has not been thoroughly studied and documented.

The Palearctic genus *Dorcadion* Dalman, 1817, which belongs to the subfamily Lamiinae, has 5 subgenera, i.e., *Acutodorcadion* Danilevsky et al., 2005; *Carinatodorcadion* Breuning, 1943; *Cribridorcadion* Pic, 1901; *Dorcadion* Dalman, 1817; and *Maculatodorcadion* Breuning, 1943 with respect to Özdikmen & Kaya (2015).

According to Danilevsky (2015), the genus includes a total of 382 species worldwide, i.e., 30 species in *Acutodorcadion*, 10 species in *Carinatodorcadion*, 330 species in *Cribridorcadion*, 8 species in *Dorcadion*, and 4 species in *Maculatodorcadion*. In Turkey, the genus is represented by a total of 192 species, which is a half of the species number in whole world, with 4 species in *Carinatodorcadion*, 184 species in *Cribridorcadion*, and 4 species in *Maculatodorcadion*. Indeed, 151 of these species are endemic to Turkey, i.e., 1 species in *Carinatodorcadion*, 147 species in *Cribridorcadion*, and 3 species in *Maculatodorcadion*. The subgenera *Acutodorcadion* and *Dorcadion* are not represented in Turkey.

Genus *Dorcadion* Dalman, 1817: 397 [type species *Cerambyx glycyrrhizae* Pallas, 1773]

Subgenus *Cribridorcadion* Pic, 1901: 12 [type species *Dorcadion mniszzechi* Kraatz, 1873]

Pedestredorcadion Breuning, 1943: 526 [type species *Lamia pedestris* Poda von Neuhaus, 1761]

Autodorcadion Plavilstshikov, 1958: 45 [type species *Cerambyx arenarius* Scopoli, 1763]

Dzhungarodorcadion Danilevsky, 1993: 47 [type species *Dorcadion jacobsoni* Jakovlev, 1899]

Bergerianum Pesarini & Sabbadini, 2004: 150 [type species *Dorcadion chrysochroum* Breuning, 1943]

Dorcadion (*Cribridorcadion*) *postalbosuturale* Özdikmen & Koçak sp. nov. (Figs. 1–3)

MALE

Body length: 18 mm, and body width: 5.5 mm.

Body black, covered with rather dense, recumbent, short whitish-gray pubescence.

Head completely black, glabrous except mouth parts with rather dense, recumbent, longer whitish-gray pubescence; frons with very sparse and fine punctures and a fine median groove. Vertex with denser punctures. Antennae completely black, especially 1st and even 2nd antennal segments covered with rather dense, recumbent, short whitish-gray pubescence.

Pronotum completely black, glabrous with moderately dense, fine punctures, but punctures denser and more distinct than that on vertex.

Scutellum black, glabrous and triangular, but more or less elongated apically.

Elytra black, glabrous, but only on posterior half with a sutural stripe of white hairs. Elytra with moderately dense, fine punctures, but especially punctures on basal parts larger than that on pronotum. Posterior half of elytra with small, transverse wrinkles. Elytral apex flattened and rounded.

Apex of pygidium more or less visible in dorsal view.

Abdomen black clothed with very dense, recumbent, short whitish-gray pubescence except on the posterior parts of sternites 1–4, which are glabrous, glanced and impunctated.

Legs completely black with rather dense, recumbent, short whitish-gray pubescence.

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Fig. 1. *Dorcadion postalbosuturale* sp. nov. (holotype ♂).

TYPE MATERIAL

HOLOTYPE 1 ♂: TURKEY, Karaman Prov., Central, Elmaşehir district, 1,050 m, 23-II-2013. PARATYPES 5 ♂♂ and 7 ♀♀: data same as Holotype. The specimens are deposited in collection of Özgür Koçak (Turkey: Karaman Province) (Fig. 4).

REMARKS

The new species definitely belongs to the subgenus *Dorcadion* (*Cribridorcadion*) Pic, 1901 and the *infernale* species group. It is closely related to *D. infernale* Mulsant & Rey, 1863 and *D. (Cribridorcadion) erdemi* Özdikmen et al. (2014) (Fig. 5).

The *infernale* species group in Turkey includes 5 species, i.e., *Dorcadion erdemi* Özdikmen et al., 2014; *D. infernale* Mulsant & Rey, 1863; *D. janatai* Kadlec, 2006; *D. pseudinfernale* Breuning, 1943; and *D. postalbosuturale* Özdikmen & Koçak sp. nov. All mentioned species now are endemic to Turkey.



Fig. 2. *Dorcadion postalbosuturale* sp. nov. (paratype ♀).

The new species is distinguished easily from *D. infernale* by a sutural stripe of white hairs on posterior half of elytra (elytra completely glabrous in *D. infernale*); clothed with very dense, recumbent, short whitish-gray pubescence on underside of body as in Figure 1. In *D. infernale* elytra clothed with sparser, recumbent, much shorter whitish-gray pubescence on underside of body. Also, the new species is distinguished easily from *D. erdemi* by abdomen that is black clothed with very dense, recumbent, short whitish-gray pubescence except on the posterior parts of sternites 1–4, which are distinctly glabrous, glanced, and impunctated (abdomen black clothed with rather dense, recumbent, very short whitish-gray pubescence completely in *D. erdemi*); hardly visible pygidium in dorsal view (pygidium clearly visible in dorsal view in *D. erdemi*). The females are different in color and design (Fig. 2).



Fig. 3. Copulation in *Dorcadion postalbosuturale* sp. nov. (paratypes ♂, ♀).



Fig. 4. Location of Karaman Province in Turkey.



Fig. 5. *Dorcadion infernale* Mulsant & Rey, 1863 from Karaman Province.

Females have the normal sexual differences as seen in Fig. 2. Body black clothed with very dense yellowish pubescence with the exception of 2 areas near antennal scapes, 2 triangular areas on vertex, beginning from apical half of the 3rd up to the end following antennal segments, 2 longitudinal bands on medio-lateral parts of pronotum and interspaces of elytral bands clothed with dark brown ground pubescence. Elytra with 5 bands of yellowish hairs as 1 lateral, 1 humeral, 1 dorsal, 1 presutural, and 1 sutural. Lateral, humeral, and sutural bands complete. Dorsal and presutural bands with spots of black velvety pubescence. Elytral bands can be put in order from thicker to thinner as lateral, presutural, humeral, dorsal, and sutural bands.

VARIABILITY OF PARATYPES

Body length varies from 16–19 mm. Body width varies from 5–6.5 mm.

ETYMOLOGY

From the postsutural band of elytra.

A key for the *infernale* species group of the subgenus *Dorcadion* (*Cribridorcadion*) in Turkey

- 1.— Punctuation of dorsal surface sparser and finer; elytra weaker wrinkled 2
- 1'.— Punctuation of dorsal surface denser and more regular coarse; elytra stronger wrinkled 3
- 2.— Smaller size, denser micro- as well as macropunctuation of the head, pronotum, and elytra, so that the sculpture of the whole dorsal surface is matter; relatively longer antennae; more wrinkled sculpture of the elytra *D. pseudinfernale*
- 2'.— Larger size, sparser micro- as well as macropunctuation of the head, pronotum, and elytra, so that the sculpture of the whole dorsal surface is lighter; relatively smaller antennae; less wrinkled sculpture of the elytra *D. janatai*
- 3.— Elytra with a sutural stripe of white hairs on posterior half 4
- 3'.— Elytra without a sutural stripe *D. infernale*
- 4.— Relatively longer body length (16–19 mm); abdomen black clothed with very dense, recumbent, short whitish-gray pubescence except on the posterior parts of sternites 1–4, which are glabrous, glanced, and impunctated; apex of pygidium hardly visible in dorsal view *D. postalbosuturale* sp. nov.
- 4'.— Relatively smaller body length (15–16.5 mm); abdomen black clothed with rather dense, recumbent, very short whitish-gray pubescence completely; pygidium clearly visible in dorsal view *D. erdemi*

References Cited

- Danilevsky ML. 2015. Catalogue of Palaearctic Cerambycoidea. <http://www.cerambycidae.net/catalog.pdf> (last accessed 29 Jan 2015).
- Mulsant E, Rey C. 1863. Longicornes nouveaux ou peu connus. Annales de la Société Linnéenne de Lyon 10: 144–184.
- Özdikmen H, Kaya G. 2015. A proposed new arrangement of some Dorcadionini (Coleoptera: Cerambycidae). Munis Entomology and Zoology 10: 1–10.
- Özdikmen H, Kaya G, Al-Hamadani N. 2014. A new species of *Dorcadion* Dalman, 1817 (Coleoptera: Cerambycidae) from Turkey. Acta Zoologica Bulgarica 66: 179–180.