

A new subspecies of the *Dorcadion semibruneum* Pic, 1903 (Coleoptera: Cerambycidae) from Turkey

Новый подвид *Dorcadion semibruneum* Pic, 1903 (Coleoptera: Cerambycidae) из Турции

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KEY WORDS: Coleoptera, Cerambycidae, *Dorcadion*, new subspecies, Turkey.

КЛЮЧЕВЫЕ СЛОВА: Coleoptera, Cerambycidae, *Dorcadion*, новый подвид, Турция.

ABSTRACT. A new subspecies, *Dorcadion semibruneum vlasenkoi* **ssp.n.**, is described from Turkey (Antalya and Isparta provinces). A data on bionomics of this subspecies are given. The variability of some characters of *Dorcadion semibruneum* sensu lato is discussed. The following new synonymy is proposed: *D. s. mediocreimpressum* Pic, 1909 = *D. s. sivasense* Özdikmen, 2016, **syn.n.** = *D. s. sivrihisarensis* Özdikmen, 2016 **syn.n.**

РЕЗЮМЕ. Описан *Dorcadion semibruneum vlasenkoi* **ssp.n.** из Турции (провинции Анталья и Испарта), приведены данные по биологии. Обсуждена изменчивость ряда признаков *Dorcadion semibruneum* sensu lato, предложена синонимия *D. s. mediocreimpressum* Pic, 1909 = *D. s. sivasense* Özdikmen, 2016, **syn.n.** = *D. s. sivrihisarensis* Özdikmen, 2016 **syn.n.**

Introduction

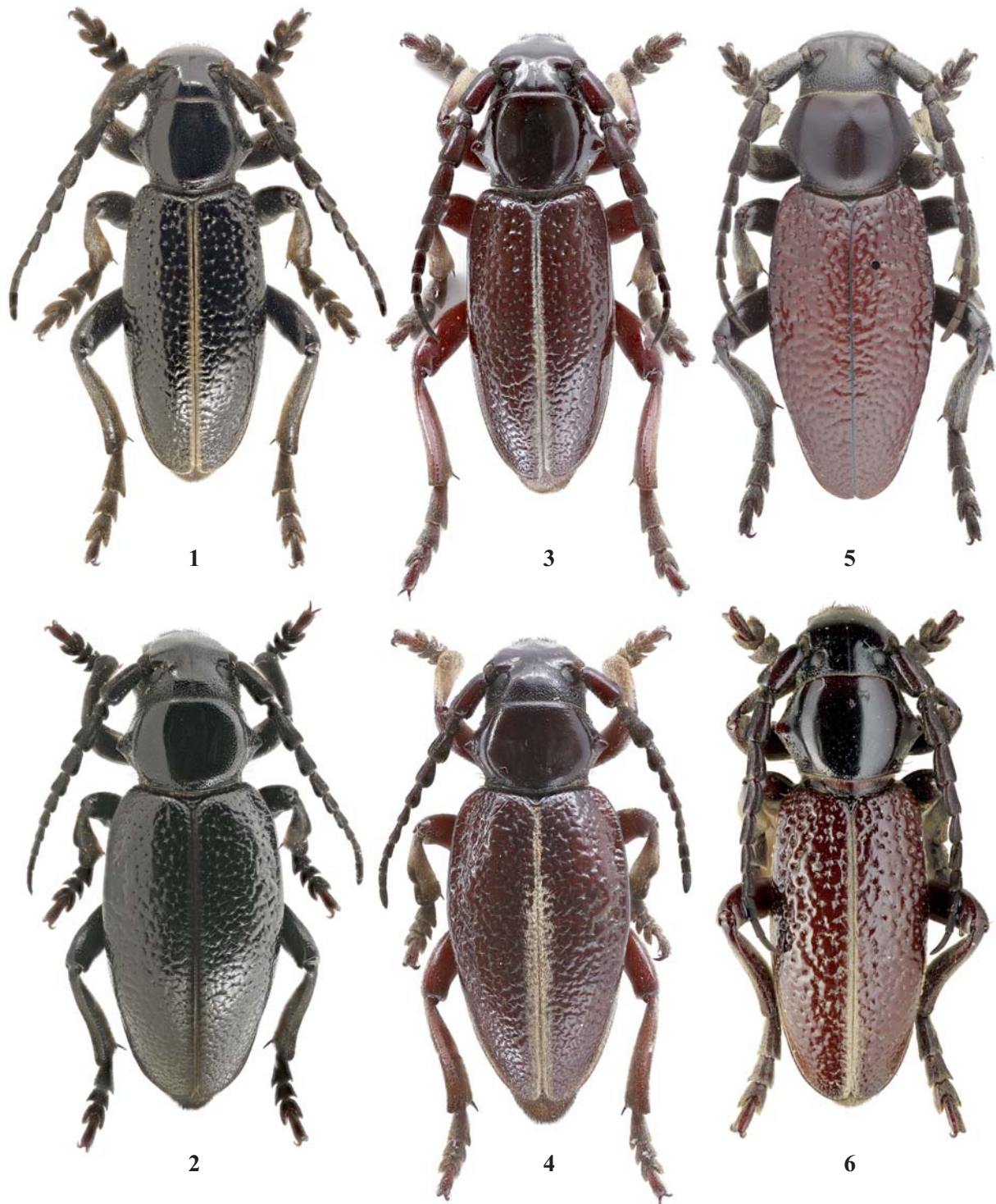
Dorcadion semibruneum Pic, 1903 distributed in Western and Central Turkey (Fig. 20), and, according to recent publications [Pesarini, Sabbadini, 2012; Lazarev, 2014; Özdikmen, 2016] includes five subspecies: *D. s. semibruneum* (Fig. 5), *D. s. mediocreimpressum* Pic, 1909, *D. s. notatum* Pesarini and Sabbadini, 2012, *D. s. sivasense* Özdikmen, 2016, *D. s. sivrihisarensis* Özdikmen, 2016. In addition, Lazarev [2014] assumed that the populations from Çakmaktepe Geçidi (Afyonkarahisar Province) and Barla (Isparta Province) may be a separate subspecies. We do not know specimens from Barla, while beetles from Çakmaktepe Geçidi (Figs 3–4, 18–19) are well presented in different collections. Last ones characterized by well-developed shoulder

carina with short dark line and smoother sculpture of the elytra (Figs 3–4). We don't know males from the type locality of *D. s. mediocreimpressum*, but female in our collection (from Çakmaktepe Geçidi) does not differ from holotype *D. s. mediocreimpressum*. So we interpret beetles from this population under this name. Most characters used by different authors for separation of recently described subspecies is not true or doubtful. For example, *D. s. mediocreimpressum* from Çakmaktepe Geçidi characterized in Pesarini and Sabbadini [2012] as having no punctures on the pronotum. In fact, beetles from this population have quite distinct pronotal puncturation, according to the material available to the author. The degree of coarseness can be also variable. The single specimen of *D. s. notatum* we examined, is in fact characterized by a rough sculpture of the elytra (Fig. 6). Since we didn't find any other considerable differences between *D. s. notatum* and *D. s. mediocreimpressum*, the description of this population (*notatum*) as a subspecies is doubtful in our opinion. But further synonymization requires more material on both taxa from types localities

The diagnostic character “black sutural stripe” for *D. s. sivrihisarensis* is also doubtful. According to our observations, strongly greasy specimens or beetles recently left pupal cell have the suture strip, which really can look very dark (Figs 2, 17). According to the material examined by the author, the degree of darkening of the elytra, pronotum and antennae can significantly vary in brown-colored beetles of this group, including nominative subspecies. As a result, it is impossible to draw conclusions about different taxonomic belonging of the studied by Özdikmen (2016) single specimens. Thus, we proposed the following synonymy: *D. s. mediocreimpressum* Pic, 1909 = *D. s. sivasense* Özdikmen, 2016, **syn.n.**, = *D. s. sivrihisarensis* Özdikmen, 2016 **syn.n.**

We received two specimens of *Dorcadion* cf. *semibrunneum* originating from different localities of southwestern Turkey. Both specimens have black coloration.

Later, we collected a series of specimens from the territory of Davraz mountains ridge, which allowed us to describe a new subspecies.



Figs 1–6. Habitus, dorsal view: 1–2 — *Dorcadion semibrunneum vlasenkoi* **ssp.n.**; 3–4 — *D. s. mediocreimpresum*; 5 — *D. s. semibrunneum*; 6 — *D. s. notatum* Pesarini and Sabbadini, 2012; 1 — holotype; 2 — paratype; 5 — syntype (NMW); 1, 3, 5–6 — males; 2, 4 — females.

Рис. 1–6. Внешний вид, сверху: 1–2 — *Dorcadion semibrunneum vlasenkoi* **ssp.n.**; 3–4 — *D. s. mediocreimpresum*; 5 — *D. s. semibrunneum*; 6 — *D. s. notatum* Pesarini and Sabbadini, 2012; 1 — голотип; 2 — паратип; 5 — синтип (NMW); 1, 3, 5–6 — самцы; 2, 4 — самки.

The examined material is deposited in the following collections:

NMP — Natural History Museum of Prague (Czech republic, Prague);

NMW — Naturhistorisches Museum Wien (Austria, Wien);

SDEIB — Senckenberg Deutsches Entomologisches Institut (Germany, Müncheberg);

Dorcadion semibrunneum vlasenkoi Kasatkin, **ssp.n.**

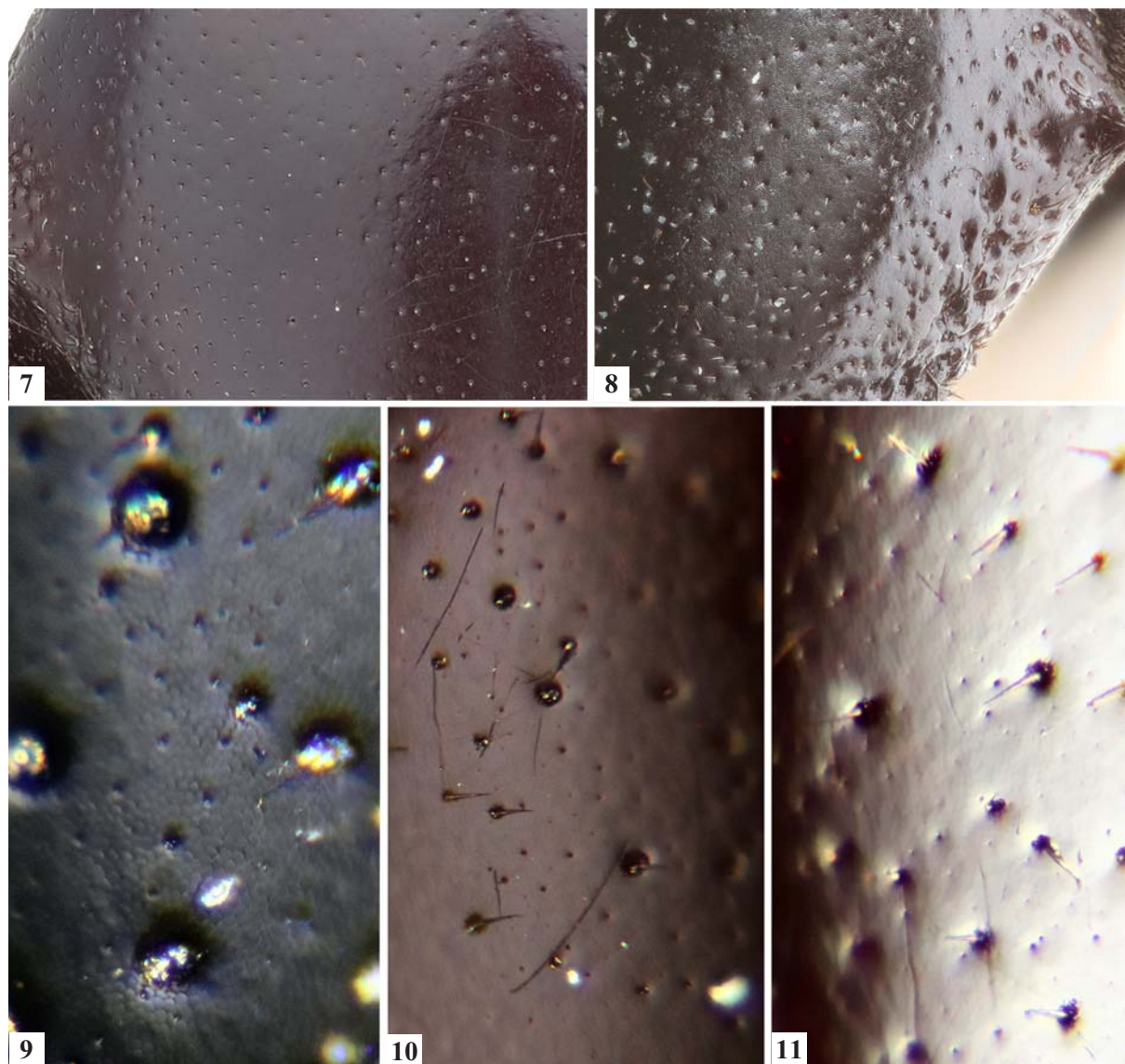
Figs 1–2, 5, 7.

MATERIAL. Holotype (author's collection): ♂, Turkey, Isparta Prov., Davraz Dağ, 37°46'59.66"N 30°44'40.28"E, 5–6 05 2019, leg. Kasatkin D.. Paratypes (all specimens in author's collection): 3♂ 8♀ with the same labels; 1♂, Turkey, Isparta Prov., W slope of Davraz Dağ, h=1600 m, 12 06 2014, mountain steppe, 37°46'42.2"N

30°40'57.1"E, leg. Saratovsky B.; 1♂, Turkey, Antalya Prov., 35 km WSW Antalya, Saklıkent vill., 36°50'392"N 30°19'655"E, 3–6 05 2010, leg. Vlasenko A.

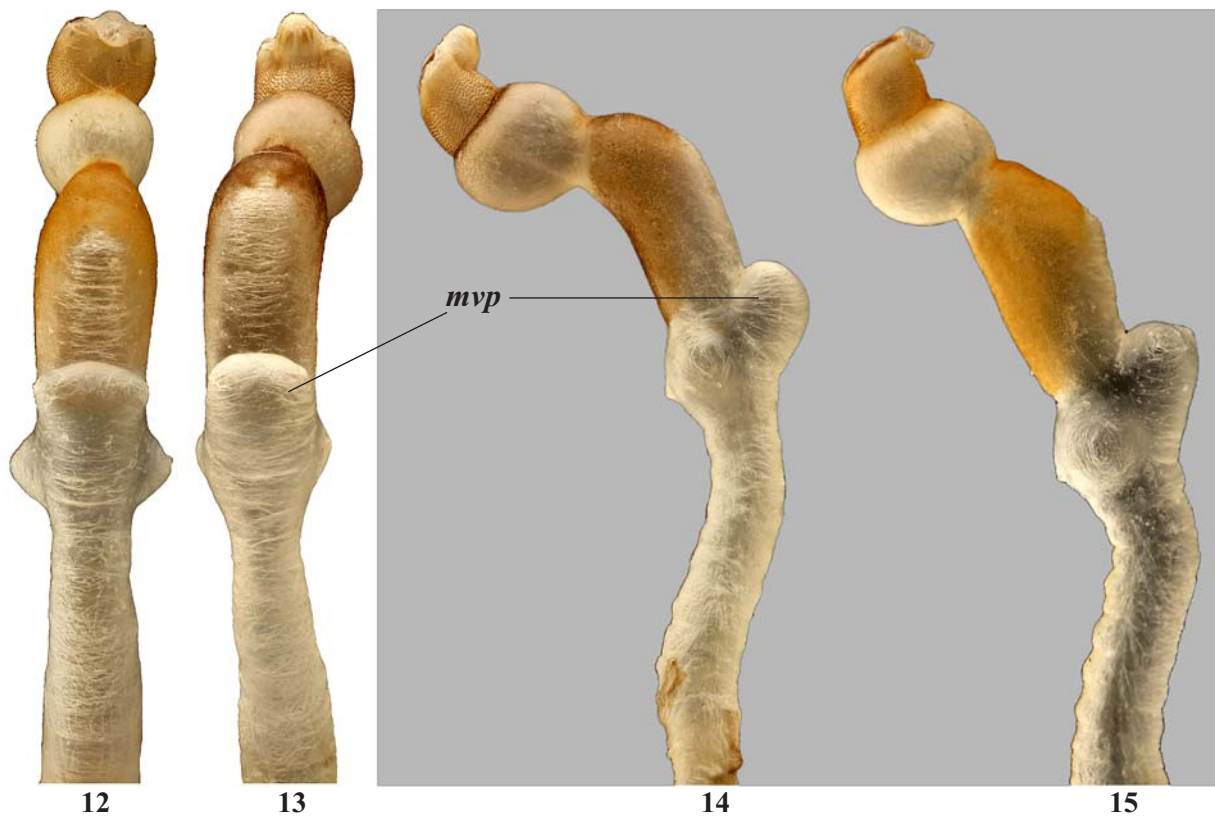
ADDITION EXAMINED COMPARATIVE MATERIALS. *D. s. notatum*: TR, umg. Barla (Ankara), 1200 m, 12 IV. 1990, Heinz leg. (NMP). *D. s. mediocreimpressum*: 2♂, 1♀, Turkey, Afyonkarahisar prov., Çakmaktepe geçidi, 08 05 2019, leg. Kasatkin D.; 2♂ the same place, 16 04 2015, Leg. M. & S. Nabozhenko; 3♂, 1♀ "Afyon vill., Başören, Çakmaktepe Geçidi, 1800 m, 04.06.2002, leg. Kostal et Vorisek" (NMP). *D. s. semibrunneum*: 1♂, Syntype, "Asia minor, Bos-Dagh, v.Bodemeyer", "Asia minor, Eski-Chehir, v.Bodemeyer", "Typus" (red label); 1♀, "Asia minor, Bos-Dagh, v.Bodemeyer" (coll. SDEIB); 1♂, Syntype, "Asia minor, Bos-Dagh, v.Bodemeyer", "Asia minor, Eski-Chehir, v.Bodemeyer", "Mniszeczki semibrunneum Pic Type" "Typus" (red label); 1♂ "Asia minor, Bos-Dagh, v.Bodemeyer", "collect.Hauser" (NMW).

DESCRIPTION. Length of male: 19.5 mm (holotype); other male (paratypes) 16–20 mm, width 4.5–5.5 mm; length of female 17–21 mm, width 5.5–7.0 mm.



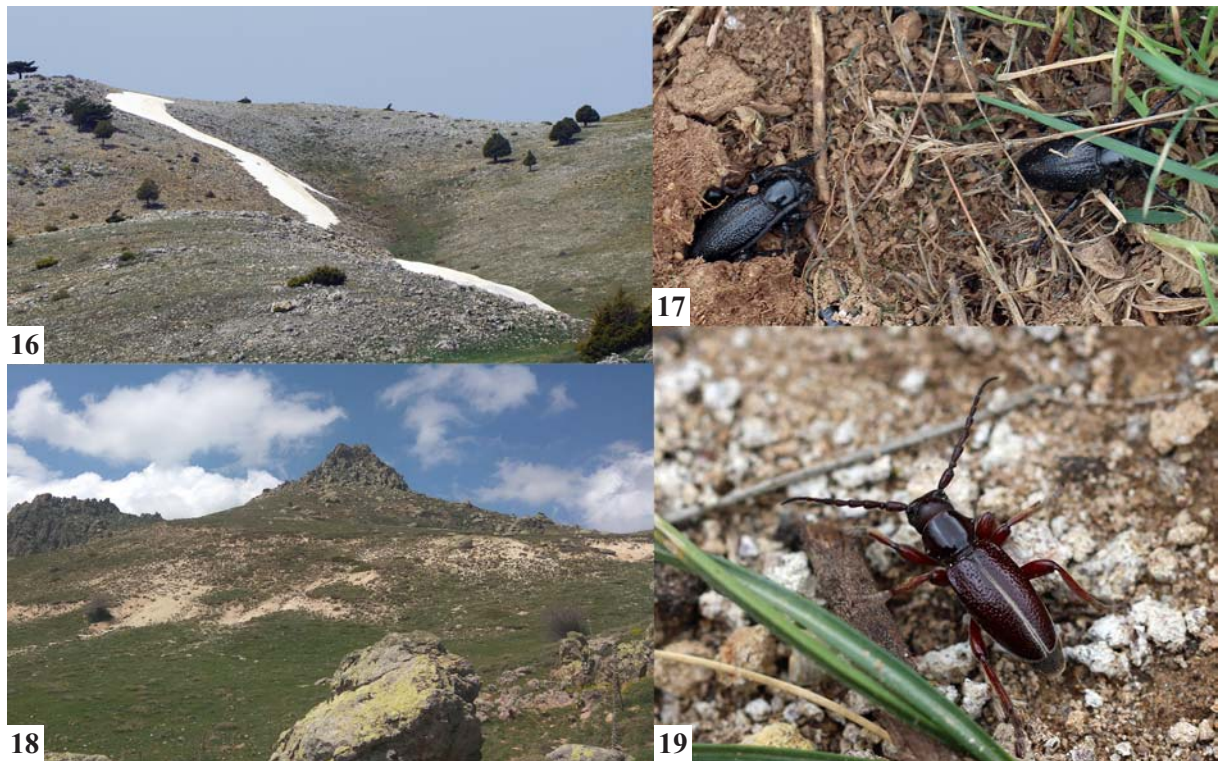
Figs 7–11. Pronotal microsculpture: 7–8 — *Dorcadion s. semibrunneum*; 9 — *D. s. vlasenkoi* **ssp.n.**; 10–11 — *D. s. mediocreimpressum*; 7 — syntype (MNW).

Рис. 7–11. Микроскульптура переднеспинки: 7–8 — *Dorcadion s. semibrunneum*; 9 — *D. s. vlasenkoi* **ssp.n.**; 10–11 — *D. s. mediocreimpressum*; 7 — синтип (MNW).



Figs 12–15. Endophallus: 12, 15 — *Dorcadion semibrunneum mediocreimpressum*; 13–14 — *D. s. vlasenkoi ssp.n.*; 12–13 — ventral view; 14–15 — lateral view; *mvp* — medioventral protuberance.

Рис. 12–15. Эндофаллус: 12, 15 — *Dorcadion semibrunneum mediocreimpressum*; 13–14 — *D. s. vlasenkoi ssp.n.*; 12–13 — снизу; 14–15 — сбоку; *mvp* — медиовентральный выступ.



Figs 16–19. Habitats: 16–17 — *Dorcadion semibrunneum vlasenkoi ssp.n.*; 18–19 — *D. s. mediocreimpressum*.

Рис. 16–19. Местообитания: 16–17 — *Dorcadion semibrunneum vlasenkoi ssp.n.*; 18–19 — *D. s. mediocreimpressum*.

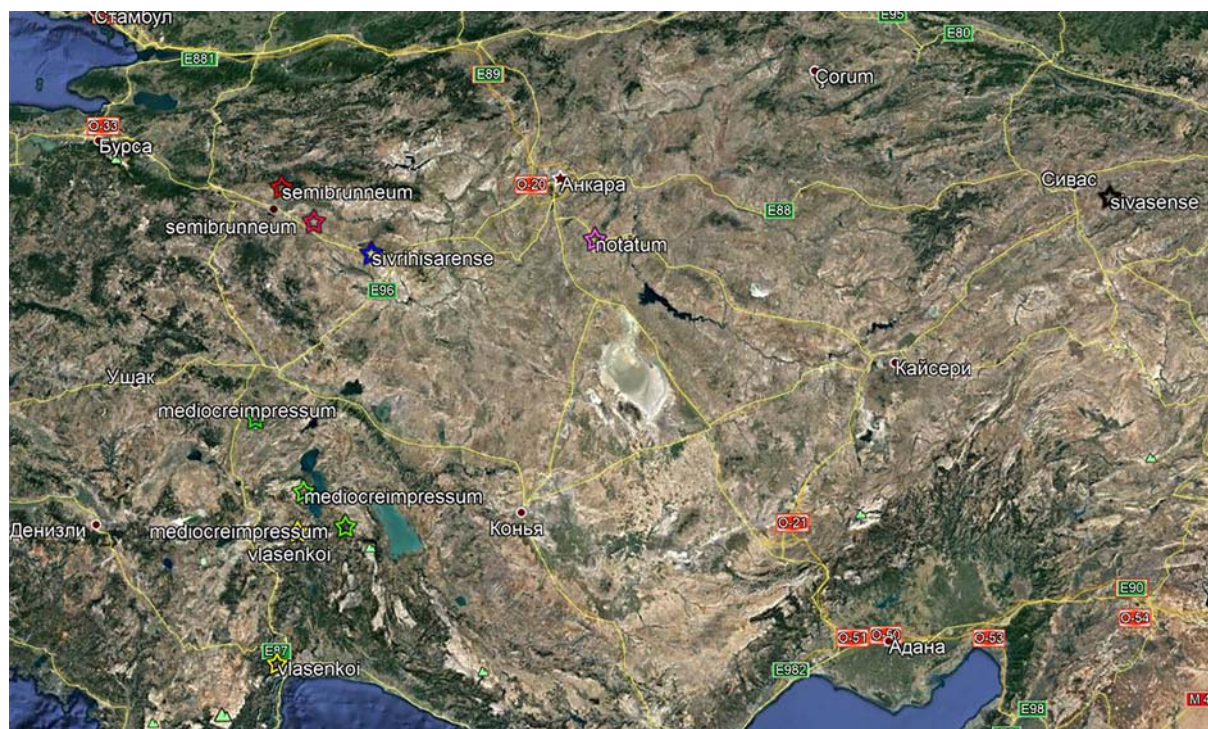


Fig. 20. Map of distribution of *Dorcadion semibrunneum* Pic, 1903.

Рис. 20. Распространение *Dorcadion semibrunneum* Pic, 1903.

Body black, glossy shined; legs black or very dark brown; one specimen with lightened legs, antennae and ventral side of body (very dark brown); sutural stripe with whitish or yellowish hairs, elytral corner also with fine white hairs. Sutural pubescence easily erased or get dirty. Head coarsely and sparsely punctured. Antennae reached last third of elytra.

Pronotum transverse, with not large lateral tubercle, pronotal spines indistinct, obtuse. Pronotal punctures fine and sparse; punctures bearing with very thin and short white hairs; discal surface with fine microsculpture between punctures.

Elytra elongate, oval, humeral carina weakly expressed. Elytral sculpture coarse, vermiculate, finer to apex; surface with coarse microsculpture between punctures, very dense in sutural area.

Male genitalia. Endophallus is characterized by typical structure for the *mniszeki-semibruneum* species-group.

Female characterized by robuster body, more transverse pronotum; more distinct humeral carina and denser punctured head and pronotum.

DIFFERENTIAL DIAGNOSIS. A new subspecies similar to *D. s. mediocreimpressum*, but differs by black coloration and less expressed humeral carina. Also, the medioventral protuberance of the endophallus of the new subspecies has the shape of a parallelepiped smoothly rounded at apex, while a similar structure in *D. s. mediocreimpressum* has distinctly angulate (Figs 12–15). In addition, the new subspecies is characterized by fine but distinct microsculpture of the pronotum (Fig. 9). *D. s. mediocreimpressum* has very indistinct microsculpture, visible only with strong optical magnification and special light (Figs 10–11). *D. semibrunneum* s.str., has on the contrary coarse and very well visible microsculpture in one non-type specimen (with label “Bos-Dagh” only!) and almost invisible one in a syntype (Figs 7–8).

VARIABILITY. A specimen collected by B. Saratovsky demonstrates lighter coloration of legs, ventral side of body and elytra. Such structures as pronotal and elytral microsculpture and elytral rugosity also variable.

DISTRIBUTION. Western and south-western Anatolia.

BIOLOGY. Subalpine landscape. Most of specimens from Davraz mountains were collected under stones (Figs 16–17).

ETYMOLOGY. The new subspecies is named after Andrey Vlasenko, who collected the first specimen of this taxon.

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References

- Lazarev M.A. 2014. New subspecies of *Dorcadion* (*Cribridorcadion*) *mniszeki* Kraatz, 1873 from Georgia, Armenia and Turkey (Coleoptera, Cerambycidae) // Humanity space International Almanac. Vol.3. No.4. P.698–709.
- Pesarini C., Sabbadini A. 2012. Note su *Dorcadion turchi*, con descrizione di cinque nuove specie e tre nuove sottospecie (Coleoptera Cerambycidae) // Annali del Museo Civico di Storia Naturale di Ferrara. Vol.14–15. P.51–63.
- Özdikmen H. 2016. Survey of the *Dorcadion mniszeki* species-group (Coleoptera: Cerambycidae) from Turkey, with descriptions of two new subspecies of *Dorcadion semibrunneum* Pic, 1903 // Acta zoologica Bulgarica. Vol.68. No.3. P.305–310.