

## Confirmation of the presence of *Dorcadion (Cribridorcadion) decipiens* (Germar, 1824) in Bulgaria (Insecta: Coleoptera: Cerambycidae)

MIKHAIL DANILEVSKY<sup>1</sup>, BETINA BOYANOVA<sup>2</sup>, TSVETOMIR TSVETANOV<sup>3</sup>

<sup>1</sup>A.N. Severtsov Institute of Ecology and Evolution of the Russian Academy of Sciences, Leninsky prospect 33, 119071 Moscow, Russia, danilevskyml@rambler.ru, danilevsky@cerambycidae.net

<sup>2</sup>Panonia 8, 3700 Vidin, Bulgaria, betina1988@abv.bg

<sup>3</sup>Lyulin 10, 1335 Sofia, Bulgaria, tsv\_tsvetanov@abv.bg

**Abstract.** The presence of *Dorcadion decipiens* (Germar, 1824) in Bulgaria is confirmed after 116 years from the first record (Nedelkov 1905), which was not accepted by scientific community as real.

**Key words:** *Dorcadion decipiens*, presence, Bulgaria.

### Introduction

Bulgarian fauna of the genus *Dorcadion* is well investigated (Kantardjiewa-Minkowa 1934, Minkova 1961, Migliaccio *et al.* 2007). Still the presence of *Dorcadion decipiens* in Bulgaria was not accepted until now by scientific community.

The species was found in Bulgaria long ago (Nedelkov 1905) in Lozen Mountain, but the record was considered doubtful by Kantardjiewa-Minkowa (1934) and Minkova (1961). *Dorcadion decipiens* was not included in the fauna of Bulgaria by Plavilstshikov (1958), Breuning (1962), Althoff & Danilevsky (1997), Danilevsky (2010, 2020), but was mentioned as doubtful by Migliaccio *et al.* (2007).

### Results and Discussion

Several specimens were observed and photographed by Betina Boyanova near Vinarovo Village, Vidin Province, Northwest Bulgaria in Bachova Place (44°6'9"N, 22°48'53.10"E, 186 m a.s.l., 18.04.2020, 01.04.2021, 30.04.2021). The population inhabits grassland surrounded by agricultural lands. Two morphological forms of females were available: androchromal, which is similar to males and autochromal with pale dorsal elytral stripes. One male specimen is preserved now in the collection of M.L. Danilevsky (Fig. 1).

Hungary is traditionally accepted as type locality. The designation of the lectotype or neotype is desirable, as two regions were mentioned in the original description: "Hungaria" and "Rossia meridionali". We present a list of localities, which are mentioned in the literature:

*Lamia (Dorcadion) decipiens* Germar, 1824: 486 – "Habitat in Hungaria, Rossia meridionali".

*Dorcadion (s. str.) decipiens*, Ganglbauer, 1884: 450 – "Ungarn, Süd-Russland"; Pic, 1901: 75 – "Russie, Hongrie".

*Dorcadion decipiens var. jacqueti* Pic, 1902: 10 – "Hongrie".

*Dorcadiion (Autodorcadion) decipiens*, Plavilstshikov, 1958: 128 – “SSSR: iugozapadnaia Ukraina (Podolia, Odessa), Moldavia, Vengria, Rum’nia, Chehoslovakia, Jugoslavia”, “V vostochnom napravlenii ne perehodit reku Bug”.

*Dorcadiion decipiens*, Nedelkov, 1905: 416 - Bulgaria, “Lozen planina”; Minkova, 1961: 297 - Bulgaria, “v Lozen planina”; Fasulati, 1959: 138 – Zakarpate: Teglash, Uzhgorodskogo raiona; Kaszab, 1971: 227 – Hungary; Sláma, 1998: 270 – a single old (1936) doubtful record for Slovakia.

*Dorcadiion (Pedestredorcadion) decipiens*, Breuning, 1946: 127 - “Hongrie”; Breuning, 1958: 27 – “Hongrie, Roumanie”; Breuning, 1962: 423 – “aus Ungarn beschrieben”, “in der Slowakei verbreitet”; Panin & Săvulescu, 1961: 385 - Romania; Mikšić & Korpčić, 1985: 44 – Jugoslavija: “u Vojvodini i Srbiji (Kladovo)”; Althoff & Danilevsky, 1997: 32 - Serbia, Romania, Hungary, Slovakia, Ukraine, Moldova; Bartenev, 2009: 304 - Iugoslavia, Rum’nia, Vengria, Slovakia, Moldavia, Ukraina.

*Pedestredorcadion decipiens*, Sama, 2002: 87 – “Slovakia (?; old records apparently not confirmed), Hungary, Serbia, Romania, Moldova, Ukraine (including Crimea)”; Migliaccio et al., 2007: 43 - “?Bulgaria”, “Lozen Mt.”, “This record needs confirmation”.

*Dorcadiion (Cribridorcadion) decipiens*, Danilevsky, 2010: 245 – Hungary, Moldova, Romania, Ukraine, Serbia and Montenegro; Danilevsky, 2020: 344 - Hungary, Moldova, Romania, Serbia, Ukraine.



**Fig. 1.** *Dorcadiion decipiens* (Germar, 1824), Vinarovo Village, Vidin Province, Bachova Place, from left to right: 18.04.2020, copulating pare, obs. B. Boyanova; 01.04.2021, autochromal female, obs. B. Boyanova; male, 30.04.2021, leg. B. Boyanova (M.L. Danilevsky’s collection, Moscow); habitat.

The current distribution of the species includes Hungary, Serbia, Romania, Moldova, Ukraine and Bulgaria. The record for Crimea was wrong. Two strongly distant populations are known now in Bulgaria: near Vinarovo Village ( $44^{\circ}6'9''N$ ,  $22^{\circ}48'53.10''E$ ) and in Lozen Mountain ( $42^{\circ}33'40''N$ ,  $23^{\circ}35'49''E$ ).

*Dorcadion decipiens* is totally black, including antennae and legs. Elytra always covered with dense pubescence. Male elytra usually black or dark-brown, often with velvety-black markings; white sutural and marginal stripes present, but sometimes humeral and dorsal elytral stripes also more or less visible or distinct, because of pale pubescence. Females usually with pale (dirty-white), wide humeral and dorsal elytral stripes, but sometimes both indistinct as in males. Body length: 11.0 – 14.5 mm.

## References

- Althoff, J. & Danilevsky, M. L. (1997) *A Check-List of Longicorn Beetles (Coleoptera, Cerambycoidea) of Europe*. Slovensko Entomološko Društvo Štefana Michielija, Ljubljana, Slovenia, 64 pp.
- Bartenev, A. F. (2009) *Zhuki-usachi Levoberezhnoi Ukrain'i u Krim'*. Har'kov, Har'kovskii Natsional'n' Universitet, 418 pp. (in Russian).
- Breuning, S. (1946) Nouvelles formes de Dorcadion (Col. Cerambycidae). *Miscellanea Entomologica*, 43: 93-132.
- Breuning, S. (1958) Catalogue des Lamiaires du Monde (Col. Céramb.). *Tutzing bei München, Verlag des Museums G.Frey*. 1. Lieferung, pp. 1-48.
- Breuning, S. (1962) Revision der Dorcadionini (Coleoptera, Cerambycidae). *Entomologische Abhandlungen und Berichte aus dem Staatlichen Museum für Tierkunde in Dresden*, 27: 1-665.
- Danilevsky, M. L. (2010) tribe Dorcadionini. In: Löbl, I. & Smetana, A. (Eds.), *Catalogue of Palaearctic Coleoptera, Vol. 6. Chrysomeloidea*. Apollo Books, Stenstrup, pp. 241-264.
- Danilevsky, M. L. (2020) tribe Dorcadionini. In: Danilevsky, M. L. (Ed.), *Catalogue of Palaearctic Coleoptera, Vol. 6 (1). Chrysomeloidea I (Vesperidae, Disteniidae, Cerambycidae)*. Revised and updated edition. Leiden/Boston: Brill, pp. 337-373.
- Fasulati, K. K. (1959) O faune nazemn'h bespozvonochn'h Vostochn'h Karpat. In: *Fauna i zhivotn'i mir Sovetskikh Karpat. Nauchn'e zapiski. Tom 40. Uzhgorodskii gosudarstvenn'i universitet*, Uzhgorod, pp. 121-140 (in Russian).
- 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.
- Germar, E. F. (1824) *Insectorum species novae aut minus cognitae, descriptionibus illustratae. Vol. I. Coleoptera*. Halae: J. C. Hendelii & Filii, xxiv+624 pp., 2 pls.
- Kantardjiewa-Minkowa, S. (1934) Die Arten der Familie Cerambycidae (Col.). II. (Lamiinae). *Mitteilungen der Rulgarischen Entomologischen Gesellschaft in Sofia*, 8: 132-144 (in Bulgarian, German summary).
- Kaszab, Z. (1971) Cincérek-Cerambycidae. *Fauna Hungariae*, Bd. 106. Budapest, pp. 1-283, 1-17.
- Migliaccio, E., Georgiev, G. & Gashtarov, V. (2007) An annotated list of Bulgarian Cerambycids with special view on the rarest species and endemics (Coleoptera: Cerambycidae). *Lambillonea*, 107 (1), Supplément 1: 1-78.
- Mikšić, R. & Korpić, M. (1985) *Cerambycidae Jugoslavije. III deo*. Akademija nauka i umjetnosti Bosne i Hercegovine, Sarajevo, 148 pp.

- Minkova, S. (1961) Untersuchungen über die Artenzusammensetzung der Tribus Dorcadionini (Col. Cerambycidae) in Bulgarien. *Bulletin de l'Institut de Zoologie et musée*, 10: 293–309 (in Bulgarian, Russian and German summaries).
- Nedelkov, N. (1905) Prinos kam entomologichnata fauna na Bulgaria (Contribution to the entomological fauna of Bulgaria). *Periodichesko Spisanie na Bulgarskoto Knizhovno Družestvo v Sofia (Periodical Journal of the Bulgarian Literary Society in Sofia)*, 66: 404–439 (in Bulgarian).
- Panin, S. & Săvulescu, N. (1961) *Familia Cerambycidae (Croitori). Fauna Republicii Populare Române, Insecta 10 (5), Coleoptera*, Bucureşti, 523 pp.
- Pic, M. (1901) Catalogue bibliographique et synonymique des longicornes d'Europe et régions avoisinantes: suite. In: *Matériaux pour servir à l'étude des longicornes. 3ème cahier, 3ème partie*. Lyon, Imprimerie Jacquet Frères, pp. 1-32, 67-74.
- Pic, M. (1902) Notes diverses et diagnoses. In: *Matériaux pour servir à l'étude des longicornes. 4ème cahier, 1re partie*. Saint-Amand (Cher), Imprimerie Bussière, pp 8-11.
- Plavilstshikov, N. N. (1958) *Cerambycidae. Part 3. Subfam. Lamiinae. Part 1. Coleoptera. Fauna of USSR. N.S., 70, Vol. 23(1)*. Izdatel'stvo Akademii Nauk SSSR, Moskva, Leningrad, 592 pp. (in Russian).
- Sama, G. (2002) *Atlas of the Cerambycidae of Europe and the Mediterranean Area. Vol. 1. Northern, Western, Central and Eastern Europe, British Isles and Continental Europe from France (excluding Corsica) to Scandinavia and Urals*. Nakladatelství Kabourek, Zlín, 173 pp.
- Sláma, M. (1998) *Tesaříkovití – Cerambycidae České republiky a Slovenské republiky (Brouci – Coleoptera)*. Praha, 383 pp.