

## New record of *Divales bipustulatus* (Fabricius, 1781) (Coleoptera: Melyridae) in Bulgaria

DENIS GRADINAROV<sup>1</sup>, YANA PETROVA<sup>2,3</sup>

<sup>1</sup> Faculty of Biology, Sofia University “St. Kliment Ohridski”, 8 Dragan Tzankov Blvd., 1164 Sofia, Bulgaria; e-mail: dgradinarov@abv.bg

<sup>2</sup> Faculty of Forestry, University of Forestry, 10 Kliment Ohridski Blvd., 1756 Sofia, Bulgaria; e-mail: yanagradinarova@abv.bg

<sup>3</sup> National Genetic Laboratory, 2 Zdrave Str., Sofia, Bulgaria

**Abstract.** New data on the distribution of *Divales bipustulatus* (Fabricius, 1781) (Coleoptera: Melyridae) in Bulgaria are presented. Several specimens were found on the inflorescences of *Centaurea* sp. in Eastern Rhodopes Mountains. All three known localities of the species are situated in low-mountain areas in the southern part of the country.

**Key words:** Melyridae, *Divales bipustulatus*, Bulgaria.

### Introduction

According to Gimmel *et al.* (2019) family Melyridae (Coleoptera: Cleroidea) includes subfamilies Dasytinae, Malachiinae and Melyrinae. For Bulgaria, a total of 54 species of the subfamilies Dasytinae and Malachiinae have been recorded (Mayor 2007), but the data concerning their distribution within the country are scarce and scattered throughout the literature. No targeted studies on the family Melyridae have been conducted in Bulgaria.

Adults of many melyrid species feed preferentially on pollen, while the larvae appear to be scavengers or predators (Mayor 2002).

In this paper, we report new distributional data on the rarely recorded species *Divales bipustulatus* (Fabricius, 1781), which was collected incidentally during fieldwork conducted by the authors in the Eastern Rhodopes in the summer of 2025.

### Material and Methods

Adult beetles were collected by hand from the inflorescences of *Centaurea* sp. (Asteraceae) in July 2025, at the start of the road to Yonchovo Village (Kardzhali Province) in the Eastern Rhodopes Mountains (Fig. 1).

The photographs of the beetles were taken with a Canon EOS R50 camera mounted on a WeMacro rail (Wemacro, Shanghai, China). A Laowa 90mm f/2.8 2x Ultra Macro APO lens was used for the beetle habitus, whereas the genital structures were photographed using a Laowa Aurogon FF 10-50X NA0.5 Supermicro APO lens. All examined specimens are catalogued and deposited in the Zoological Collection of Sofia University “St. Kliment Ohridski”, Faculty of Biology, Sofia, Bulgaria (BFUS).

## Results and Discussion

Family Melyridae Leach, 1815

Subfamily Dasytinae Laporte, 1840

*Divales* Laporte, 1838

### *Divales bipustulatus* (Fabricius, 1781)

*Material examined:* BULGARIA: Eastern Rhodopes Mts, W of Yonchovo Vill., 41°50.886'N, 25°11.201'E, 726 m a.s.l., roadside vegetation, 14.vii.2025, 5 ♂♂ (BFUS-COL000952 – BFUS-COL000956), 2 ♀♀ (BFUS-COL000957, BFUS-COL000958), on flowers of *Centaurea* sp., Yana Petrova leg.



**Fig. 1.** Habitat of *Divales bipustulatus* in Eastern Rhodopes, Bulgaria, 14.vii.2025. A – forest vegetation at the start of the road to Yonchovo Village; B – host plant *Centaurea* sp. on the roadside.

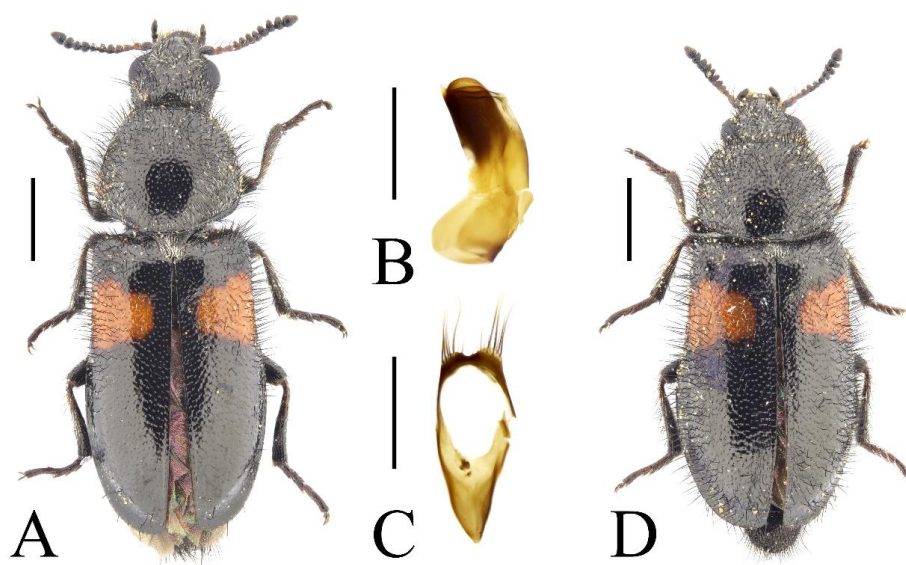


**Fig. 2.** Habitus of *Divales bipustulatus* from Bulgaria. A – male (BFUS-COL000955); B – penis, the same specimen; C – tegmen, the same specimen; D – female (BFUS-COL000958). Scale bars: 1 mm (A, D); 0.5 mm (B, C).

The species differs from its congeners by the following combination of characters: double-haired and non-spinulose outer sides of the pro- and mesotibiae, smooth sides of the pronotum without keels, black erect hairs on the dorsal surface, and the specific male genital morphology (Majer 1984) (Fig. 2). Colour pattern variable (Majer 1984), but all specimens, examined by us share the coloration shown in Fig. 2, with a black pronotum and black elytra with large red spot in the anterior half on each elytron, extended laterally.

The ten known species of the genus *Divales* are distributed mainly in Southern Europe and North Africa (Majer 1984, Mayor 2007). Among these, *D. bipustulatus* has the widest known range, recorded from Bulgaria, France, Germany, Greece, Italy, Switzerland, Algeria, Morocco and Tunisia (Horion 1953, Majer 1984, Neumann 1998, Mayor 2007).

In Bulgaria, *D. bipustulatus* was previously reported only twice, both times during the second half of the 20th century. Horion (1953: 126) recorded the species from Krichim [as “Kritschin”, located at the foot of the northern slopes of the Western Rhodopes Mountains], and Majer (1984: 283) recorded it from Stara Kresna [a village in the western foothills of Northern Pirin Mountains]. No further locality or ecological data were provided in either record. Here, we report the species from the Eastern Rhodopes Mountains. All examined specimens were collected from the inflorescences of *Centaurea* sp. along a road passing through a mixed forest dominated by oak, with scattered Scots pines (*Pinus sylvestris* L.). All three known localities of the species in the country are situated in low-mountain areas in Southern Bulgaria.

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