

## New records of *Pygopleurus* Motschulsky, 1860 species (Scarabaeoidea: Glaphyridae) from Bulgaria

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**Abstract.** New chorological data of three *Pygopleurus* Motschulsky, 1860 (Scarabaeoidea: Glaphyridae) (i.e. *P. apicalis* (Brullé, 1832), *P. diffusus* (Petrovitz, 1958) and *P. humeralis* (Brullé, 1832)) are reported for Bulgaria. The records of *P. apicalis* (Brullé, 1832) and *P. diffusus* (Petrovitz, 1958) are new for the country.

**Key words:** Glaphyridae, Pygopleurus, Bulgaria.

### Introduction

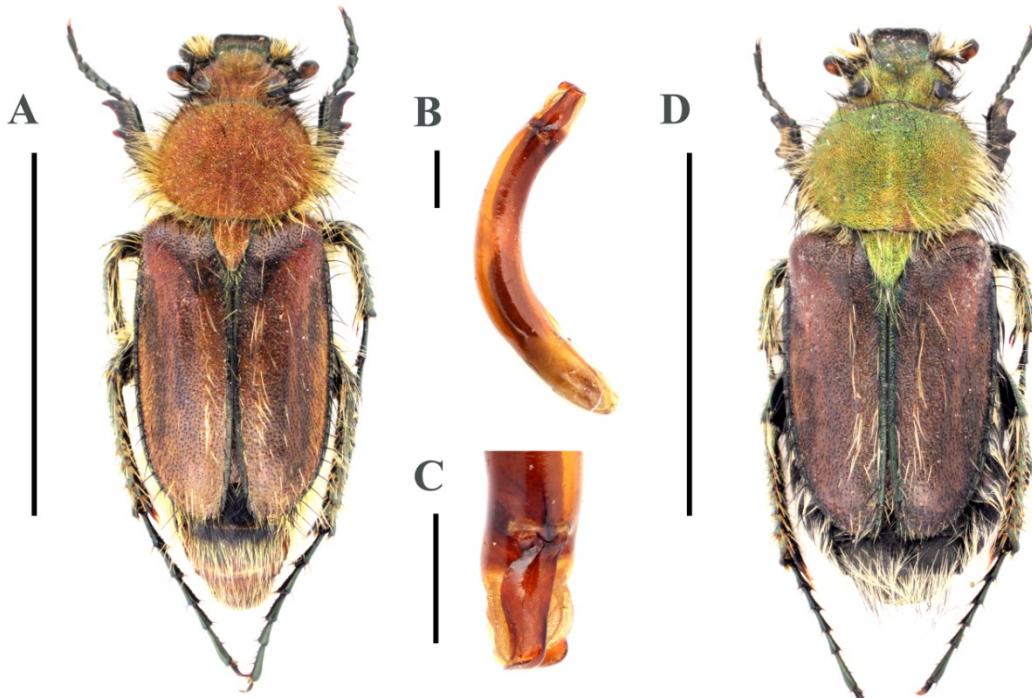
Up to now, based on available references (Minkova 1959, Nikodým & Bezděk 2016) only four species of genus *Pygopleurus* were known for Bulgaria: *Pygopleurus foina* (Reitter, 1890), *Pygopleurus hirsutus* (Brullé, 1832), *Pygopleurus humeralis* (Brullé, 1832) and *Pygopleurus vulpes* (Fabricius, 1781). In the present work, we report new data on the distribution of three species from Bulgaria. Nearly all examined specimens are deposited in the Zoological Collection of Sofia University “St. Kliment Ohridski”, Faculty of Biology (BFUS).

### Results and Discussion

#### *Pygopleurus apicalis* (Brullé, 1832) (Fig. 2: A, B, C)

Material examined: Bulgaria: Belasitsa Mts., Klyuch Vill., 500 m., 30.iv.2008, 1 ♂, D. Gradičarov leg.; Belasitsa Mts., Belasitsa Vill., 41°22.100'N 23°07.835'E, 369 m., 30.iv.2018, roadside meadows, 7 ♂♂, 2 ♀♀, Y. Petrova leg.; Sandanski-Petrich Valley, 2 km NE Kolarovo Vill., 41°22.570'N 23°08.017'E, 274 m., 30.iv.2018, roadside verges next to agricultural fields, 1 ♂, in flower of *Papaver* sp., Y. Petrova leg.

Even if the species is reported from Bulgaria, Greece and Macedonia (Nikodým & Bezděk 2016), no verified Bulgarian specimens were available, so the specimens herein reported are the first verified data for the Country.



**Fig. 1.** *Pygopleurus diffusus* (Petrovitz, 1958), Ograzhden Mts., 30.iv.2018. A: male; B: aedeagus, lateral; C: parameres; D: female. Scale bars: A, D: 10 mm.; B, C: 1 mm.

***Pygopleurus diffusus* (Petrovitz, 1958) (Fig. 1: A - D)**

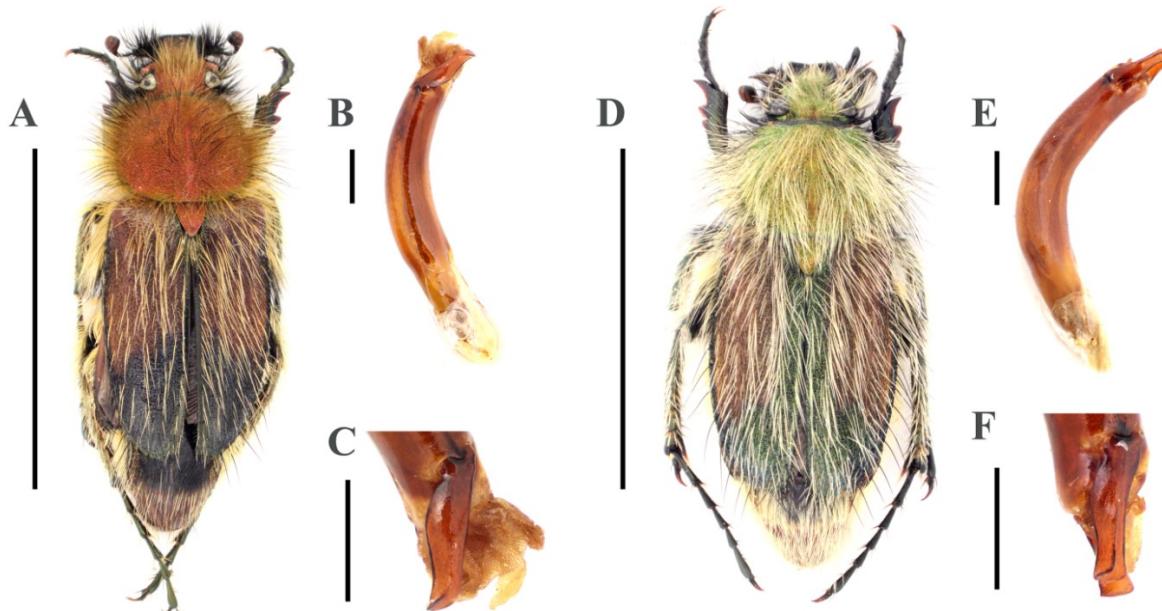
Material examined: Bulgaria: Varna, Kalimanci, 4.vi.1982, A. Podlussány leg., 3 specimens (in coll. Szaloki); Sandanski-Petrich Valley, Rupite Place,  $41^{\circ}27.145'N$   $23^{\circ}16.040'E$  90 m., 06.v.2010, 1 ♂, net-sweeping, O. Sivilov & G. Hristov leg. (BFUS); Ograzhden Mts., 1 km SE Borovichene Vill.,  $41^{\circ}24.860'N$   $23^{\circ}01.449'E$ , 453 m., 30.iv.2018, roadside meadows, 2 ♂♂, 2 ♀♀, inflowers of *Papaver* sp., Yana Petrova & Denis Gradinarov leg. (BFUS).

The species is distributed in Albania, Greece, Macedonia, while the report for Turkey (Nikodým & Bezděk 2016) is highly questionable. New record for Bulgaria.

***Pygopleurus humeralis* (Brullé, 1832) (Fig. 2: D, E, F)**

Material examined: Bulgaria: Kresnenski Prolom Gorge, 200 m., 04.v.2008, 1 ♂, on Asteraceae, D. Gradinarov leg.; Pirin Mts., slope above Railway station P. Yavorov,  $41^{\circ}45.124'N$   $23^{\circ}09.291'E$ , 220 m., 04.v.2008, 1 ♂, 2 ♀♀, D. Gradinarov leg.; Ograzhden Mts., 2 km NW Strumeshnitsa Vill.,  $41^{\circ}24.708'N$   $23^{\circ}02.147'E$ , 375 m., 30.iv.2018, pine forest, 1 ♂, on *Ranunculus* sp., Y. Petrova & D. Gradinarov leg.; Sandanski-Petrich Valley, Kozhuh Hill., 100 m., 02.v.2008, 1 ♂, 3 ♀♀, D. Gradinarov leg.; Sandanski-Petrich Valley, Kozhuh Hill.,  $41^{\circ}27.648'N$   $23^{\circ}15.309'E$ , 181 m., 02.iv.2016, 1 ♂, on *Anemone* sp., D. Gradinarov leg.; the same locality and date, 1 ♂, on *Iris* sp., D. Gradinarov leg.; Sandanski-Petrich Valley, N Kresna town, left bank of Struma Riv.,  $41^{\circ}44.110'N$   $23^{\circ}09.459'E$ , 182 m., 28.iv.2018, riverside meadows, 1 ♂, on *Papaver* sp., Y. Petrova & D. Gradinarov leg.; the same locality, 01.v.2018, riverside meadows, 1 ♂, on *Ranunculus* sp., Y. Petrova leg.

The species is distributed in Bulgaria, Greece, Macedonia and Turkey (Nikodým & Bezděk 2016). In Bulgaria it is reported from Plovdiv, Malko Tarnovo, Burgas, Primorsko, Haskovo and Sakar Mountain (Minkova 1959, as *Amphicoma vulpes* ab. *viridisuturata* Reitt.), Sandanski-Petrich Valley and Kresna gorge (Zaharieva – Stoilova & Dimova 1980; Sakalian *et al.* 1993; Kalushkov & Dimova 1997 as *Amphicoma petrovitzi* Miks.).



**Fig. 2.** *Pygopleurus apicalis* (Brullé, 1832), Kolarovo Vill., 30.iv.2018 (A, B, C); *Pygopleurus humeralis* (Brullé, 1832), Kresna town, 28.iv.2018 (D, E, F); A, D: males; B, E: aedeagus, lateral; C, F: parameres. Scale bars: A, D: 10 mm.; B, C, E, F: 1 mm.

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