

New data on the distribution of *Pilemia tigrina* (Mulsant, 1851) (Cerambycidae: Lamiinae) in Bulgaria

DENIS GRADINAROV

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

Abstract. Single male specimen of *Pilemia tigrina* (Mulsant, 1851) was collected in 2014 in Vrachanska Planina Mts., under Milanovo Vill. Additional locality of the species, based on collection material, is also reported – near Ivanovo Vill., Shumen region.

Key words: Cerambycidae, *Pilemia tigrina*, Bulgaria

Introduction

Three species of the genus *Pilemia* Fairmaire, 1864 (Cerambycidae: Lamiinae) have been reported for Bulgaria: *Pilemia hirsutula* (Frolich 1793), *P. serriventris* (Holzschuh, 1984) and *P. tigrina* (Mulsant, 1851) (Migliaccio *et al.* 2007). From these, *P. serriventris* and *P. tigrina* represent *tigrina* – group in Bulgaria (Holzschuh 1984). *Pilemia serriventris* is Bulgarian endemic species with several known localities in SE part of the country (after Migliaccio *et al.* 2007), while *P. tigrina* have been reported from two localities only - Iskarski Prolom Gorge at Cherepishki Manastir Monastery (Nedelkov 1905, as *Phytoecia tigrina*) and near Sofia (Kantardjieva-Minkova 1934). The species *P. tigrina* is included in Annexes II and IV of the Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Council of Europe 1992) and listed in species checklist for Bulgaria for reporting under the Article 17 of the Habitats Directive. In this regard the data on the distribution of the species in Bulgaria are extremely scarce. In this paper, new data on the distribution of the species in the country are presented.

Results

During the processing of the entomological material, collected in 2014 from Vrachanska Planina Mts. (W Stara Planina Mts.), a single male of *Pilemia tigrina* (Mulsant, 1851) was identified. Collection data of the specimens are as follow: Vrachanska Planina Mts., roadside verge between Lakatnik and Milanovo Vill., 2 km S Milanovo Vill., 43°05.77' N; 23°23.97' E, 590 m a.s.l., 23.iv.2014, D. Gradinarov leg. The specimen was collected from the host plant (labeled as “Boraginaceae”), in the afternoon (15:30 pm), after weak rainfall. The new locality of the species is within NATURA 2000 ecological network (site “Vrachanski Balkan”, BG0000166) and in the territory of Vrachanski Balkan Nature Park.

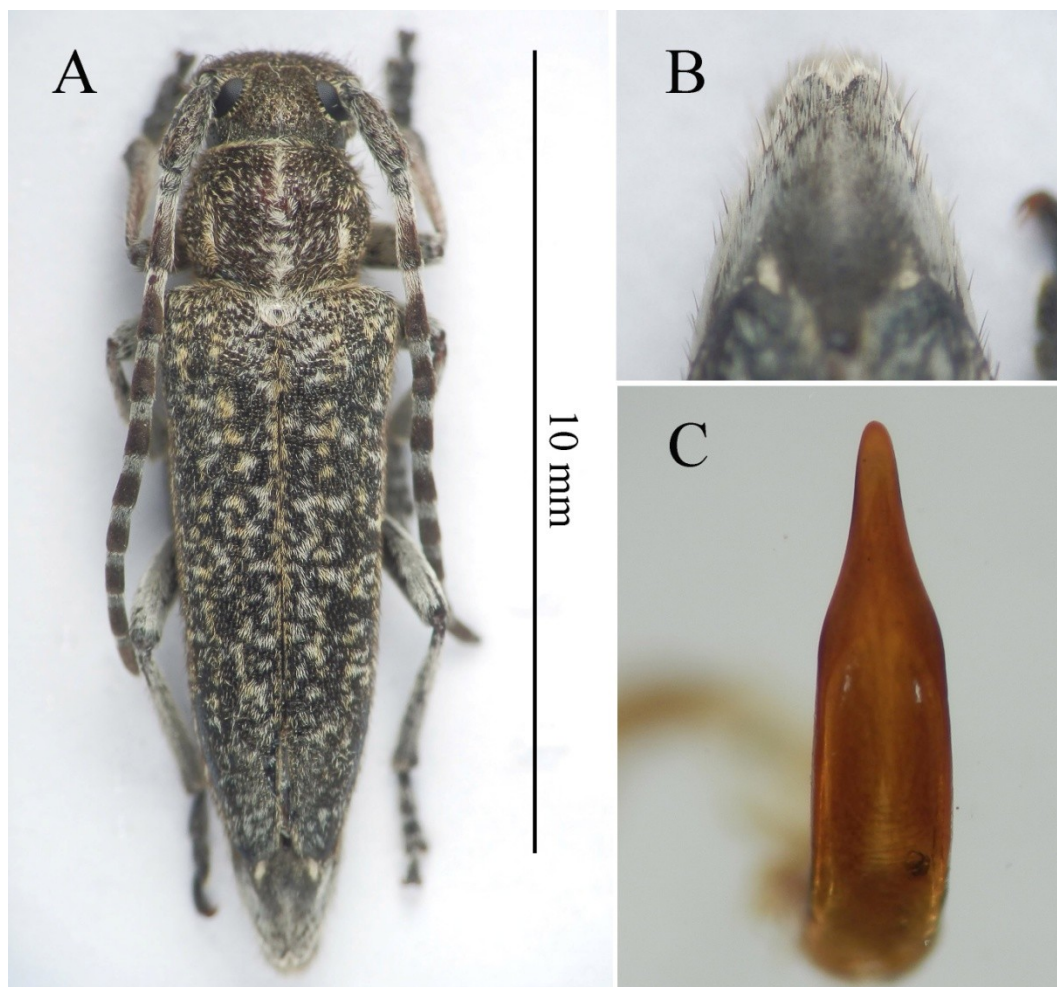


Fig. 1. *Pilemia tigrina* (Mulsant, 1851) male, Vrachanska Planina Mts., 23.iv.2014, D. Gradinarov leg. A: Dorsal view; B: Pygidium, dorsal view; C: Apex of penis.

Identification of the species was performed according Holzschuh (1984). The main distinguishing traits of the species are presented in Fig. 1 (A, B, C). The specimens is deposited in the Zoological collection of Sofia University “St. Kliment Ohridski”, Faculty of Biology (BFUS).

Discussion

The first report of *P. tigrina* in Bulgaria is from Iskarski Prolom Gorge, Cherepishki Manastir vicinity (Nedelkov 1905). The distance between this locality and a new one in Vrachanska Planina Mts. is less than 20 kilometers, with no significant difference in altitude. Most likely the both localities concern the same geographical population of the species, but they belong to two separate NATURA sites - “Iskarski prolom – Rzhana” (site code BG0001042) and “Vrachanski Balkan” (site code BG0000166). The real distribution of the species in Bulgaria seems to be considerably wider. Two specimens (male and female) of *P. tigrina*, collected by Czech entomologist Jan Sobota in Bulgaria, are preserved in the collection of Dr. M. Danilevsky (M. Danilevsky, personal communication). The locality is denoted as “Ivanovo”, the date and the name of the collector are designated on the label (“3.5.1986 Dr.J.Sobota”). It became possible to specify the exact localities of collected

material - these are the hills near Ticha Dam Lake, Shumen region (Dr. Jan Sobota, personal communication). So, the species seems to be distributed in NE Bulgaria as well.

The conclusion about the rarity of *P. tigrina* in Bulgaria may result from the host plant patchy distribution – most probably *Anchusa barrelieri* (All.) Vitman (Tibor 2005) as well as an insufficient data on biology and life cycle of the species. The present record of *P. tigrina* from Vrachanska Planina Mts. indicates that the species can occupy roadside habitats and become active relatively early in the spring (in the second half of April), even in mountain areas. In this regard, the only well-documented finding of *P. tigrina* in Moldova is also from roadside habitat, in early May (Csathó 2014).

Acknowledgements. The author is grateful to Dr. Mikhail Danilevsky (A.N. Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences, Moscow, Russia) for the confirmation of the species identification and for the additional information on this species distribution in Bulgaria. The author would like to thank Dr. Jan Sobota (Hradec Kralove, Czech Republic) as well for providing the locality data for NE Bulgaria specimens.

References

- Council of Europe (1992) Directive 43/92/CEE, of 21 May 1992, on the conservation of natural habitats and of wild fauna and flora. *Official Journal of the European Union*, 206: 1–66.
- Csathó, A. I. (2014) *Pilemia tigrina* (Mulsant, 1851), new for the fauna of Republic of Moldova (Coleoptera: Cerambycidae). *Folia Entomologica Hungarica*, 75: 69–72.
- Holzschuh, C. (1984) Beschreibung neuer Arten aus der unmittelbaren Verwandtschaft von *Phytoecia* (*Pilemia*) *tigrina* (Cerambycidae, Col.). *Koleopterologische Rundschau*, 57: 167–175.
- Kantardjieva-Minkova, S. (1934) Die Arten der Familie Cerambycidae (Col.). II. (Lamiinae). *Bulletin de la Société Entomologique de Bulgarie*, 8: 132–144. (In Bulgarian, German summary).
- Migliaccio, E., Georgiev, G. & Gashtarov, V. (2007) An annotated list of Bulgarian Cerambycids with special view on the rarest species and endemics (Coleoptera: Cerambycidae). *Lambillionea*, 107 (1), supplément 1: 1–78.
- Nedelkov, N. (1905) Prinos kam entomologichnata fauna na Balgaria (Contribution to the entomological fauna of Bulgaria). *Periodichesko spisanie na Bulgarskoto knizhovno druzhestvo v Sofia* (*Periodical Journal of the Bulgarian Literary Society in Sofia*), 66: 404–439 (In Bulgarian).
- Tibor, K. (2005) Adatok a *Pilemia tigrina* (Mulsant, 1851) magyarországi elterjedéséhez és életmódjához (Coleoptera: Cerambycidae). *Folia Historico Naturalia Musei Matraensis*, 29: 145–150.