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# First exact data on the distribution of saproxylic species *Calchaenesthes oblongomaculata* (Guérin-Méneville, 1844) (Cerambycidae: Purpuricenini) in Bulgaria

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**Abstract**. Three male specimens of *Calchaenesthes oblongomaculata* (Guérin-Méneville, 1844) (Cerambycidae: Purpuricenini) were collected in foothills of Maleshevska Planina Mts., near Kamenitsa Vill. (SW Bulgaria). The individuals were found on the leaves of Downy oak (Quercus pubescens Willd.) or flying around the tree. The present record confirms the presence of the species in the country.

**Key words**: Cerambycidae, *Calchaenesthes oblongomaculata*, Bulgaria

## Introduction

*Calchaenesthes* Kraatz, 1863 (Cerambycidae: Purpuricenini) is Western Paleartic genus, includes five accepted species (Özdikmen et al. 2013). Two species are distributed in Europe – *C. oblongomaculata* (Guérin-Méneville, 1844) and *C. sexmaculata* (Reiche, 1861) (Sama & Löbl 2010). According to Sama & Löbl (2010) the distributional areal of *C. oblongomaculata* includes Bulgaria, Greece, Romania, Cyprus, Jordan and Asian Turkey. After Özdikmen *et al.* (2013), however, the species is not distributed in Anatolia, while the records from Cyprus and Jordan require confirmation. The species is included in European Red List of Saproxylic Beetles with DD (data deficient) category (Nieto & Alexander 2010).

For Bulgaria, *C. oblongomaculata* is recorded in the Check-List of Longicorn Beetles of Europe (Althoff & Danilevsky 1997) and in the Catalogue of Palaearctic Coleoptera (Sama & Löbl 2010). Migliaccio *et al.* (2007), however, do not include the species in the list of Bulgarian cerambycids, and currently there is no reliable evidence of the species presence in the country. In the present work first exact data on the species distribution in Bulgaria are reported.

## Results

Three male specimens of *C. oblongomaculata* were collected near Kamenitsa Vill., SW Bulgaria in early April 2017 (Fig. 1). The collecting data of the specimens are as follow:
Bulgaria, foothills of Maleshevska Planina Mts., 700 m SE Kamenitsa Vill., 41°38'43.2''N, 23°09'58.9''E, 210 m a.s.l., 02.IV.2017, three males, leg. D. Gradinarov, B. Zlatkov, D. Kaynarov & I. Andreev. The habitat represents shrubs and low woods, dominated by Kermes oak (*Quercus coccifera* L.), with rare solitary young trees of Downy oak (*Quercus pubescens* Willd.), bordering the xerothermic herbaceous communities (Fig. 2 A). The specimens were collected from the leaves of a single flowering *Q. pubescens* tree (Fig. 2 B) or around the same tree at flight, from 11:30 to 13:00 am.

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The specimens collected are deposited in the Zoological Collection of Sofia University "St. Kliment Ohridski", Faculty of Biology (BFUS).

**Fig. 1**. *Calchaenesthes oblongomaculata*, male, Bulgaria, Kamenitsa Vill. Scale bar: 10 mm.

## Discussion

According to Bense (1995: 248-249), in Europe *C. oblongomaculata* is known from Greece and Romania. In the Check-List of Longicorn Beetles of Europe, the species is listed for Bulgaria as well, without specified locality (Althoff & Danilevsky 1997: 21). It seems that the same country record was later used for the Catalogue of Palaearctic Coleoptera (Sama & Löbl 2010: 197) (P. Rapuzzi, personal communication). Thus, the present record provides the first exact data on the distribution of *C. oblongomaculata* in Bulgaria.

*C. oblongomaculata* is obligate saproxylic species, associated with host plant of genus *Qercus* (Sama *et al.* 2011, Plewa *et al.* 2011, Walczak *et al.* 2014). In Greece, *Q. coccifera* have been indicated as the host plant of the species (Plewa *et al.* 2011). Notably, in the present finding of the species, individuals clearly have been attracted by *Q. pubescens*, despite the prevalence of *Q. coccifera* in the habitat. Further investigations are needed for the establishment the range of food plants of the species in Bulgaria.

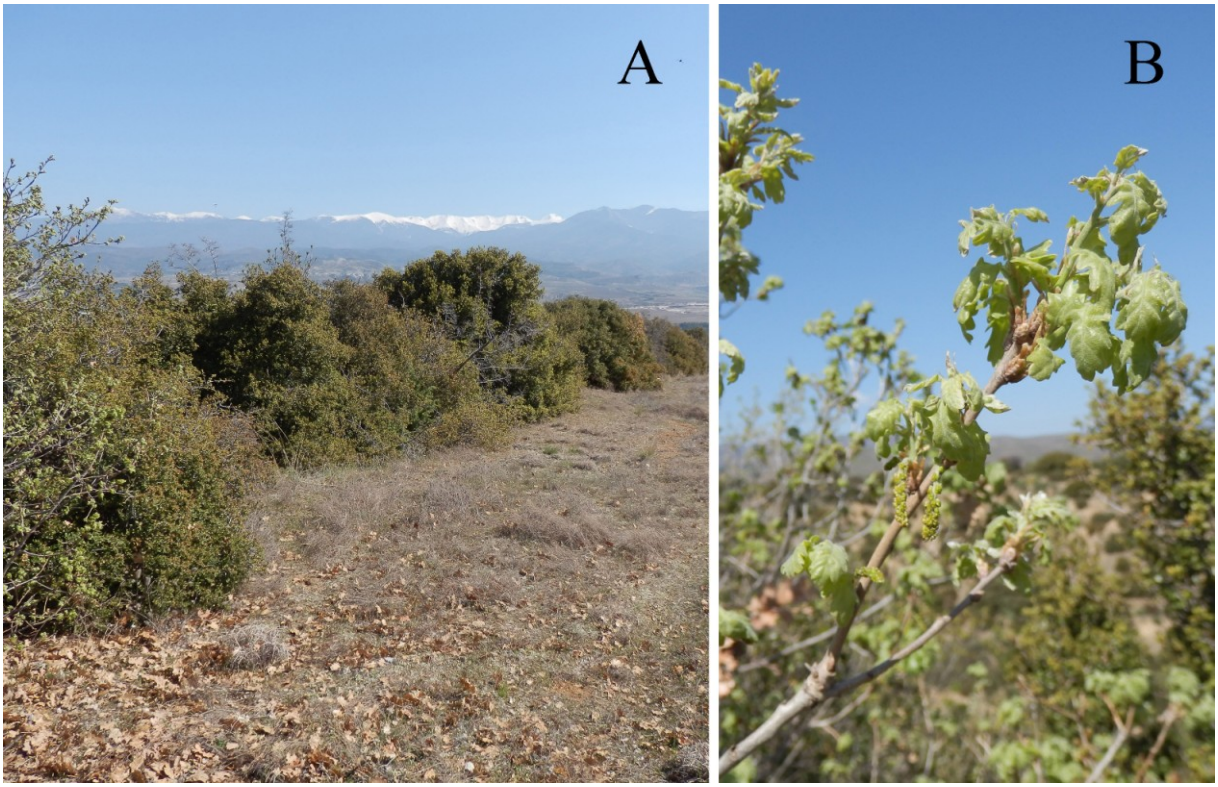


**Fig. 2.** Collecting site in Maleshevska Planina Mts. A: General view of the habitat. B: Flowering *Quercus pubescens* tree.

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## 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.

Bense, U. (1995) *Longhorn beetles. Illustrated key to the Cerambycidae and Vesperidae of Europe*. Weikersheim, Margraf Verlag, 512 pp.

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.

Nieto, A. & Alexander, K. N. A. (2010) *European Red List of Saproxylic Beetles*. Publications Office of the European Union, Luxembourg, Belgium.

Özdikmen, H., Aytar, F., Cihan, N., Şamlı, N., Özbek, H. & Kaya, G. (2013) A synopsis of Palearctic genus *Calchaenesthes* Kraatz, 1863 with a new species of *C. primis* sp. n. from Turkey (Cerambycidae: Cerambycinae). *Munis Entomology & Zoology*, 8(1): 148-153.

Plewa, R., Łoś, K. & Górski, P. (2011) Nowe dane o rozmieszeniu, biologii I behawiorze gatunków z rodziny kózkowatych (Coleoptera, Cerambycidae) z Grecji. [New data on

the distribution, biology and behavior of some longhorn beetles (Coleoptera, Cerambycidae) from Greece]. *Elateridarium*, 5: 232-247.

Sama, G. & Löbl, I. (2010) Cerambycidae, Western Palaearctic taxa, eastward to Afghanistan, excluding Oman and Yemen and the countries of the former Soviet Union. *In:* Löbl, I. & Smetana, A. (Eds.), *Catalogue of Palaearctic Coleoptera. 6. Chrysomeloidea*. Apollo Books, Stenstrup, pp. 84-334.

Sama, G., Jansson, N., Avci, M., Sarikaya, O., Coskun, M., Kayis, T., & Özdikmen, H. (2011) Preliminary report on a survey of the saproxylic beetle fauna living on old hollow oaks (*Quercus* spp.) and oak wood in Turkey (Coleoptera: Cerambycidae). *Munis Entomology & Zoology*, 6(2): 819-831.

Walczak, M., Woźniak, A., Szczepański, W. T. & Karpiński, L. (2014) The structure of anthophilous longhorn beetles (Col.: Cerambycidae) visiting hawthorns (*Crataegus* spp.) in the Western Palearctic. *Baltic Journal of Coleopterology*, 14(2): 205-217.