

## New records of *Agapanthia maculicornis maculicornis* (Gyllenhal, 1817) (Cerambycidae: Lamiinae) in SE Bulgaria

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**Abstract.** Eight new localities of *Agapanthia maculicornis maculicornis* (Gyllenhal, 1817) (Cerambycidae: Lamiinae) in SE Bulgaria are reported. The species is rather common in xerothermic herbaceous communities, being most often found on plants from the tribe Cichorieae (Asteraceae: Cichorioideae). Photographs of the species from Bulgaria are published for the first time.

**Key words:** *Agapanthia maculicornis*, distribution, host plants.

### Introduction

*Agapanthia* (*Homoblephara*) *maculicornis* (Gyllenhal, 1817) is represented by two subspecies: *A. maculicornis maculicornis* (Gyllenhal, 1817) and *A. maculicornis davidi* Sláma, 1986 (Danilevsky 2023). The nominative subspecies is known from Bosnia and Herzegovina, Bulgaria, Greece, Hungary, North Macedonia, Moldova, Romania, Slovenia, Central and South European Territories of Russia, Ukraine, Türkiye, Kazakhstan, and West Siberia (Danilevsky 2023). The range of *A. maculicornis davidi* includes Sicily, Southern and Central Italy (Pesarini & Sabbadini 2007, Faggi *et al.* 2010). The species is xerothermophilous and rare or with localized distribution throughout most of its European range (Koch 1992, Sama 2002, Faggi *et al.* 2010).

In Bulgaria *A. maculicornis* has been reported from only three localities in SE part of the country – Srem Vill. (Tundzha River Valley, dry hillside), Bogdanovo Vill. (Strandzha Mts, pasture edge) (Bringmann *et al.* 2005) and Biala voda Vill. (Strandzha Mts, mixed *Quercus* spp. stands, meadows with herbaceous plants) (Georgiev *et al.* 2015). In the present work we report a number of new localities of the species in SE Bulgaria.

### Material and Methods

The material was collected by the authors during routine entomological surveys conducted in the period from 2019 to 2023 in several regions of SE Bulgaria – Sakar and Strandzha Mts, Black Sea Coast and Tundzha River Valley. The collected specimens are preserved in the Zoological Collection of Sofia University, Faculty of Biology (BFUS).

## Results and Discussion

### *Agapanthia (Homoblephara) maculicornis maculicornis* (Gyllenhal, 1817)

(Fig. 1)

*New records:*

**Sakar Mts:** N of Sakartsi Vill., 42°03'41.8"N, 26°17'34.0"E, 365 m a.s.l., roadside verges and meadows, 25.v.2019, 1 ♂, 1 ♀, Y. Petrova & D. Gradinarov leg.; S of Ustrem Vill., the road to Radovets Vill., 42°00'43.2"N, 26°27'55.8"E, 150 m a.s.l., xerothermic vegetation, hillside with *Paliurus spina-christi* Mill., 05.v.2021, 1 ♂, 1 ♀, on stem of *Chondrilla juncea* L., D. Gradinarov leg.; SE of Glavan Vill., 42°01'08.6"N, 26°09'46.9"E, 646 m a.s.l., dry roadside meadows next to an oak forest, 24.v.2023, 2 ♂♂, 2 ♀♀, on *Tragopogon* sp. (Fig. 2B), D. Gradinarov & Y. Petrova leg.

**Strandzha Mts:** 3 km SW of Sredets, 42°18'35.5"N, 27°09'29.6"E, 190 m a.s.l., roadside meadows with *Tragopogon* sp. next to an oak forest, 23.v.2023, 2 ♂♂ (one male on *Rumex* sp.), Y. Petrova leg.; 2 km NW of Bistrets Vill., 42°19'22.4"N 26°59'06.2"E, 206 m a.s.l., 25.v.2023, on stem of *Cichorium intybus* L., 1 ♂, D. Gradinarov & Y. Petrova leg.; NW of Prohod Vill., roadside vegetation at the foot of a xerothermic hill, 42°19'58.7"N, 27°03'23.9"E, 49 m a.s.l., 25.v.2023, 1 ♂, 2 ♀♀, D. Gradinarov & Y. Petrova leg.

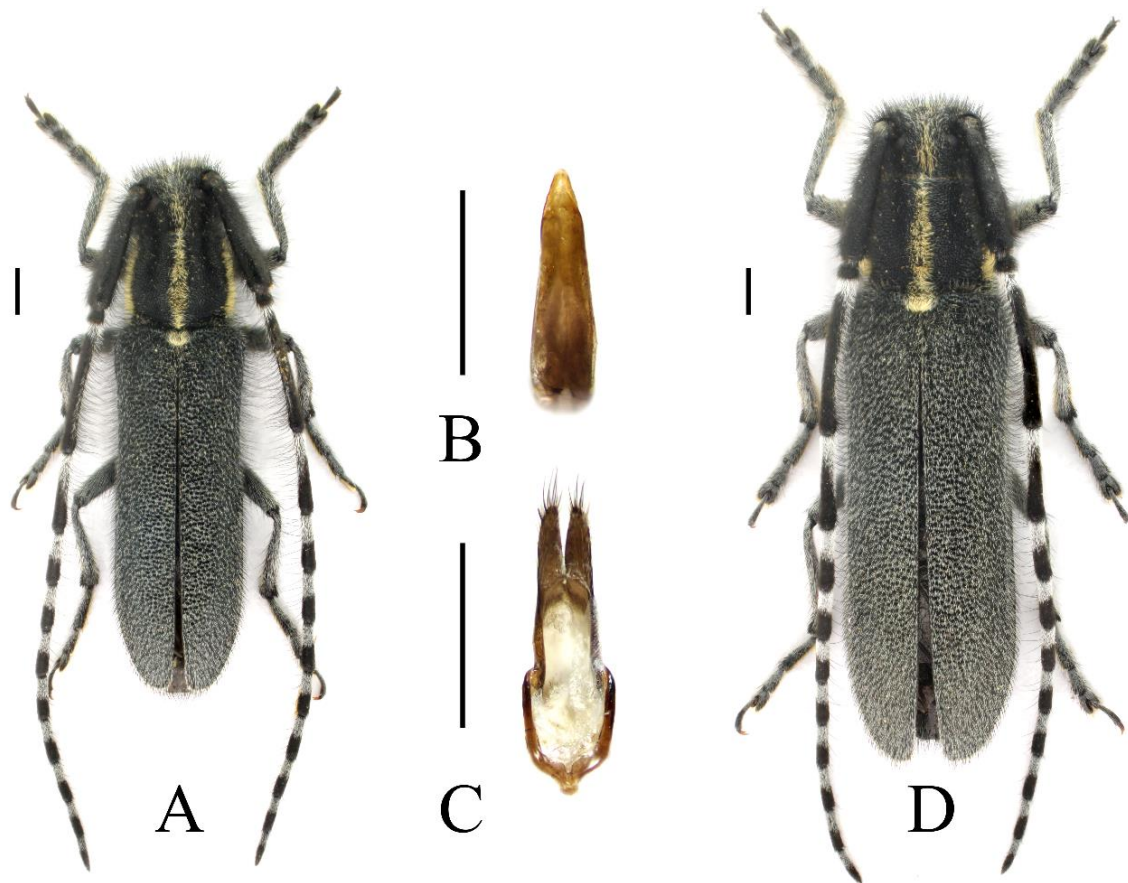
**Black Sea Coast:** Burgas lowland, 3 km NE of Konstantinovo Vill., near Mandrensko Ezero Lake, 42°25'01.8"N, 27°20'46.6"E, 17 m a.s.l., roadside vegetation, 23.v.2023, 1 ♀, Y. Petrova leg.

**Tundzha River Valley:** near Elhovo, next to the park zone, 42°10'29.7"N, 26°33'57.4"E, 107 m a.s.l., ruderal vegetation, 23.v.2023, 2 ♀♀, on stems and leaves of *Tragopogon* sp. (Fig. 2A), D. Gradinarov leg.

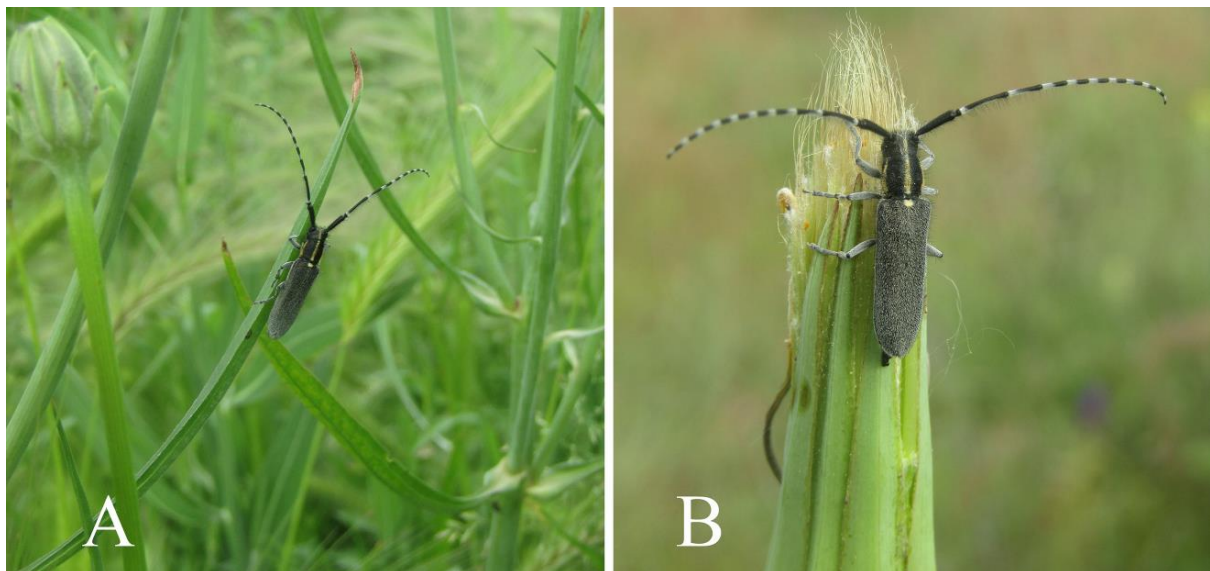
The available data on the host plants of *A. maculicornis* in the literature are contradictory. The first reported host plant of the species is *Helianthus annuus* L. in Ukraine (Pjatakowa 1930), and this record has been repeated by later authors (e.g., Koch 1992, Bense 1995, Sláma 1998). Sláma (1998) also reports finding the species on *Cirsium* sp. in [North?] Macedonia. Summarizing information on host plants of *A. maculicornis*, Sama (2002) listed *Campanula glomerata* L. (for Hungary), *Dianthus superbus* L. (for Siberia) and *Helianthemum* [sic!] (for Ukraine), omitting both *Helianthus annuus* and *Cirsium*. Pesarini & Sabbadini (2007) reports finding of *A. maculicornis* on *Chondrilla juncea* in Greece. According to Danilevskaya *et al.* (2009), all earlier reports of host plants of the species are rather doubtful. As „true“ host plants of *A. maculicornis* the latter authors consider plants from the genera *Tragopogon* (South Russia) and *Scorzonera* (NE Kazakhstan). On *Tragopogon* the species has been found also in Caucasus (Miroshnikov 2010) and in Greece (Hoskovec *et al.* 2023), as well as in Bulgaria in earlier studies (Georgiev *et al.* 2015).

Within the present study we have found *A. maculicornis* on *Tragopogon* sp. (Fig. 2), *Chondrilla juncea* and *Cichorium intybus*. All these plants, as well as the plant genus *Scorzonera*, regarded as a host plant of *A. maculicornis* by Danilevskaya *et al.* (2009), belong to the tribe Cichorieae (Asteraceae: Cichorioideae) (Kilian *et al.* 2009). Thus, plants of the tribe Cichorieae appear to be the host plants of *A. maculicornis*. The finding of one male specimen on *Rumex* sp. (Polygonaceae) near Sredets during our study is rather accidental.

The species *A. maculicornis* appears to be quite common in SE Bulgaria, as within three days (from 23 to 25 May 2023) we found it in six relatively remote localities, without any special search. This can be explained by the wide distribution of suitable habitats, in particular xerothermic herbaceous communities, dry hills, and xerothermic oak forests in the study region.



**Fig. 1.** *Agapanthia maculicornis maculicornis*, SE of Glavan Vill., 24.v.2023. A – male; B – apex of penis, the same specimen; C – parameres, the same specimen; D – female.



**Fig. 2.** *Agapanthia maculicornis maculicornis* on *Tragopogon* sp. A – near Elhovo, 23.v.2023; B – SE of Glavan Vill., 24.v.2023.

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