

First record of Sycamore Seed Bug *Belonochilus numenius* (Say, 1832) (Hemiptera: Heteroptera: Lygaeidae) in Turkish Thrace

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ABSTRACT: In this study, an alien invasive species, *Belonochilus numenius* (Say, 1832), was recorded in two localities in Edirne province during field studies in the Thrace Region between 2019-2021. These findings are the first record of this species, which entered from Spain to Europe in 2008 and then spread to other European countries, in the Thrace Region and the second record in Turkey. In addition, the latest distribution of this species in Europe and Turkey is shown on the map.

KEYWORDS: *Belonochilus numenius*, first record, Lygaeidae, Turkish Thrace.

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INTRODUCTION

Belonochilus numenius (Say, 1832) is called the sycamore seed bug, and the natural distribution of this Nearctic species is in Canada, the United States, and Mexico (Slater, 1964; Ashlock & Slater, 1988).

After this alien and invasive species was identified firstly in Spain in 2008 (Gessé

et al., 2009) the species has spread rapidly in Central and Southern European countries. *Belonochilus numenius*, which has been detected in 20 European countries and Madeira (Aukema, 2020) has been identified by Çerçi & Oruz (2021) in İzmir Province, which is located in the western Anatolia (Asian part) in Turkey so far.



RESULTS***Belonochilus numenius* (Say, 1832)**

Material examined: EDİRNE: Uzunköprü-Kırkkavak (41°11'893N; 26°47'591E), 25.05.2019, 1♂; Edirne-Centrum(41°39'597N; 26°35'789E), 01.07.2021, on *Platanus orientalis* L, 1♀.

The identification was made taking into consideration the descriptions and the characteristics of the male genitalia indicated by Baena & Torres (2012). In the photographs were given dorsal and ventral views of the species, and its paramera (Fig. 1). Specimens are deposited in the Trakya University zoology collection.

Distrubution in Turkey: İzmir (Selçuk) (Çerçi & Oruz, 2021).

General Distrubution: Europe: Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, France, Germany, Greece, Hungary, Italy, Macedonia, Montenegro, Serbia, Sicily, Slovakia, Slovenia,

Spain, Switzerland. **North Africa:** Madeira. **Asia:** Turkey (Asian part). Extralimital: North America (Canada, Mexico, USA) (Aukema, 2020; Çerçi & Oruz, 2021)

In the present study, *Belonochilus numenius* was recorded in two localities in Edirne province in Thrace Region. When taking into account the rapid spread of the species, which was also recorded in Bulgaria and Greece, it is an expected result that it was found in the Thrace Region near the borders of both countries. The species is recorded for the first time in the Thrace Region, and this finding is the second record in Turkey. It seems that this alien invasive species would continue to spread eastward and it would be possible to encounter it in other parts of Anatolia in the future.

Belonochilus numenius, is an arboreal seed predator, which its adults and nymphs feeding on mature and immature fruits of *Platanus* spp., but it was also occasionally recorded on other deciduous trees in its native area (Wheeler, 1984). In this study, the specimen found in Edirne (Center) was also caught from *Platanus* sp.

Chronological distribution of *Belonochilus numenius* (Say, 1832) in Palaearctic (Fig.2)

- 2008 France (Matocq, 2008; Baena & Torres, 2012; Dusoulier et al., 2013)
- 2009 Spain (Gessé et al., 2009; Riba et al., 2015)
- 2010 Italy (Küchler & Strauß, 2010)
- 2011 Austria (Rabitsch et al., 2011)
- 2011 Czech Republic (Hradil, 2011; Kment et al., 2013)
- 2012 Hungary (Torma, 2012)
- 2013 Bulgaria (Aukema et al., 2013)
- 2013 Germany (Küchler & Kehl, 2013; Werner et al., 2013; Werner, 2014)
- 2013 Slovakia, (Kment & Cunev, 2013)
- 2015 Madeira (Rabitsch & Heiss, 2015)
- 2016 Bosnia and Herzegovina (Kulijer & Miljevic, 2016)
- 2016 Serbia (Protić & Šeat, 2016)
- 2016 Slovenia (Gogala et al., 2016)
- 2018 Albania (Rabitsch 2018)
- 2018 Greece (Davranoglou & Koutsoukos, 2018)
- 2019 Croatia (Martinović et al., 2019)
- 2019 Macedonia (Srebrova et al., 2019)
- 2020 Belgium (Claerebout et al., 2020)
- 2020 Montenegro (Martinović, 2020)
- 2021 Turkey (Asian part) (Çerçi & Oruz, 2021)
- 2021 Turkey (European part) (this study)



Figure 1. *Belonochilus numenius* (Say, 1832) a. Dorsal view b. Ventral view c. Paramere

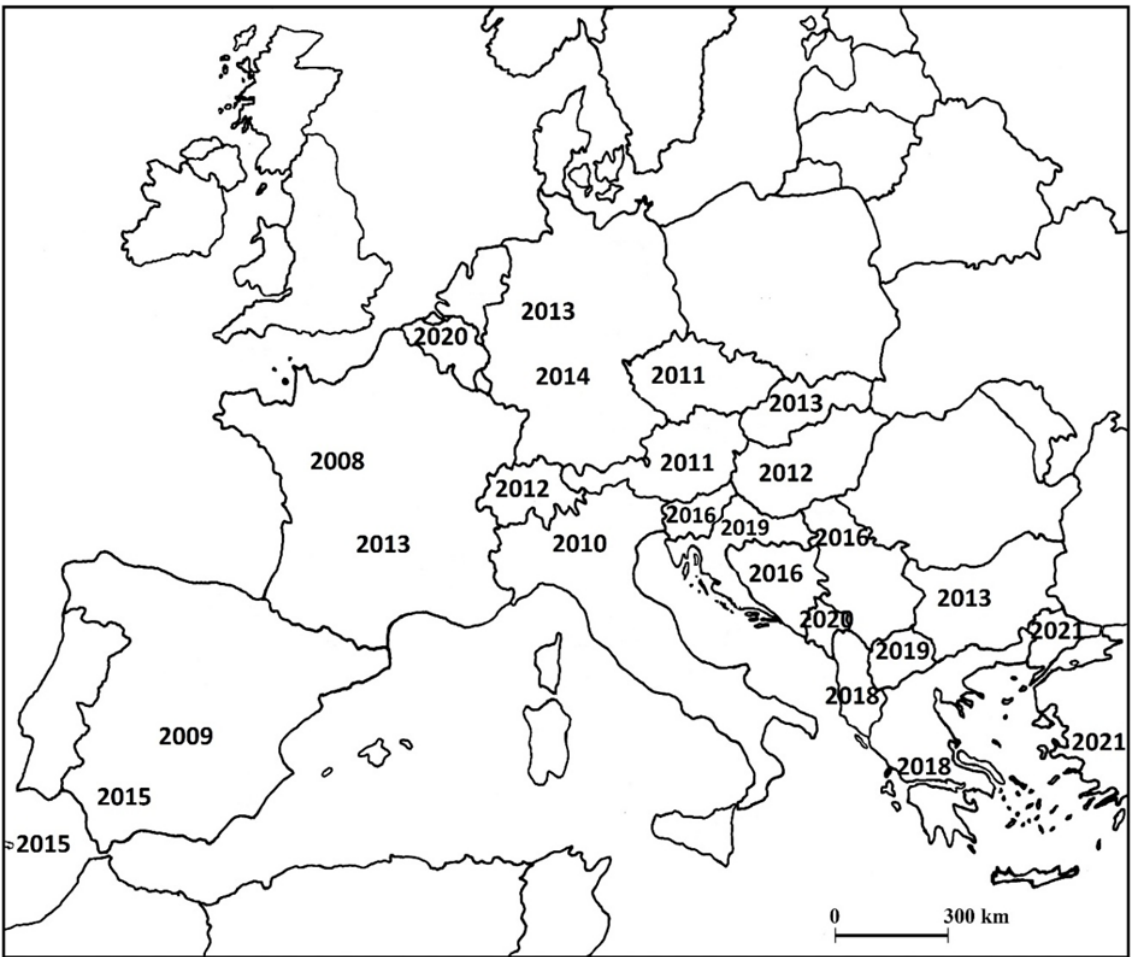


Figure 2. The distribution of *Belonochilus numenius* (Say, 1832) in Europe.

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