

First record of *Barbotinia oraniensis* (Barbotin, 1964) (Hymenoptera: Cynipidae) from Turkey

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Abstract: *Barbotinia oraniensis* (Barbotin, 1964) is here reported for the first time from Turkey. The cynipid wasp has recorded in Mediterranean region, Northern Africa and some European countries. The galls of the species were collected from the seed capsules of *Papaver rhoeas* L. (Papaveraceae) in April 2022. Photos of the gall, and data on the distribution, and biology of the new record species are provided.

Keywords: Turkey, Cynipid, Gall, New record, Papaver

Barbotinia oraniensis (Barbotin, 1964) (Hymenoptera: Cynipidae) türünün Türkiye’den ilk kaydı

Özet: *Barbotinia oraniensis* (Barbotin, 1964) ilk kez bu çalışma ile Türkiye’den kaydedilmiştir. Bu sinipid arısının daha önceden Akdeniz bölgesi, Kuzey Afrika ve bazı Avrupa ülkelerinde yayılış gösterdiği bildirilmiştir. Konukçu bitki *Papaver rhoeas* L. (Papaveraceae)’nin kapsülleri içerisinde oluşan mazılar Nisan 2022 tarihinde toplanmıştır. Mazi fotoğrafları, türün yayılışı ve biyolojisi hakkındaki bilgiler verilmektedir.

Anahtar kelimeler: Türkiye, Sinipid, Mazi, Yeni kayıt, Papaver

1. Introduction

The family Cynipidae Latreille, 1802 that distributes all over the world (except Antarctica), is one of the families of Hymenoptera (Insecta), with more than 1.500 valid species (Ronquist et al., 2015; Buffington et al., 2020). According to detailed studies on cynipid gall wasps, there is a greater diversity of gall wasps in Turkey compared to neighboring geographies (Melika, 2006; Shachar et al., 2018; Tavakoli et al., 2021). However, the diversity of herb gall wasps (tribes Aulacideini Nieves-Aldrey, Nylander & Ronquist, 2015; Aylacini Ashmead, 1903 and Phanacidini Nieves-Aldrey, Nylander & Ronquist, 2015) is poorly known in Turkey with eight species of Aulacideini (*Aulacidea acroptilonica* Tyurebaev, 1979; *A. tavakolii* Melika, 2008; *A. turcica* Azmaz & Katılmış, 2020; *A. turguti* Azmaz & Katılmış, 2021; *Fumariphilus hypecoi* (Trotter, 1913); *Liposthenes kernerii* (Wachtl, 1891), *Neaylax salviae* (Giraud, 1859), *Rhodus cyprius* (Houard, 1919)), one species of Aylacini (*Aylax minor* Hartig, 1840) and three species of Phanacidini (*Phanacis ciceki* Azmaz & Katılmış, 2021; *P. hypochoeridis* (Kieffer, 1887); *P. urhani* Azmaz & Katılmış, 2021), as in many other places (Azmaz and Katılmış, 2017, 2020, 2021; Buffington et al., 2020). In this article, the first record of *Barbotinia oraniensis* (Barbotin, 1964) (Cynipidae,

Aylacini), spreading in the Mediterranean geography, is given from Turkey.

2. Material and method

This study was carried out in April 2022, in the southwest of Turkey (Denizli province). In Laodikeia Ancient City, the seed capsules of *Papaver rhoeas* L. (Papaveraceae) were examined and found gall specimens were collected. The collected specimens were photographed and then placed in one-liter jars. The date and locality of the sampling were recorded. Gall specimens were transported to the laboratory where some were dissected and checked. The specimens are currently deposited in the Entomology Research Laboratory, Pamukkale University (ERL-PAU), Denizli, Turkey.

3. Results

Barbotinia oraniensis (Barbotin, 1964)

Aylax oraniensis Barbotin, 1964: 152.

Material examined: TURKEY, Denizli, Pamukkale, Laodikeia Ancient City, 37°50’N, 29°06’E, 285 m a.s.l.; ex *P. rhoeas*; M. Tataroğlu & Y. Katılmış leg.; collected date: 28.IV.2022 (Figure 1).

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Remarks: The distribution of this species was also reported to us from Troy Ancient City (Çanakkale province) in August 2021 by Dr. Ion Schiopu (unpublished data).

Biology: A monolocular gall begins to develop inside the seed capsule (one or three number) in April and matures in June. Adults emerge next spring (Melika, 2006). Host plants: *Papaver hybridum* L. (Diakontschuk, 2003), *P. dubium* L. and *P. rhoeas* L. (Nieves-Aldrey, 2001).

Distribution: Described firstly from Algeria (Barbotin, 1964). Known also from Croatia (Istria), France, Iran, Italia, Romania, Serbia, Spain and Ukraine (Crimea) (Andriescu, 1971, 1983; Kwast, 2012; Melika, 2006; Melika and Karimpour, 2012; Nieves-Aldrey, 2001; Pujade-Villar and Schiopu, 2015; Stojanović and Marković, 2016).

4. Discussion

The present study is the first record of the occurrence of *B. oraniensis* in Turkey which is the richest geography of Western Palaearctic region for cynipid species. The known distribution for *B. oraniensis* indicates that it is a Circum-Mediterranean species, represented in the Mediterranean Sea basin (Algeria, Spain, France, Italy, Croatia), with extension in Bulgaria, Romania (the western coast of Black Sea), Ukraine-Crimea (northern coast of Black Sea) and Iran (as eastern limit of Western Palaearctic). The occurrence of this species in Turkey indicates the connection of these regions in Western Palaearctic. Thus, as a result of the distribution completed like puzzle pieces, the distribution of the species in the Mediterranean basin was completely revealed. When the distribution pattern of *B. oraniensis* in Turkey is evaluated, the species is thought to occur only coastal regions (known currently Çanakkale and Denizli). Mountainous topography of western Turkey and the Taurus Mountains that extends parallel to the Mediterranean coast, are probably natural barriers that prevents spread of the species to the inner regions of Anatolia.



Figure 1. Young galls of *Barbotinia oraniensis* inside seed capsule

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