

Herb gallwasp *Neaylax salviae* (Giraud, 1859) (Hymenoptera, Aylacini) – new record from Turkey

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Abstract: Here we report a new record for *Neaylax salviae* (Giraud, 1859) (Hymenoptera, Aylacini) on *Salvia officinalis* L. (Lamiaceae) in the inland Aegean region of Turkey. We give details on the geographical distribution and host. *Neaylax salviae* (Giraud, 1859) is a new record on the genus level for Turkish fauna.

Key words: *Neaylax salviae*, Cynipidae, new record, *Salvia officinalis*, Turkey

Yararlı bitki gal arısı *Neaylax salviae* (Giraud, 1859) (Hymenoptera, Aylacini) – Türkiye’den yeni kayıt

Özet: Bu çalışmada Türkiye’de İç Ege bölgesinde *Neaylax salviae* (Giraud, 1859) *Salvia officinalis* L. üzerinde ilk kez kaydedildi. Coğrafik dağılım ve konukçusu ile ilgili detaylı bilgileri verildi. *Neaylax salviae* (Giraud, 1859) aynı zamanda cins seviyesinde de Türkiye faunası için yeni kayıttır.

Anahtar sözcükler: *Neaylax salviae*, Cynipidae, yeni kayıt, *Salvia officinalis*, Türkiye

Introduction

Cynipidae is one of the largest families of Cynipoidea. About 1400 species are known worldwide (Ronquist, 1999). The number of recorded species from Europe and contiguous territories, including northern Africa and Turkey, is about 300 (Dalla Torre and Kieffer, 1910; Nieves-Aldrey, 2001; Stone et al., 2001). The Aylacini herb gall species total about 75 in the same area (Dalla Torre and Kieffer, 1910; Nieves-Aldrey, 2001; Karimpour et al., 2008). Most publications on cynipid galls found in this area are on the oak gallwasps of the tribe Cynipini, many of which are forest pests in Turkey (Schimitschek, 1944;

Katılmış and Kıyak, 2008; Kıyak et al., 2008), or as components in broader studies of western Palaearctic gallwasp fauna (Atkinson et al., 2002; Tavakoli et al., 2006; Stone et al., 2007, 2008). Melika and Stone (2001) identified a new species from Turkey and Iran (*Andricus askewi* Melika and Stone 2001), and Melika et al. (2004) identified a new species from Turkey, Iran, and Greece (*Andricus megalucidus* Melika, Stone, Sadeghi and Pujade-Villar, 2004). Recently, Katılmış and Kıyak (2008) listed 81 gall-inducing wasps (Hymenoptera: Cynipidae), with a new record from Turkey. They listed 2 herb galls (*Aylax hypocoi* Trotter, 1913; *Liposthenes kernerii* (Wachtl, 1891))

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in this list from Turkey. Katılmış and Kıyak (2009) recorded the oak gallwasp *Aphelonyx persica* Melika, Stone, Sadeghi and Pujade-Villar, 2004 for the first time in Turkey.

The Aylacini gallwasp fauna of the Middle East and Turkey has been poorly studied. The world catalog of Cynipidae (Dalla Torre and Kieffer, 1910; Weld, 1952) listed no Aylacini species for this region.

Materials and methods

This study was carried out in 2007 in the inland Aegean region. The inland Aegean region is between the coastal Aegean and middle Anatolian regions. In the study area, *Salvia officinalis* was examined and the observed galls were collected. The collected galls were put in jar bags with capacities of 1 L and covered with

tulle. We also recorded the localities and collection times. Emerged and intact gall specimens and larvae were preserved in 70% alcohol. The specimens were deposited in the Zoology Museum of Gazi University.

Results

Neaylax salviae (Giraud, 1859)

DENİZLİ province, Çal district, Belevi town, 37°54'N, 29°23'E, 954 m, 14.07.2007, 13 galls; Serinhisar district, between Kocapınar town and Karaçay town, 2 km, 37°40'N, 29°24'E, 1100 m, 12.08.2007, 4 galls; KÜTAHYA province, between Kütahya and Çavdarhisarı, 3 km, 39°21'N, 30°02'E, 958 m, 11.07.2007, 8 galls (Figure 1a and 1b).

Host: *Salvia officinalis*



Figure 1. The gall of *Neaylax salviae*.

Discussion

Katılmış and Kiyak (2008) listed 2 Aylacini species from Turkey. For Iran, the Middle East, and Israel, 12 species of Aylacini, 8 of which were new species, were recently described (Melika and Gharaei, 2006; Tavakoli and Melika, 2006; Karimpour et al., 2008; Melika and Karimpour, 2008). In this study, we recorded *Neaylax salviae* from Turkey. This species was earlier known from Europe, Israel, Russia, and Ukraine (Melika, 2006). The herb gallwasp fauna of Turkey and the Middle East is little known. No doubt, further local faunistic studies will increase the number of known Aylacini species in Turkey.

Salvia officinalis is cultivated in Turkey. This plant is distributed in the Mediterranean and Aegean regions in Turkey (Karabacak et al., 2009; personal observation). This species comes into flower between

June and July. Seeds are formed in August (personal observation).

Neaylax salviae induces galls in the nutlets of *Salvia officinalis*. The galls are subspherical. The diameter of the galls is about 2.5-3 mm. They have thin gall walls and ample larval chambers (Figure 1a and 1b).

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