

FIRST RECORD OF THE MAPLE GALLWASP, *PEDIASPIS ACERIS* (GMELIN, 1790) (CYNIPIDAE: PEDIASPIDINI) FROM TURKEY, WITH A NEW HOST RECORD

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ABSTRACT: In this study, we report a new record that *Pediaspis aceris* (Gmelin, 1790) belonging to the maple gallwasp (Pediaspidini), on *Acer hyrcanum* Fisch. & Mey. (Aceraceae) in Isparta. *P. aceris* is a new record for Cynipidae fauna of Turkey in tribe, genus and species levels. At the same time, *A. hyrcanum* is a new host record for this species. Geographical distribution, host and photos of the gall are given.

KEY WORDS: Cynipidae, Pediaspidini, new record, new host, Turkey

Although Cynipidae belonging to Cynipoidea is the largest family with roughly 1400 described species (Ronquist et al., 2015), Pediaspidini belonging to Cynipidae has only 2 species belonging to 2 genera (*Himalocynips*, *Pediaspis*). Both genera are monotypic. *Himalocynips vigintilis* Yoshimoto, 1970 is only known from Nepal (Eastern Palearctic) and there is no data about its biology (Liljeblad & Ronquist, 1998). *P. aceris* as a European species is significant because it is the only gall wasp except Cynipini to show both sexual and asexual generations, a life cycle trait that has either evolved independently in the Pediaspidini, or indicates a sister group relationship between Cynipini and Pediaspidini. Moreover, both generations of *P. aceris* induce gall on maple (*Acer monspessulanum* L., *A. platanoides* L., *A. pseudoplatanus* L. and *A. opalus* Miller) (Melika, 2006).

Cynipidae fauna of Turkey is represented by seven taxa (Aulacideini, Aylacini, Ceroptresini, Cynipini, Diastrophini, Diplolepidini, Synergini). Approximately 150 species belonging to these taxa were totally recorded from Turkey according to faunistic studies in last decade (Kemal & Koçak, 2010; Kiyak & Katılmış, 2010; Katılmış & Kiyak, 2008, 2009a,b, 2010, 2011a,b,c,d, 2012a,b; Mutun & Dinç, 2011, 2015; Mete & Demirsoy, 2012; Çetin et al., 2014; Dinç et al., 2014; Mutun et al., 2014; Azmaz & Katılmış, 2015; Katılmış & Azmaz, 2015).

MATERIALS AND METHODS

All gall specimens on host plant were collected from Isparta in 2010 and 2015. After photos of the gall specimens were taken, data about locality and host plant were recorded. Galls were kept in laboratory conditions and checked weekly for emerged wasps. Adult gall wasps were subsequently fixed in ethanol. The adults were then air-dried, fixed on cards (5x10 mm), and pinned. The terminology used to describe gall wasp morphology follows Melika (2006). The gall specimens and adults were deposited in the Pamukkale University, Faculty of Arts & Sciences, Department of Biology, Entomology Laboratory, Denizli, Turkey.

RESULTS

Tribe Pediaspidini Ashmead, 1903
Genus *Pediaspis* Tischbein, 1852
Species *Pediaspis aceris* (Gmelin, 1790)

Material examined: ISPARTA, Eğirdir, above Yukarıgökdere village, Davraz mountain, Kasnak Oak Nature Protection Area, 37°44' N, 30°49' E, 1540 m, collected 02.VI.2010, 11.VI.2015, 2♀, 1♂, on *A. hyrcanum* (Fig. 1).

Host: *Acer hyrcanum* is a new host record as a maple tree.

Distribution: Known from Austria, Belgium, France, Germany, Georgia, Hungary, Iberian Peninsula, Iran, Romania, Russia, Switzerland, Ukraine (Melika, 2006).

DISCUSSION

As faunistic studies about gall wasps in Turkey include mainly oak gall wasps (Cynipini) on oaks, *P. aceris* that known only from Western Palearctic as a European species, has not been unfortunately recorded from Turkey so far. As a result of this study, tribe Pediaspidini was recorded as a new taxon for Cynipidae fauna of Turkey. Furthermore, a new host record (*A. hyrcanum*) was provide for *P. aceris*. We predict that species richness of the Turkish fauna will increasingly continue with faunistic studies.

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Figure 1. *Pediaspis aceris* sexual galls on leaf (a) and on fruit (b) (a scale bar 1 cm).