



## Two new species of Aphidini Latreille, 1802 (Hemiptera: Aphididae) from Turkey

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### Abstract

Apterous and alate viviparous females of *Protaphis kvavadzei* sp. n. on *Eryngium campestre* (Apiaceae) and *Aphis matricariae* sp. n. on *Matricaria* sp. (Asteraceae) from Turkey are described. The new species are differentiated from other aphids colonising these host plants and from species with similar morphology.

**Key words:** *Aphis matricariae*, *Protaphis kvavadzei*, *Matricaria*, *Eryngium*, new species, Turkey

### Introduction

The genus *Protaphis* Börner, 1952 is closely related to *Aphis*, and is represented by 42 species worldwide (Favret 2014). Species of this genus mostly live underground or at ground level on stem bases of Asteraceae, Fabaceae, Campanulaceae and Rutaceae, and are always attended by ants. Their morphology is adapted for this way of life. Although many species of *Protaphis* are recorded from Central Asia (Kadyrbekov 2001), only two species, *P. pseudocardui* Theobald, 1915 and *P. terricola* Rondani 1847, have hitherto been recorded in Turkey (Görür *et al.* 2012). A North American species, *P. middletonii* (Thomas 1879) was previously reported from *Centaurea* sp. in Turkey (Akyurek *et al.* 2011, as *Aphis middletonii*), but was not included in the 2012 list, being based on a misidentification.

The new species *Protaphis kvavadzei* is here described on *Eryngium campestre* (Apiaceae) from central Turkey, based on apterous and alate viviparous females collected by D. Hille Ris Lambers in 1977. This species was included as “*Aphis (Protaphis)* sp. (Turkey, BMNH colln)” in the identification key to apterae of *Eryngium*-living aphids of Blackman & Eastop (2006, p. 431).

The genus *Aphis* Linnaeus, 1758 is represented by more than 570 species worldwide (Remaudière & Remaudière 1997; Favret 2014). Most species live on shrubs and herbs, with relatively few on trees. The species belonging to this genus are mostly distributed in the northern hemisphere, with a few native to South America, New Zealand and Australia (Blackman & Eastop 2014). The latest publications about Turkish aphids (Görür *et al.* 2012; Şenol *et al.* in press) include 69 species of *Aphis*, although at least two of these require additional confirmation, as they are North American species never previously recorded in the palaeartic region—*A. carduella* Walsh 1863 (recorded as *A. helianthi* Riley & Monell 1879 in Görür *et al.* 2012) and *A. impatientis* Thomas 1878.

The new species *Aphis matricariae* is here described on *Matricaria* sp. (Asteraceae) from northern Turkey, based on apterous and alate viviparous females collected by G. Remaudière in 1966. Blackman & Eastop (2006), in their key to apterae on *Matricaria* (p. 641), included this species as “*Aphis (Pergandeida)* sp. (Turkey; BMNH colln)”.

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