



Two new species of *Hilara* (Diptera, Empididae) from northwestern Turkey

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Abstract

Two new species, *Hilara deryae* sp. nov. (*Hilara clavipes*-group) and *Hilara hasankoci* sp. nov. (*Hilara interstincta*-group) are described from northwestern Turkey. The male and female stages are described, compared with related species and male genitalia and forelegs illustrated. Keys to the western Palaearctic species of *Hilara clavipes*-group and the Mediterranean species of *Hilara interstincta*-group are updated. Also the systematic position of the new species within the species groups is discussed.

Key words: taxonomy, species key, distribution, dance flies, new species

Introduction

Hilara Meigen is a complex and relatively well known genus in Europe (Chvála 2005; Chvála & Merz 2009). The recent monograph of Chvála (2008) on the Mediterranean fauna of *Hilara* (with 82 species evaluated) has further advanced this knowledge. Despite these recent gains, *Hilara* remains poorly known from Turkey, with only 12 species presently recorded (Çiftçi & Hasbenli 2007; Raffone 2007; Çiftçi *et al.* 2008; Chvála 2008).

Hilara is the most difficult Palaearctic genus of Empididae to distinguish and identify species because of the large number of described species, the lack of distinctive differential characters and generally uniform appearance for non-specialists. *Hilara* is an easily recognized genus according to the absence of metapleural bristles and long and acute radial fork (R_{4+5}) (Chvála 1994). Three authors have attempted to classify *Hilara* into morphologically distinctive species groups, initially by Strobl (1892), Collin (1961) and later by Chvála (2005). Currently, 14 species groups are recognized (Chvála 2005, 2008; Chvála & Merz 2009), with 12 of these groups proposed for cold and temperate Europe (Chvála 2005).

In this study two new species are described and are assigned to the following two species groups. Species of the *Hilara clavipes*-group are large, dull, greyish black and brownish grey with unusually long bristled fore tibia and strongly dilated fore basitarsus (Chvála 2005). Previous to this study, there were six species known from this group, four from Europe and two from the Mediterranean Region (Chvála 2005, 2008). *Hilara bolkarensis* Çiftçi *et al.* (Çiftçi *et al.* 2008) should also be assigned to the *Hilara clavipes*-group because it possesses all the defining characters of this group. The *H. interstincta*-group is characterized by the larger body size and strong bristles (Chvála 2005), with eight species known from cold and temperate Europe. Later, thirteen Mediterranean (Chvála 2008) and three central European species (Chvála & Merz 2009) were added to the *H. interstincta*-group for a total of twenty-four species.

Material and methods

This study is based mainly on 62 male and 88 female specimens collected from the Marmara Region of Turkey in 2009 and 2010. For illustration, male genitalia and forelegs were dissected and cleared in the 10% KOH for 24 hours at 30 °C. Following drawing, genitalia and forelegs were stored in small capsules with glycerol and pinned beneath the specimens. In this study, the morphological nomenclature of Chvála (2005, 2008) and Chvála & Merz