



Two new species of the genus *Prosopistoma* (Ephemeroptera: Prosopistomatidae) from Iraq and Algeria

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Abstract

In addition to the three so far known species of *Prosopistoma* Latreille, 1833 from West Palaearctic region, *P. pennigerum* (Müller, 1785), *P. oronti* Alouf, 1977 and *P. orhanelicum* Dalkıran, 2009, two new species are described based on larvae. *Prosopistoma helenae* sp. n. has been found in Iraq (Tigris River in Mosul) and *Prosopistoma alaini* sp. n. in Algeria (Oued Isser, Sidi Abdelli). Critical distinguishing characters of all West-Palaearctic species of *Prosopistoma* are discussed in detail.

Key words: *Prosopistoma*, new species, Maghreb, North Africa, Middle East

Introduction

The monotypic family Prosopistomatidae is a small and highly derived group of mayflies known from the Palaearctic, Afrotropical, Oriental and Australasian regions (Barber-James *et al.* 2008), with the highest diversity in the Oriental and Afrotropic regions (Gillies 1954; Peters 1967; Soldán & Braasch 1987; Barber-James *et al.* 2008; Barber-James 2009; Shi & Tong 2013). Three species have been known from the Palaearctic region up to now. *Prosopistoma pennigerum* (Müller, 1785) was originally widespread in Europe (except northernmost Europe and British Islands), reaching to west Russia, Turkey and Georgia in the east (e.g. Schletterer & Füreder 2009). However, its present occurrence is strongly limited due to pollution and habitat degradation (Schletterer & Füreder 2009). *Prosopistoma oronti* Alouf, 1977 was recorded from Lebanon (Alouf 1977; Thomas *et al.* 1988), Syria and Israel (Koch 1988) and *Prosopistoma orhanelicum* Dalkıran, 2009 was recently described from north western Turkey (Dalkıran 2009).

This study is focused on a revision of North African and Middle East material present in the collection of V. Landa and T. Soldán in Biology Centre, Czech Academy of Sciences in České Budějovice. Specimens collected in Algeria have been originally considered to belong to *P. pennigerum* by T. Soldán (Gagneur & Thomas 1988; Thomas 1988). However, Barber-James (2009) considered records mentioned by these authors as a new species and discussed possible relationships to the material collected in the Atlas Mountains in Morocco (Touabay *et al.* 2002). She pointed out the lack of available material to describe a new species. Specimens collected in Iraq have been originally assigned to *P. phoenicium*, which is a synonym of *P. oronti*, by T. Soldán (Bauernfeind & Soldán 2012).

The aim of this study is to describe two new species based on the above-mentioned material and compare them with other Palaearctic species of the genus. We also briefly described *P. pennigerum* based on the material from Portugal, France and Hungary using the same characters as in the description of the new species to make exact comparison.