



## Genus *Trichocera* in Morocco: first records from Africa and a new species (Diptera: Trichoceridae)

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### Abstract

Till now only two species of the genus *Trichocera*, *T. annulata* and *T. hiemalis*, were recorded from north Africa. Here-with, we document seven species from Morocco, which extend distribution of the genus and the family to most southern localities of the western Palearctics in Africa (mountain ranges: the Rif, Middle Atlas and Beni Snassen). The following species were found: one new species in the nominate subgenus *Trichocera* (*Trichocera*) *marocana*, n. sp., and six of the subgenus *Trichocera* (*Saltrichocera*) (*saltator*, *sardiniensis*, *pappi*, *annulata*, *regelationis*, *rufescens*). The remarkably high share of the *regelationis* group of species in this southern fauna is discussed in view of tolerance of these species to warm climate.

**Key words:** *Trichocera*, new species, zoogeography, Africa, adaptation to cool/warm climate

### Introduction

Trichoceridae are a cool adapted nematoceran family of the Diptera. The largest genus *Trichocera* Meigen, 1803 is divided into three subgenera: *Trichocera* Meigen, 1803, *Saltrichocera* Krzemińska, 2002, and *Metatrachocera* Dahl, 1966, and comprises 106 species inhabiting the northern hemisphere, except few species introduced by man to islands in the southern hemisphere (Dahl 1970a, b). Eighty nine species live in the Palearctics, and 52 of them were stated in Europe (Krzemińska *et al.* 2009). Till now two notes on occurrence in Africa were made: on *Trichocera annulata* Meigen being present in Algeria (Edwards 1923: 493), and on *Trichocera hiemalis* DeGeer in Morocco (Pierre 1922). The most southern records of several other species come from the Mediterranean region in Europe (Canary Islands: Santos Abreu 1923, Dahl *et al.* 2002; Sardinia: Petrašiūnas 2009) and from Asia (Himalaya: records listed in Dahl & Alexander 1976). In the present study, new records of subgenera *Trichocera* and *Saltrichocera* in Africa are documented, and a new species is described.

### Material

Specimens were mostly collected by hand net by OD and BB and by malaise trap from November to May, in seasons 2012–2015, in the northern regions of Morocco, in the Rif Mountains, in Beni Snassen and in the Middle Atlas Mountains (Fig. 1). Localities differ in altitude from 300 to above 1600 m, and, noteworthy, all collection sites were around water bodies: brooks or rivers. The vegetation is typical of the Mediterranean area, with several species of oak, pistachio, oleander, rock rose (*Cistus*), blackberry, etc. Detailed characteristics of each locality, predominant vegetation and geographic position, is given in the Appendix 1. The altitude, season and temperature in time of collecting of particular species are summarized in Table 1.