



The Dolichopodainae and Troglophilinae cave crickets of Turkey: an update of taxonomy and geographic distribution (Orthoptera, Rhaphidophoridae)

MEHMET S. TAYLAN¹, CLAUDIO DI RUSSO², MAURO RAMPINI² & MARINA COBOLLI²

¹Akdeniz University, Science Institute, Biology Department, Antalya, Turkey. E-mail: msaittaylan@akdeniz.edu.tr

²Dipartimento di Biologia e Biotecnologie “C. Darwin”, Università degli Studi di Roma “La Sapienza”, Viale dell’Università 32, 00185 Roma, Italy. E-mail: mauro.rampini@uniroma1.it

Abstract

In this note we report a new series of data on Dolichopodainae and Troglophilinae cave crickets of Turkey, after an extensive survey conducted between the years 2006 and 2010 in the main Anatolian cave systems. These new data, including the identifications of some undescribed taxa, are discussed in the framework of climate regions, vegetation and karst distribution of Turkey, contributing to the study of diversity and geographical distribution of Rhaphidophoridae cave crickets from Turkey.

Key words: Dolichopodainae, Troglophilinae, cave crickets, Turkey

Introduction

Studies of Turkish Rhaphidophoridae Walker, F., 1871, started with I. Bolivar in 1899 after the famous travel of the entomologist M. Martinez Escalera who collected the first specimens of cave crickets in Asia Minor: by *Dolichopoda pusilla* (Akbès), *Dolichopoda aranea* and *Troglophilus escaleraei* (Jenidje-Kalè). Other species from Anatolia (*Troglophilus adamovici* from Zindan cave and *Troglophilus gajaci* from Cennet cave) were described seventy-five years later by P. Us (1974) on the material collected by Jean Gajac between 1963 and 1970. After these first studies, new data from new collections of Rhaphidophoridae from caves and epigeal habitats of Turkey have been gathered in the XXI century. Particularly, recent researches by two of us (CDR & MR) in the Mediterranean and Black Sea areas of Turkey allowed the description of three new species of the genus *Dolichopoda* Bolivar, 1880 (*D. sbordonii* Di Russo & Rampini, 2006, *D. noctivaga* Di Russo & Rampini, 2007, *D. lycia* Rampini & Di Russo 2008), and two new species of the genus *Troglophilus* Krauss, 1879 (*T. bicakcii* Rampini & Di Russo, 2003 and *T. tatyanae* Di Russo & Rampini, 2007).

The known distribution of Rhaphidophoridae included so far only the Eastern Black Sea (from Trabzon to Artvin) and the Mediterranean (from Antalya to Hatay along the Taurus Mountains) regions. In this note we report a new series of data after an extensive survey conducted between the years 2006 and 2010 in the main Anatolian cave systems including new areas not previously checked. These new data, including the identifications of some undescribed taxa, are discussed in the framework of climate regions, vegetation and karst distribution of Turkey, contributing to the study of diversity and geographical distribution of Rhaphidophoridae cave crickets from Turkey.

Material and methods

Commonly, Turkey is divided in five geographical regions: Mediterranean (including Aegean), Marmara, Black-sea, Central Anatolia (including East Anatolia) and South-East Anatolia. These regions are classified not only on the basis of geography but mainly on their strong climatic differences (Fig. 1). Although the Mediterranean loca-