



# Article

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## First annotated checklist of the ant fauna of Turkey (Hymenoptera: Formicidae)

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### Abstract

The first annotated checklist of the ants of Turkey is presented. A total of 306 valid names of species-group taxa (286 species, 20 subspecies) is recorded based on literature records and additional newly collected material carried out since 1998. Synonyms are included. New localities are added for some poorly known species. Four species (*Tapinoma subboreale*, *Formica georgica*, *Formica lugubris* and *Lasius balcanicus*) are reported for the first time and thirteen species (*Bothriomyrmex atlantis*, *B. meridionalis*, *Tapinoma madeirense*, *Camponotus robustus*, *Formica fuscocinerea*, *F. gagatoides*, *Rossomyrmex minuchae*, *Messor barbarus*, *Monomorium glabrum*, *M. salomonis*, *Myrmica vandeli*, *Stenamma westwoodii* and *Tetramorium forte*) are excluded from the list of Turkish ants.

**Key words:** Checklist, Formicidae, ants, new record, Turkey

### Introduction

Turkey is an important region in terms of faunal diversity (Çıplak 2003). With an area of 780.000 km<sup>2</sup>, it is an intersection of three phytogeographical regions—Circumboreal, Mediterranean and Irano-Turanien (Takhtajan 1986)—and a transition between the European and Asian faunas. The lack of a faunistic list for such a large and zoogeographically important area is a definite gap in our knowledge of Palaearctic ants. Moreover, the lack of a faunal list presents a challenge for myrmecological studies in Turkey.

The first record of the ant species from Turkey was given by Rigler (1852), who studied the fauna of İstanbul. Since then, many researchers have contributed taxonomic and faunistic studies on the ants of Turkey. These studies were performed by foreign researchers until the second half of the twentieth century (*e.g.* Forel 1906, Emery 1921a, Schkaff 1924, Santschi 1934, Donisthorpe 1950a), but more recently Turkish scientists have made many contributions (*e.g.* Aktaş 1976, Aras & Aktaş 1990, Aktaş *et al.* 1994, Kiran & Aktaş 2006). Although several hundred names of ant taxa are reported in these studies and nearly all neighbouring countries have at least one checklist (Atanassov & Dlussky 1992, Arakelian 1994, Gratiashvili & Barjadze 2008, Paknia *et al.* 2008, Lapeva-Gjonova *et al.* 2010, Legakis 2011), a complete list of the ant fauna of Turkey has not been published.

Therefore the aim of this study is to prepare for the first time a comprehensive list of the Turkish ant fauna that clarifies the valid names. With this study 306 valid names of species-group taxa are recorded. Four species are reported for the first time and thirteen species are excluded from the ant fauna of Turkey.

### Material and methods

The list was prepared based on literature records and additional newly collected material carried out since 1998. The names of subfamilies, genera and species are given alphabetically. The valid species names are listed with synonyms, localities and literature data. The localities are given as numbers in brackets that indicate Turkish provinces as shown in Figure 1. If a published locality record was just a region (*e.g.* Asia Minor, Thrace) or included more than one province (*e.g.* Taurus Mts., Sultan Mt.), the locality is written as in the original publication.