

# New and additional records for the formicid fauna (Insecta: Hymenoptera) of Iran

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**Abstract.** This article provides fifteen new and additional records for the ant fauna of Iran from thirteen localities. *Cataglyphis aenescens*, *Lasius lasioides*, *Lasius neglectus*, *Formica lusatica*, and *Liometopum microcephalum* are new to Iran.

**Kurzfassung.** In dieser Arbeit werden zu 15 Ameisenarten neue und ergänzende Nachweise von 13 Sammelgebieten aufgeführt. *Cataglyphis aenescens*, *Lasius lasioides*, *Lasius neglectus*, *Formica lusatica* und *Liometopum microcephalum* sind neu für den Iran.

**Key words.** Formicidae, fauna, new records, Middle East, Iran.

## Introduction

With more than 11,800 species, ants have an extensive distribution in terrestrial ecosystems and play an important role as predators, scavengers, herbivores, detritivores, and granivores (HÖLLDOBLER & WILSON 1990). In their turn, ants are preyed upon by a variety of specialist predators, including reptiles (PIANKA & PARKER 1975), mammals (REDFORD 1987), spiders (PORTER & EASTMOND 1982), and insects (GOTELLI 1996).

Important works on the Formicidae fauna of the Middle East include WHEELER & MANN (1916) and MENOZZI (1933), who studied the subfamily Formicinae in Palestine, WHITCOMBE (1982) on the ant fauna of Oman, HEATWOLE (1990) on ants of the United Arab Emirates, as well as COLLINGWOOD (1985) and COLLINGWOOD & AGOSTI (1996) on the Arabian Peninsula. The latter authors reported 265 species including 56 new species. COLLINGWOOD & VAN HARTEN (2001, 2005) studied the ant fauna of Yemen, AKTAÇ (1976) that of Turkey, and KUGLER (1981, 1983, 1986 & 1988) that of Israel/Palestine and Sinai.

The ant fauna of Iran has not yet been studied comprehensively. FOREL (1904a, 1904b), CRAWLEY (1920, 1922) and MENOZZI (1927) described or recorded some species from Iran. Since then, only some sporadic studies have been conducted during the last decade by Iranian researchers. ARDEH (1994) reported 15 species from Karadj city in Tehran Province in the north of Iran. ALIPANAH et al. (1995, 2000), ALIPANAH & DEZHAKAM (2000) and ALIPANAH (2004) reported a total of 38 species, mostly from Tehran Province. TIRGARI & PAKNIA (2004, 2005) recorded 6 species from Lar city in Fars Province in the south of Iran. In the present paper, fifteen species are reported as new or additional records for the ant fauna of Iran from thirteen localities (Fig. 1).

## Material and methods

Ant specimens were collected from 2001 to 2004 during field trips, mostly by hand and rarely by pitfall traps, Winkler collectors and baited traps. Specimens were preserved in 96% ethanol or 70% alcohol in small glass vials and were transferred to the Zoological Museum of Gorgan Uni-