

New and additional records for the ant fauna from Iran

(Hymenoptera: Formicidae)

Sakine Hossein Nezhad, Shahrokh Pashaei Rad, Fateme Firouzi, Donat Agosti

Abstract. The ant fauna (Hymenoptera: Formicidae) in two provinces (Zanjan, Mazandaran) of Iran has been studied in 2008 and 2009: 10 additional species new for the Iranian fauna have been discovered. The ant fauna of Iran includes now 158 species records.

Key words. Formicidae, ants, fauna, new record, Iran, Middle East.

Introduction

Iran's faunal diversity is comparatively high due to the country's varied geological, altitudinal and climatic structure; therefore it would be expected that there is a rich ant fauna in this country. Currently, the ant fauna of Iran comprises 148 species in 32 genera (PAKNIA et al. 2008, 2010, RADCHENKO & PAKNIA 2010, FIROUZI et al. 2011). We carried out surveys in the two Northern Iranian provinces Mazandaran and Zanjan to study the diversity in their various ecosystems (Fig.1). The first province is situated south of the Caspian Sea on the Northern slopes of the Alborz Mountains with forest steppe and the second is in the semiarid area south of the Alborz Mountains on the Iranian plateau.

Material and methods

The study materials were collected in spring and summer, in 2008 and 2009. The samples are preserved in 96% alcohol and referred to the Biosystematics Laboratory in Shahid Beheshti University. For the identification of the species the keys by AGOSTI & COLLINGWOOD (1987), COLLINGWOOD (1979, 1985), COLLINGWOOD & AGOSTI (1996) have been used. Ant specimens were sent to Cedric COLLINGWOOD and Bernhard SEIFERT to confirm their proper identification. Hay Mayans Insect Museum in the Iranian Research Institute of Plant Protection, Tehran, Iran (HMIM) and Donat Agosti's ant collection (DAAC) have been used as reference collections and as repository of voucher specimens. The pictures have been taken using a Wild M5 dissecting microscope with attached Nikon D300, and were edited with Combine ZP software.

Results and discussion

Additional to the earlier published checklist and annotations (PAKNIA et al. 2008, 2010, RADCHENKO & PAKNIA 2010, FIROUZI et al. 2011), ten ant species have been recorded for the first time for Iran. The ant fauna of Iran includes now 158 species records.