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An annotated checklist of Mutillidae (Insecta: Hymenoptera) from Iran

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Abstract

An annotated list for 151 species group-names recorded from territory of modern Iran during two hundred years (1811–2011) of research is given. The list is based on the original literature sources and consideration of geopolitical changes of Persian/Iranian country borders and administrative subregion borders during this period. The occurrence of 92 species in 25 genera for Iran is verified. The records of four specific names from Iran are required in clarification. An information about the sex on which the relevant species has been recorded and the distribution by provinces is presented and illustrated on maps. Subsequent misspelling *beludzhistanica* Lelej 2002 (in genus *Dentilla*) is not valid.

Key words: Hymenoptera, Mutillidae, checklist, distribution, Iran

Introduction

The family Mutillidae, with about 4 200 described species, is among the largest solitary wasp families parasitoids on enclosed hosts at preimaginal stage of other holometabolous insects. Knowledge of the natural history of mutillid wasps is usually restricted to the habitat in which the adults are collected and/or the flowers where are established to feed. Host-parasitoid relationships are established for about 40 mutillid species only. A peculiar feature for the family is the extreme sexual dimorphism and undoubtedly this is the reason why most species are now known from one sex only. The present check list aiming at first step to serve as a background for up-to-date information for the species of family Mutillidae recorded from Iran until now.

Mutillids has greatest diversity in the tropical and subtropical regions of the world being abundant in arid and semiarid areas. The last circumstance and Iran's geographical location makes it an area of special interest in studying of mutillid wasp's fauna and distributional patterns. Iran occupies a large part of the Iranian plateau covering an area of 1,623,779 km². It takes crucial position in Palaearctic region being proverbial bridge between the Middle East and Arabian peninsula, and Central Asia and occupying areas close to the continental border between Palaearctic and Oriental Regions.

The earliest record on the Mutillid fauna of Iran was published by Olivier (1811). From 1870 to 1893 O.I. Radoszkowski (alone or in co-authority) recorded 11 valid species. During 14.03–15.11.1898, 5.10.1900–20.08.1901, and 16.09.1903–25.05.1904 the ornithologist N.A. Zarudny gathered considerable material of different groups of animals including mutillid wasps from territories of eastern half of nowadays Iran. Based mainly on this material A.S. Skorikov (1935) provided records for 39 now valid mutillid species from Iran. A.S. Lelej (Lelej 1976; Lelej 1980; Lelej 1985; Lelej & Ostein 2004, *etc.*) described 13 new species and added many new records from Iran.

The present checklist is based on the original references only. Higher classification of Mutillidae follows Lelej (2002a). The valid genera inside the frames of the relevant tribe and the valid species inside the frames of the relevant genus are given alphabetically. The valid species names are followed by a chronological listing of references to records from Iran. Variant name spellings, misspellings, and alternate binominal combinations which have been used for the species in the literature are listed chronologically. Multiple references to one and the same