

## New data on Vespid wasp fauna of Jordan (Hymenoptera, Vespidae)

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**A b s t r a c t :** Authors present the new finds of Vespid wasps of Jordan. The data for two species of Vespinae, two species of Polistinae, and four species of Eumeninae are given. The finds of *Vespula germanica* (FABRICIUS 1793), *Polistes gallicus* (LINNÉ 1767), *Polistes dominulus* (CHRIST 1791), *Delta l. lepeleterii* (SAUSSURE 1853), *Rhynchium oculatum* FABRICIUS 1781 ssp. *hebraeum* GIORDANI-SOIKA 1952, and *Eumenes m. mediterraneus* KRIECHBAUMER 1879 are first data to Jordan. Moreover, the find of *Delta l. lepeleterii* (SAUSSURE 1853) is first to the Middle East. Comparison with some neighbouring countries is discussed.

**K e y w o r d s :** Hymenoptera, Vespidae, Jordan, Middle East, faunistics.

### Introduction

Knowledge of social wasp fauna of the Middle East is uneven. The social wasps were studied in three surrounding countries: Israel (BYTINSKI-SALZ & GUSENLEITNER 1971), Egypt (ZALAT 1992), and Saudi Arabia (predominantly southern parts, RICHARDS 1984). On the other hand, only fractional data (1-3 species) are available from other three countries (Lebanon, Syria, Iraq). The only species (*Vespa orientalis*) was known from Jordan (CARPENTER & KOJIMA 1997, HADDAD et al. 2005). As *V. orientalis* represents very big problem for beekeepers (RICHARDS 1984, HADDAD et al. 2005), we started to collect data for better knowledge of Jordan Aculeate fauna from both faunistic and bee-protecting purposes. Solitary wasps (Eumeninae) are long-term studied in the Middle East, the data from Jordan were published by GIORDANI-SOIKA (1970) and GUSENLEITNER (2001).

This paper summarizes the first data on social wasps (Vespidae: Polistinae and Vespinae) and brings several new information on solitary wasps (Vespidae: Eumeninae).

### Material and methods

The whole material was collected by sweeping net. Wasps were trapped predominantly on flowers by Omar Adwan (=OA), Ahmad Bataynah (=AB), and Hanna Mdanat (=HM). All wasps were identified by Libor Dvořák, Eumeninae were revised by Josef Gusenleitner.

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