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## **Three new records of Gasteruptionidae (Hymenoptera: Evanioidea) from Iran**

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### **Abstract**

In this paper three species of the genus *Gasteruption* LATREILLE (Hymenoptera: Evanioidea: Gasteruptionidae) are recognized as new records for the Iranian fauna. The new records are: *Gasteruption diversipes* (ABEILLE), *Gasteruption erythrostomum* (DAHLBOM) and *Gasteruption tournieri* (SCHLETTERER).

Key words: Hymenoptera, Evanioidea, Gasteruptionidae, *Gasteruption*, new records, Iran.

### **Zusammenfassung**

Vorliegende Arbeit behandelt den Neunachweis der Arten *Gasteruption diversipes* (ABEILLE), *Gasteruption erythrostomum* (DAHLBOM) and *Gasteruption tournieri* (SCHLETTERER) (Hymenoptera: Evanioidea: Gasteruptionidae) für den Iran.

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## Introduction

The species of Gasteruptiidae are predator-inquilines. They lay eggs inside the nests of solitary bees and wasps (e.g. Masaridae, Vespidae (Eumeninae), Apidae, Colletidae, Megachilidae). Their larvae feed on the food stores and/or nest inhabitants. Adults feed on flower nectar and eat pollen as well (TOWNES 1950; PAGLIANO & SCARAMOZZINO 2000). The distribution of *Gasteruption* is cosmopolitan (KIEFFER 1912; CROSSKEY 1962), though unknown from Polynesia and Hawaii (CROSSKEY 1962), and it is most diverse in the Australian and Ethiopian regions (MACEDO 2009, 2011). Some species of *Gasteruption* deposit their eggs in proximity to the host egg (MALYSHEV 1964, 1966). Some species are ectoparasitic, they lay their eggs on the egg of the host bee or wasp. Other species lay their eggs on the store of honey just in front of the host egg, on the wall of the cell in front of the food store, or on the outer surface of the cell lining (FERRIERE 1946; CROSSKEY 1962; JENNINGS & AUSTIN 2004). Faunal studies on the Gasteruptiidae of Iran are very rare and only the two species *Gasteruption jaculator* (LINNAEUS 1758) and *G. laticeps* (TOURNIER 1877) have been recorded so far (TIRGARI 1975). The aim of this paper is introducing of three new records of the family Gasteruptiidae to Iranian fauna.

## Materials and Methods

The specimens of this research was collected by Malaise trap in northwestern Iran including, Arasbaran (East Azarbayjan province) and Ourmieh (West Azarbayjan province) in summer 2007. Classification, nomenclature, synonymies and distributional data of Gasteruptiidae suggested by FERRIERE (1946), ŠEDIVÝ (1958), SCHMIDT (1979), DOLLFUSS (1982), MADL (1988), MACEDO (2009), PAGLIANO & SCARAMOZZINO (2000) and YILDIRIM et al. (2004) have been followed.

## Results

In this paper three new records of the genus *Gasteruption* LATREILLE (Gasteruptiidae) are introduced as the fauna of Iran together with synonymies and distribution data.

### Family *Gasteruption* ASHMEAD 1900

#### Subfamily Gasteruptiinae ASHMEAD 1900

#### Genus *Gasteruption* LATREILLE 1777

#### *Gasteruption diversipes* (ABEILLE 1879)

*Gasteruption distinguendum* SCHLETTERER 1885

*Gasteruption dusmeti* KIEFFER 1904

*Gasteruption kriebbaumeri* var. *striaticeps* KIEFFER 1904

**Material examined:** West Azarbayjan province: Ourmieh (1426 m), 1♀, 27 September 2007.

**General distribution:** Palaearctic: Europe, North Africa, Sardinia, Turkey.

***Gasteruption erythrostomum* (DAHLBOM 1834)**

*Foenus pyrenaicus* GUERIN 1844.

**Material examined:** East Azarbayjan province: Arasbaran (867 m), 2♀♀, 14 July 2007.

**General distribution:** Palaearctic: Europe, Russia, Turkey.

***Gasteruption tournieri* (SCHLETTERER 1885)**

*Gasteruption austriacum* SCHLETTERER 1885

*Gasteruption nitidum* SCHLETTERER 1885.

**Material examined:** East Azarbayjan province: Arasbaran (746 m), 2♀♀, 3♂♂, 16 July 2007.

**General distribution:** Palaearctic: Middle and South Europe, Bashkiria, Turkey.

### Discussion

Upon the result of this research three species of Gasteruptionidae were collected and identified as new records for Iran. In spite of the importance of these wasps, their fauna was not studied in Iran so far. Due to the fact that Iran is a large country with various geographical regions and climates, the fauna of Gasteruptionidae is expected to show diversities which must be discovered by the researchers on the basis of continuous samplings.

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