

**NEW RECORDS OF THE DIGGER WASPS (HYMENOPTERA:
CRABRONIDAE) FROM IRAN**

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Summary. *Didineis bucharica* Gussakovskij, 1937 and *Harpactus pulchellus* A. Costa, 1859 are recorded from Iran for the first time. In addition, *Bembix eburnea* Radoszkowsky, 1877 is new for Fars province.

Key words: Hymenoptera, digger wasps, fauna, new records, Malaise trap, Iran.

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Резюме. Впервые для Ирана приводятся *Didineis bucharica* Gussakovskij, 1937 и *Harpactus pulchellus* A. Costa, 1859. Кроме того, *Bembix eburnea* Radoszkowsky, 1877 впервые указывается из провинции Фарс.

INTRODUCTION

Crabronidae, commonly known as digger wasps, is a diverse and abundant family of Aculeata wasps, with over 8 891 nominal species in 249 genera and 8 subfamilies, occur worldwide but mainly in the tropics (Aguiar *et al.*, 2013; Pulawski, 2018). Recent studies of the family significantly increased our knowledge of the existing biodiversity of Iranian crabronid wasps. However, the digger wasp fauna of Iran is still poorly known. New data on the Iranian Crabronidae are given in present work.

MATERIAL AND METHODS

The specimens studied in this paper were collected using standard Malaise traps from different localities from Fars province, Iran, during the period 2015–2016. Voucher specimens are deposited in Department of Entomology, Shiraz Branch, Islamic Azad University, Shiraz, Iran (SHIAU) and the Institute of Biodiversity and Ecosystem Research, Sofia, Bulgaria (IBER). The nomenclature and classification were adapted from Nemkov & Ohl (2011),

Nemkov & Lelej (2013) and Pulawski (2018). General distribution was compiled from Nemkov (2009), Schmid-Egger (2004, 2014), Antropov *et al.* (2017) and Pulawski (2018).

NEW RECORDS

Family Crabronidae Latreille, 1802

Subfamily Bembicinae Latreille, 1802

Tribe Alyssontini, de Dalla Torre, 1897

Genus *Didineis* Wesmael, 1852

REMARKS. The genus includes 24 species distributed worldwide except for the Australian Region (Pulawski 2018). Nemkov (2015) reviewed all species of the genus *Didineis* from Russia and neighboring territories. Until now, two recorded from Iran species were *D. crassicornis* Handlirsch, 1888 and *D. wuestneii* Handlirsch, 1888 (Sakenin *et al.*, 2011; Atbaei *et al.*, 2015).

***Didineis bucharica* Gussakovskij, 1937**

MATERIAL EXAMINED. **Iran:** Fars: Kherameh (Dodej), 29°34'23"N, 52°59'42"E, 1675m, 14–26.VII 2015, 1♂, leg. M. Sadeghi; the same locality, 21.VIII–3.IX 2015, 1♀.

DISTRIBUTION. Iran (new record): Fars province. – United Arab Emirates, Uzbekistan.

Tribe Bembicini Latreille, 1802

Subtribe Bembicina Latreille, 1802

Genus *Bembix* Fabricius, 1775

***Bembix eburnea* Radoszkowsky, 1877**

MATERIAL EXAMINED. **Iran:** Fars: Khonj, 27°53'31"N, 53°26'42"E, 668m, 10–17.V 2015, 1♀, leg. M. Atbaei; the same locality, 6–13.IV 2015, 1♀.

DISTRIBUTION. Iran: Kerman (Gussakovskij 1933), Golestan, Khorasan Razav, (Ebrahimi, 2014). – Turkmenistan, Kazakhstan, Uzbekistan, Tajikistan, Turkey, Central Asia, China, Afghanistan, Russia.

REMARKS. This species is recorded here from Fars province for the first time.

Subtribe Gorytina Le Peletier-de-Saint-Fargeau, 1845

Genus *Harpactus* Shuckard, 1837

REMARKS. The genus *Harpactus* has a worldwide distribution and includes 72 described species (Ljubomirov & Schmid-Egger, 2014). So far, two species of the genus *Harpactus* have been reported from Iran: *H. laevis* (Latreille, 1792) and *H. tauricus* Radoszkowsky, 1884 (Nemkov, 1996; Atbaei *et al.*, 2015).

***Harpactus pulchellus* A. Costa, 1859**

MATERIAL EXAMINED. **Iran:** Fars: Kherameh (Dodej), 29°34'23"N, 52°59'42"E, 1675m, 7–19.VII 2015, 2♀, leg. M. Sadeghi; the same locality, 14–26.VII 2015, 2♀; the same

locality, 20–30.VII 2015, 1♀; the same locality, 3–11.IX 2015, 1♂; Marvdasht (Firoozi), 29°55'N23", 52°50'22"E, 1615m, 22.VIII–5.IX 2016, 1♀, leg. M. Sadeghi; Maharloo (Posht par), 29°19'08"N, 52°51'07"E; 1480m, 27.V–17.VI 2016, 1♂, leg. M. Sadeghi.

DISTRIBUTION. Iran (new record): Fars province. – South Europe, Turkey, Russia (Krasnodar region).

CONCLUSION

In this study, two species, *Didineis bucharica* and *Harpactus pulchellus*, were identified as new records for the fauna of Iran. One species, *Bembix eburnea* was found in Fars province for the first time.

The faunistic and taxonomic papers reporting data on the family Crabronidae in Iran increased rapidly through last years (Atbaei *et al.*, 2015; Rezaei & Fallahzadeh, 2015; Schmid-Egger *et al.*, 2016). However, this fauna is relatively poorly known and possibly very rich. There is no revise research or review study about this family from Iran and thus study of this fauna is not easy (Rezaei & Fallahzadeh, 2015). It is expected that a considerable further number of taxa will be recorded or discovered in this ecologically diverse "transit region" of three zoogeographic realms (Palaeartic, Oriental and Afrotropical regions).

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