



<http://dx.doi.org/10.11646/zootaxa.3754.4.2>

<http://zoobank.org/urn:lsid:zoobank.org:pub:78BF5DF4-5BB3-49C5-9206-5D11C28F6874>

## Study of the genus *Bracon* Fabricius, 1804 (Hymenoptera: Braconidae) of Southern Iran with description of a new species

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### Abstract

A survey on the genus *Bracon* Fabricius, 1804 was conducted in Hormozgan province, Southern Iran, during February 2011–July 2012. In all, 19 species belonging to seven subgenera were collected and identified, of which seven species and the subgenus *Asiabracon* Tobias, 1957 are recorded for first time from Iran. *Bracon* (*Orthobracon*) *persiangulfensis* Ameri, Beyarslan & Talebi sp. n. is newly described and illustrated from the Queshm island of Persian Gulf. Morphological characters of the new species were compared with the congeneric species. The newly recorded species from Iran were as follow: *B. (Asiabracon) quadrimaculatus* Telenga, 1936; *B. (Bracon) kozak* Telenga, 1936; *B. (Glabrobracon) immutator* Nees; *B. (Habrobracon) telengai* (Mulyarskaya, 1955); *B. (Habrobracon) variegator* Spinola, 1808; *B. (Orthobracon) epitriptus* Marshall, 1885 and *B. (Orthobracon) exhilarator* Nees, 1834. A key is presented for identification of *Bracon* species collected in Hormozgan province as well as an updated checklist of all *Bracon* species occurring in Iran.

**Key words:** Braconinae, taxonomy, Hormozgan province, Persian Gulf

### Introduction

The Braconidae comprises a large and economically important family of parasitoid hymenopteran that represented in all zoogeographic regions (excluding Antarctica), consisting of some 1056 genera and about 19652 known species (Yu *et al.* 2012). Thirty six of 46 subfamilies of the Braconidae are recorded from the western Palaearctic region (van Achterberg 1988). The greatest diversity of Braconidae occurs in old world tropical and subtropical regions (Quicke 1987).

The subfamily Braconinae currently comprises more than 2900 described species worldwide (Yu *et al.* 2012). Fahringer (1934) described 417 species in Braconinae. Tobias (1986) included a key to species of Palaearctic Braconinae, which was complemented with additional revisionary works on this group in the Palaearctic region (Tobias 1976, 1986). Several genera and species of Braconinae have also been described by van Achterberg (1983, 1985, 1997). Quicke (1987) revised and keyed the Braconinae of the Palaearctic region. Among the countries bordering Iran, our knowledge of Braconinae of Turkey has gradually increased in recent years. To date, 189 species from Braconinae and about 107 species of *Bracon* have been recorded in Turkey (Beyarslan 2002a, 2002b, 2009, 2010, 2011; Beyarslan & Çetin Erdoğan 2010, 2011, 2012; Beyarslan *et al.* 2005, 2006, 2009; Beyarslan & Fischer 1990; Beyarslan & Tobias 2008; Bolu *et al.* 2009).

*Bracon* Fabricius, 1804 is a cosmopolitan genus with over 16 subgenera and 599 described species worldwide, mostly distributed in the Palaearctic region (Yu *et al.* 2012). This genus includes species that parasitize a wide range of insects, having thousands of undescribed species (Quicke 1987; Quicke & Sharkey 1989). Based on the known host records, most *Bracon* species are idiobiont ectoparasitoids of the concealed larvae of various insect orders consisting Lepidoptera, Coleoptera, Diptera, Hymenoptera, or even gall-forming Hemiptera (Shaw & Huddleston 1991; Flores *et al.* 2005).

**TABLE 1.** (Continued)

<i>Bracon</i> species	Distribution in Iran (provinces)	References
<i>B. (H.) variegator</i> Spinola, 1808	Hormozgan	Current study
<i>B. (L.) brevitemporalis</i> Tobias, 1959	East Azarbaijan, Lorestan	Ghahari <i>et al.</i> (2012b), Rastegar <i>et al.</i> (2012)
<i>B. (L.) erraticus</i> (Wesmael, 1838)	Hormozgan	Papp (2012), Current study
<i>B. (L.) fortipes</i> (Wesmael, 1838)	Hormozgan	Papp (2012), Current study
<i>B. (L.) grandiceps</i> (Thomson, 1892)	Lorestan	Ghahari <i>et al.</i> (2012b)
<i>B. (L.) guttiger</i> Wesmael, 1838	Zanjan	Ghahari <i>et al.</i> (2010)
<i>B. (L.) humidus</i> Tobias, 1976	Guilan	Ghahari <i>et al.</i> (2012a)
<i>B. (L.) meyeri</i> (Telenga, 1936)	Guilan	Ghahari <i>et al.</i> (2012a)
<i>B. (L.) nigiventris</i> (Wesmael, 1838)	Lorestan	Ghahari <i>et al.</i> (2012b)
<i>B. (L.) suchorukovi</i> (Telenga, 1936)	Guilan	Ghahari <i>et al.</i> (2012a)
<i>B. (L.) thuringiacus</i> (Schmidknecht, 1896)	East Azarbaijan, Lorestan	Ghahari <i>et al.</i> (2012b), Rastegar <i>et al.</i> (2012)
<i>B. (O.) epitriptus</i> Marshall, 1885	Hormozgan	Current study
<i>B. (O.) exhilarator</i> Nees, 1834	Hormozgan	Current study
<i>B. (O.) persiangulfensis</i> Ameri, Beyarslan & Talebi <b>sp. n.</b>	Hormozgan	Current study
<i>B. (P.) piger</i> Wesmael, 1838	Guilan, Hormozgan	Ghahari <i>et al.</i> (2012a), Current study
<i>B. (R.) urinator</i> (Fabricius, 798)	Not defined	Telenga, 1936

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