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NEW RECORDS OF BRACONIDAE (HYMENOPTERA) FROM IRAN

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Summary. This paper deals with the faunistic survey of Braconidae (Hymenoptera: Ichneumonoidea) from some regions of Iran. In total, 21 species from seven subfamilies (Alysiinae, Brachistinae, Braconinae, Cheloninae, Euphorinae, Pambolinae and Rhyssalinae) were collected and identified as the new country records.

Key words: Ichneumonoidea, Braconidae, fauna, species diversity, new records, Iran.

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Резюме. Статья посвящена фаунистическому исследованию паразитических перепончатокрылых семейства Braconidae (Hymenoptera: Ichneumonoidea) отдельных регионов Ирана. Впервые для отдельных провинций Ирана приводится 21 вид из 7 подсемейств (Alysiinae, Brachistinae, Braconinae, Cheloninae, Euphorinae, Pambolinae и Rhyssalinae).

INTRODUCTION

Braconids (Hymenoptera: Braconidae) are one of the most diverse and important natural parasitoids which have efficient role in biological control programs (Matthews, 1974; Shaw, 1995). The members of the family Braconidae (Hymenoptera) are primary parasitoids on other insects, especially the larval stages of Coleoptera, Diptera and Lepidoptera, but also some hemimetabolous insects like aphids, Heteroptera or Embiidina (Sharkey, 1993; Wharton, 1993). The fauna of Iranian Braconidae with 780 species in 141 genera (Farahani *et al.*, 2016) has rather poorly been studied. The aim of this paper is introducing of 21 new records of Braconidae from Iran.

MATERIAL AND METHODS

The specimens from different regions of Iran were collected by Malaise traps, sweeping and light trapping, were put in ethanol 75%, pinned or mounted on small labels according to

taxonomic methods and were determined. The specimens were identified by the third and fourth authors by means of taxonomic keys such as Tobias (1986), van Achterberg (1993) and Chen et al. (2004). Some materials were determined by J. Papp (Hungary) and C. van Achterberg (Netherlands). The specimens of this investigation are preserved in the collections of the first, third and fourth authors. Classification and nomenclature are derived from Yu *et al.* (2016).

LIST OF THE SPECIES

In total, 21 species of Braconidae within 7 subfamilies, Alysiinae (2), Brachistinae (3), Braconinae (7), Cheloninae (4), Euphorinae (3), Pambolinae (1) and Rhyssalinae (1) were collected and identified from different regions of Iran. The list of species is given below alphabetically.

Subfamily Alysiinae Leach, 1815

Carinthilota vechti van Achterberg, 1988

MATERIAL EXAMINED. Kurdistan Prov.: Bijar, 35°52'N 47°36'E, 19.V 2011, 1♀ (N. Samin leg.).

Exotela umbellina (Nixon 1954)

MATERIAL EXAMINED. Hamedan Prov.: Malayer, 34°20'N 48°45'E, 3.X 2009, 3♀ (H. Sakenin leg.).

Subfamily Brachistinae Förster, 1862

Eubazus (Eubazus) pallipes Nees, 1812

MATERIAL EXAMINED. Kurdistan Prov.: Saqez, 36°22'N 46°26'E, 19.V 2011, 1♀ (N. Samin leg.); West Azerbaijan Prov.: Takab, 36°27'N 47°04'E, 10.IX 2014, 1♀, 1♂ (N. Samin leg.).

Schizoprymnus brevicornis Herrich-Schäffer, 1838

MATERIAL EXAMINED. Golestan Prov.: Golestan National Park, 6.VIII 2010, 2♀, 1♂ (H. Sakenin leg.); Mazandaran Prov.: Sari, 36°30'N 53°30'E, 14.IV 2012, 1♀ (H. Sakenin leg.).

Triaspis caucasica Abdinbekova, 1969

MATERIAL EXAMINED. Semnan Prov.: Damghan, 35°30'N 54°20'E, 25.vii.2012, 1♀ (S. Mirseyed leg.).

Subfamily Braconinae Nees, 1811

Bracon (Bracon) necator (Fabricius, 1777)

MATERIAL EXAMINED. West Azarbaijan Prov.: Salmas, 38°11'N 44°44'E, 9-11.VIII 2014, 2♀, 2♂ (N. Samin leg.).

Bracon (Glabrobracon) densipilosus Tobias, 1957

MATERIAL EXAMINED. Fars Prov.: Abadeh, 31°15'N 52°30'E, 6.V 2014, 2♀, 1♂ (H. Sakenin leg.).

***Bracon (Glabrobracon) negativus* Tobias, 1957**

MATERIAL EXAMINED. Semnan Prov.: Shahrud, 35°30'N 55°30'E, 23.VII 2012, 1♀ (D. Makhan leg.).

***Bracon (Lucobracon) punctifer* Thomson, 1892**

MATERIAL EXAMINED. Khorasan-e Razavi Prov.: Ferdos, 34°10'N 57°40'E, 19.VI 2013, 3♀, 1♂ (H. Ostovari leg.).

***Coeloides abdominalis* (Zetterstedt, 1838)**

MATERIAL EXAMINED. Luristan Prov.: Azna, 33°28'N 49°25'E, 3-7.VIII 2010, 1♀ (H. Naderian leg.).

***Iphiaulax (Euglyptobracon) tauricus* Shestakov 1927**

MATERIAL EXAMINED. West Azerbaijan Prov.: Mahabad, 36°46'N 45°44'E, 9-11.VIII 2014, 1♂ (N. Samin leg.).

***Vipio appellator* (Nees, 1834)**

MATERIAL EXAMINED. Luristan Prov.: Aligoodarz, 33°05'N 49°29'E, 3-7.VIII 2010, 1♀, 1♂ (H. Naderian leg.).

Subfamily Cheloninae Förster, 1862

***Ascogaster (Ascogaster) bidentula* Wesmael, 1835**

MATERIAL EXAMINED. Ilam Prov.: Abdanan, 32°53'N 47°30'E, 15.IV 2008, 1♀ (M. Azizi leg.).

***Ascogaster (Ascogaster) gonocephala* Wesmael, 1835**

MATERIAL EXAMINED. Semnan Prov.: Damghan, 35°30'N 54°20'E, 25.VII 2012, 1♂ (S. Mirseyed leg.).

***Chelonus (Chelonus) dauricus* Telenga, 1941**

MATERIAL EXAMINED. East Azerbaijan Prov.: Maragheh, 37°23'N 46°24'E, 2.VI 2012, 1♀ (M. Havaskary leg.).

***Chelonus (Chelonus) wesmaelii* Curtis, 1837**

MATERIAL EXAMINED. Hamedan Prov.: Toyserkan, 34°34'N 48°21'E, 5.X 2009, 2♀ (H. Sakenin leg.).

Subfamily Euphorinae Foerster, 1863

***Meteorus jaculator* (Haliday, 1835)**

MATERIAL EXAMINED. Esfahan Prov.: Chadegan, 32°46'N 50°38'E, 10.V 2011, 1♀ (S. Shaban leg.).

***Perilitus kokujevi* Tobias, 1986**

MATERIAL EXAMINED. East Azerbaijan Prov.: Myaneh, 37°25'N 47°42'E, 16.IX 2010, 1♀ (M. Havaskary leg.).

Syntretus (Syntretus) elegans (Ruthe, 1856)

MATERIAL EXAMINED. West Azerbaijan Prov.: Salmas, 38°11'N 44°44'E, 9-11.VIII 2014, 1♂, 2♀ (N. Samin leg.).

Subfamily Pambolinae Marshall, 1885

Pambolus biglumis (Haliday, 1836)

MATERIAL EXAMINED. Chaharmahal-Bakhtiary Prov.: Lordegan, 31°26'N 50°50'E, 15-21.VII 2013, 1♀ (S. Shaban leg.); Mazandaran Prov.: Savadkooh, 36°05'N 52°55'E, 18.VII 2013, 2♂ (H. Sakenin leg.).

Subfamily Rhysalinae Förster, 1862

Oncophanes (Oncophanes) minutus (Wesmael, 1838)

MATERIAL EXAMINED. West Azerbaijan Prov.: Salmas, 38°11'N 44°44'E, 9-11.VIII 2014, 2♀, 1♂ (N. Samin leg.).

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