

## ARTIGO / ARTÍCULO / ARTICLE

## A study on the ichneumonid wasps (Hymenoptera: Ichneumonidae) from the province of Lorestan, Iran.

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**Abstract:** This faunistic paper deals with the species diversity of ichneumonid wasps (Hymenoptera: Ichneumonidae) from the province of Lorestan, Iran. In total, 38 species belonging to 29 genera and 4 subfamilies (Acaenitinae, Cryptinae, Ichneumoninae, and Pimplinae) were collected and identified. *Bathythrix thomsoni* (Kerrich, 1942), *Gambrus ornatus* (Gravenhorst, 1829), *Gelis melanocephalus* (Schrank, 1781), *Thrybius praedator* (Rossi, 1792), *Trychosia ingrata* (Tschek, 1871), *Neotypus coreensis* Uchida, 1930, and *Probolus crassulus* Horstmann, 2000 are new records for the fauna of Iran.

**Key words:** Hymenoptera, Ichneumonidae, Faunistics, Lorestan, Iran.

**Resumen:** Estudio de los icneumónidos (Hymenoptera: Ichneumonidae) de la provincia de Lorestán, Irán. Este trabajo trata de la diversidad de especies de icneumónidos (Hymenoptera: Ichneumonidae) de la provincia de Lorestán, Irán. En total se capturaron e identificaron 38 especies pertenecientes a 29 géneros y 4 subfamilias (Acaenitinae, Cryptinae, Ichneumoninae y Pimplinae). *Bathythrix thomsoni* (Kerrich, 1942), *Gambrus ornatus* (Gravenhorst, 1829), *Gelis melanocephalus* (Schrank, 1781), *Thrybius praedator* (Rossi, 1792), *Trychosia ingrata* (Tschek, 1871), *Neotypus coreensis* Uchida, 1930 y *Probolus crassulus* Horstmann, 2000 son citas nuevas para la fauna de Irán.

**Palabras clave:** Hymenoptera, Ichneumonidae, Faunística, Lorestán, Irán.

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## Introduction

Ichneumonidae (Hymenoptera) is the biggest hymenopteran family with 51 generally recognized subfamilies, 1,579 genera and 24,281 described species (Çoruh *et al.* 2014). However, it should be emphasized that every year many new species are added to this number. The real number of species was estimated by Townes (1969) to be far higher, with probably up to 60,000 species (Gauld 1991). The biology of ichneumonids is very variable in general, and all forms of parasitism are represented, but common to all ichneumonids is that they kill their host (Laurenne 2008).

The Ichneumonidae fauna of Iran is not well studied. In the checklist by Barahoei *et al.* (2012) 502 species belonging to 189 genera and 24 subfamilies are listed from Iran. Later many authors (Ghahari 2014; Ghahari & Jussila 2014a, b, 2015; Ghahari *et al.* 2014a, b; Barahoei *et al.* 2014a, b, 2015, etc.) have made contributions to the Iranian fauna.

The province of Lorestan covers an area of 28,392 km<sup>2</sup> and comprises a historic territory of western Iran. The terrain consists chiefly of mountains, with numerous ranges, part of the Zagros mountain range, running northwest to southeast. The highest point of the province is a peak at 4050 m, and the low-lying areas being in the southernmost sector of the province are approximately 500 m

above sea level. The climate is generally sub-humid continental with winter precipitation, mostly as snow. Temperatures vary widely with the seasons and between day and night (12 to 32°C in summer and -2 to 8°C in winter). The aim of this work is the faunistic survey on Ichneumonidae of the province of Lorestan.

## Material and methods

The materials of this research were collected by Malaise trap and sweeping net from different regions of the province of Lorestan. The specimens were put in ethanol 75%, pinned or mounted on small labels and identified. Generally the taxonomical works of Kasparyan (1973, 1981), Kasparyan & Tolkanitz (1999) and Yu *et al.* (2012) were used. Distribution of Ichneumonidae suggested by Yu *et al.* (2012) has been followed.

In total 38 ichneumonid species belonging to 29 genera and 4 subfamilies (Acaenitinae, Cryptinae, Ichneumoninae, and Pimplinae) were collected and identified. Seven species, *Bathythrix thomsoni* (Kerrich, 1942), *Gambrus ornatus* (Gravenhorst, 1829), *Gelis melanocephalus* (Schrank, 1781), *Thrybius praedator* (Rossi, 1792), *Trychosis ingrata* (Tschek, 1871), *Neotypus coreensis* Uchida, 1930, and *Probolus crassulus* Horstmann, 2000 are new records for the fauna of Iran. A list of species is given below with distribution data.

## Results

### Subfamily Acaenitinae

#### Genus *Phaenolobus* Förster, 1869

##### *Phaenolobus saltans* (Gravenhorst, 1829)

**Material examined:** Province of Lorestan: Alashtar (1255 m), 1♀, April 2009.

**Distribution outside Iran:** Austria, Croatia, Germany, Greece, Hungary, Italy, Macedonia, Poland, Portugal, Romania, Spain, Ukraine (Yu *et al.* 2012).

### Subfamily Cryptinae

#### Genus *Aclastus* Förster, 1869

##### *Aclastus solutus* (Thomson, 1884)

**Material examined:** Province of Lorestan: Aligoodarz (2081 m), 2♂♂, June 2009.

**Distribution outside Iran:** Austria, Belgium, Bulgaria, Czech Republic, Faeroe Islands, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Portugal (Madeira), Slovakia, Spain, Sweden, Turkey, UK (Yu *et al.* 2012).

#### Genus *Acroricnus* Ratzeburg, 1852

##### *Acroricnus stylator* (Thunberg, 1824)

**Material examined:** Province of Lorestan: Noor Abad (1756 m), 1♀, June 2009; Chaghalvandi (1660 m), 2♀♀, September 2013.

**Distribution outside Iran:** Austria, Azerbaijan, Belarus, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Korea, Latvia, Lithuania, Macedonia,

Netherlands, Norway, Poland, Romania, Russia, Spain, Sweden, Switzerland, Turkey, UK, Ukraine, USA, former Yugoslavia (Yu et al. 2012).

**Genus *Bathythrix* Förster, 1869**

***Bathythrix thomsoni* (Kerrich, 1942)**

**Material examined:** Province of Lorestan: Chaghalvandi (1660 m), 2♂♂, September 2013. **New record for the fauna of Iran.**

**Distribution outside Iran:** Austria, Bulgaria, Czech Republic, Finland, France, Germany, Ireland, Italy, Netherlands, Poland, Russia, Spain, Sweden, UK (Yu et al. 2012).

**Genus *Buathra* Cameron, 1903**

***Buathra tarsoleucos* (Schränk, 1781)**

**Material examined:** Province of Lorestan: Pol-e-Dokhtar (635 m), 1♂, June 2009.

**Distribution outside Iran:** Afghanistan, Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Korea, Latvia, Lithuania, Mongolia, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Tajikistan, Turkey, UK, Ukraine (Yu et al. 2012).

**Genus *Cryptus* Fabricius, 1804**

***Cryptus viduatorius* Fabricius, 1804**

**Material examined:** Province of Lorestan: Aligoodarz (2084 m), 2♀♀, June 2009.

**Distribution outside Iran:** Austria, Azerbaijan, Belarus, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Georgia, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Moldova, Netherlands, Norway, Poland, Romania, Russia, Serbia, Montenegro, Spain, Sweden, Switzerland, Tajikistan, Turkey, UK, Ukraine (Yu et al. 2012).

**Genus *Dichrogaster* Doumerc, 1855**

***Dichrogaster longicaudata* (Thomson, 1884)**

**Material examined:** Province of Lorestan: Kouhestak (1215 m), 1♂, August 2009.

**Distribution outside Iran:** Austria, Bulgaria, Canada, Czech Republic, Egypt, Finland, France, Germany, Greece, Iraq, Israel, Italy, Moldova, Mongolia, Norway, Poland, Portugal (Madeira), Serbia, Slovakia, Spain, Sweden, Turkey, USA (Yu et al. 2012).

**Genus *Gambrus* Förster, 1869**

***Gambrus incubator* (Linnaeus, 1758)**

**Material examined:** Province of Lorestan: Roudbar (1642 m), 2♀♀, June 2009.

**Distribution outside Iran:** Austria, Azerbaijan, Belgium, Bulgaria, Croatia, Czech Republic, Finland, France, Germany, Hungary, Ireland, Italy, Kenya, Latvia, Lithuania, Norway, Poland, Romania, Russia, Spain, Sweden, Switzerland, Turkey, UK (Yu et al. 2012).

***Gambrus ornatus* (Gravenhorst, 1829)**

**Material examined:** Province of Lorestan: Mamoon (1897 m), 1♂, September 2013. **New record for the fauna of Iran.**

**Distribution outside Iran:** Austria, Azerbaijan, Belarus, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Kyrgyzstan, Latvia, Moldova, Netherlands, Norway, Poland, Romania, Russia, Spain, Sweden, Switzerland, Syria, Turkey, Turkmenistan, UK (Yu et al. 2012).

**Genus *Gelis* Thunberg, 1827**

***Gelis melanocephalus* (Schrank, 1781)**

**Material examined:** Province of Lorestan: Mamoon (1897 m), 1♀, September 2013. **New record for the fauna of Iran.**

**Distribution outside Iran:** Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Ireland, Latvia, Lithuania, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, UK (Yu et al. 2012).

***Gelis mutillatus* (Gmelin, 1790)**

**Material examined:** Province of Lorestan: Shool Abad (1663 m), 3♀♀, September 2013.

**Distribution outside Iran:** Austria, Belgium, Bulgaria, Croatia, Czech Republic, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Netherlands, Norway, Poland, Romania, Russia, Spain, Sweden, UK, Ukraine (Yu et al. 2012).

***Gelis trux* (Förster, 1850)**

**Material examined:** Province of Lorestan: Kamandan (2002 m), 1♀, April 2012.

**Distribution outside Iran:** Austria, Bulgaria, Czech Republic, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Moldova, Netherlands, Norway, Poland, Romania, Russia, Spain, Sweden, Switzerland, UK, Ukraine (Yu et al. 2012).

**Genus *Hoplocryptus* Thomson, 1873**

***Hoplocryptus bohemani* (Holmgren, 1856)**

**Material examined:** Province of Lorestan: Shool Abad (1663 m), 1♂, September 2013.

**Distribution outside Iran:** Austria, Azerbaijan, Bulgaria, Czech Republic, Finland, France, Germany, Hungary, Latvia, Mongolia, Norway, Poland, Romania, Russia, Serbia, Montenegro, Spain (Canary Islands), Sweden, Switzerland, Turkey, UK (Yu et al. 2012).

**Genus *Meringopus* Förster, 1869**

***Meringopus calescens persicus* Heinrich, 1937**

**Material examined:** Province of Lorestan: Kamandan (2002 m), 2♀♀, April 2012.

**Distribution outside Iran:** Afghanistan, Austria, Azerbaijan, Bulgaria, Canada, China, Czech Republic, France, Germany, Greece, India, Italy, Kazakhstan, Kyrgyzstan, Mongolia, Morocco, Poland, Russia, Spain, Switzerland, Tajikistan, Turkey, USA, Uzbekistan (Yu et al. 2012).

***Meringopus pseudonymus* (Tschek, 1872)**

**Material examined:** Province of Lorestan: Borujerd (1637 m), 2♀♀, October 2009.

**Distribution outside Iran:** Algeria, Austria, Bulgaria, Croatia, France, Germany, Greece, Hungary, Israel, Italy, Jordan, Poland, Romania, Russia, Spain, Tajikistan, Turkey (Yu et al. 2012).

**Genus *Mesostenus* Gravenhorst, 1829*****Mesostenus transfuga* Gravenhorst, 1829**

**Material examined: Province of Lorestan:** Kamandan (2002 m), 1♀, April 2012; Chaghalvandi (1660 m), 2♂♂, 1♀, September 2013.

**Distribution outside Iran:** Algeria, Austria, Azerbaijan, Belgium, Bulgaria, Czech Republic, Egypt, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Kazakhstan, Latvia, Lithuania, Moldova, Mongolia, Poland, Portugal (Azores), Romania, Russia, Spain (Canary Islands), Sweden, Switzerland, Turkey, Turkmenistan, UK, Ukraine (Yu et al. 2012).

**Genus *Pleolophus* Townes, 1962*****Pleolophus brachypterus* (Gravenhorst, 1815)**

**Material examined: Province of Lorestan:** Aligoodarz (2084 m), 1♂, June 2009.

**Distribution outside Iran:** Austria, Azerbaijan, Belarus, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Moldova, Netherlands, Norway, Poland, Romania, Russia, Switzerland, Turkey, UK (Yu et al. 2012).

**Genus *Thrybius* Townes, 1965*****Thrybius praedator* (Rossi, 1792)**

**Material examined: Province of Lorestan:** Azna (1875 m), 1♂, July 2009. **New record for the fauna of Iran.**

**Distribution outside Iran:** Austria, Belgium, Czech Republic, Denmark, Finland, France, Georgia, Germany, Greece, Hungary, Ireland, Italy, Latvia, Poland, Romania, Slovenia, Spain, Sweden, Tunisia, Turkey, UK (Yu et al. 2012).

**Genus *Trychosis* Förster, 1869*****Trychosis ingrata* (Tschek, 1871)**

**Material examined: Province of Lorestan:** Azna (1875 m), 1♀, July 2009. **New record for the fauna of Iran.**

**Distribution outside Iran:** Austria, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Hungary, Latvia, Moldova, Poland, Romania, Slovakia, Spain, Sweden, Switzerland, UK (Yu et al. 2012).

***Trychosis neglecta* (Tschek, 1871)**

**Material examined: Province of Lorestan:** Darreh-Asbar (1670 m), 1♀, August 2009.

**Distribution outside Iran:** Austria, Azerbaijan, Belarus, Belgium, Bulgaria, Czech Republic, Finland, France, Germany, Hungary, Italy, Latvia, Lithuania, Moldova, Norway, Poland, Romania, Slovakia, Spain, Sweden, Switzerland, Turkey, UK (Yu et al. 2012).

**Genus *Zoophthorus* Förster, 1869*****Zoophthorus graculus* (Gravenhorst, 1829)**

**Material examined: Province of Lorestan:** Noor Abad (1756 m), 1♂, June 2009.

**Distribution outside Iran:** Belgium, Bulgaria, Canada, Czech Republic, Finland, France, Germany, Hungary, Ireland, Lithuania, Mexico, Mongolia, Netherlands, Norway, Poland, Romania, Slovakia, Spain, Sweden, Turkey, UK, USA (Yu et al. 2012).

**Subfamily Ichneumoninae**

**Genus *Anisobas* Wesmael, 1844**

***Anisobas hostilis* (Gravenhorst, 1820)**

**Material examined:** Province of Lorestan: Sarab Doreh (1176 m), 3♂♂, July 2009.

**Distribution outside Iran:** Algeria, Austria, Belgium, Bulgaria, China, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Kazakhstan, Kyrgyzstan, Latvia, Luxembourg, Morocco, Netherlands, Poland, Romania, Russia, Serbia, Montenegro, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, UK (Yu *et al.* 2012).

**Genus *Apaeleticus* Wesmael, 1845**

***Apaeleticus bellicosus* Wesmael, 1845**

**Material examined:** Province of Lorestan: Roudbar (1642 m), 2♂♂, June 2009; Dorood (1683 m), 1♂, 2♀♀, October 2009.

**Distribution outside Iran:** Belarus, Belgium, Bulgaria, Croatia, Finland, France, Germany, Ireland, Italy, Latvia, Netherlands, Poland, Romania, Russia, Spain, Turkey, Ukraine, UK (Yu *et al.* 2012).

**Genus *Coelichneumon* Thomson, 1893**

***Coelichneumon bohemani* (Holmgren, 1864)**

**Material examined:** Province of Lorestan: Khorramabad (1126 m), 1♂, August 2009.

**Distribution outside Iran:** Austria, Belgium, Bulgaria, Croatia, Czech Republic, Finland, France, Germany, Hungary, Poland, Romania, Russia, Sweden, Switzerland, Turkey, UK, Ukraine (Yu *et al.* 2012).

**Genus *Diphyus* Kriechbaumer, 1890**

***Diphyus ochromelas* (Christ, 1790)**

**Material examined:** Province of Lorestan: Darreh-Asbar (1673 m), 1♂, 2♀♀, August 2009.

**Distribution outside Iran:** Austria, Azerbaijan, Belarus, Belgium, Bulgaria, Croatia, Finland, France, Germany, Hungary, Italy, Kazakhstan, Latvia, Lithuania, Netherlands, Norway, Poland, Romania, Russia, Spain, Sweden, Switzerland, Turkey, UK, Ukraine (Yu *et al.* 2012).

**Genus *Exephanes* Wesmael, 1845**

***Exephanes ischioxanthus* (Gravenhorst, 1829)**

**Material examined:** Province of Lorestan: Borujerd (1637 m), 1♂, October 2009.

**Distribution outside Iran:** Austria, Belgium, Bulgaria, Croatia, Czech Republic, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Moldova, Netherlands, Poland, Romania, Russia, Spain, Sweden, Switzerland, Turkey, UK (Yu *et al.* 2012).

**Genus *Ichneumon* Linneaus, 1758**

***Ichneumon cessator* Müller, 1776**

**Material examined:** Province of Lorestan: Sefid Dasht (1122 m), 2♂♂, 2♀♀, April 2009; Aligoodarz (2081 m), 1♂, June 2009.

**Distribution outside Iran:** Austria, Azerbaijan, Belarus, Belgium, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Kazakhstan, Latvia, Luxembourg, Norway, Poland, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Turkey, UK (Yu *et al.* 2012).

***Ichneumon curtulus* Kriechbaumer, 1882**

**Material examined: Province of Lorestan:** Khorramabad (1126 m), 2♂♂, 1♀, August 2009; Sefid Dasht (1122 m), 1♀, September 2013.

**Distribution outside Iran:** Austria, Germany, Hungary, Kazakhstan, Poland, Romania, Spain (Yu *et al.* 2012).

***Ichneumon gratus* Wesmael, 1855**

**Material examined: Province of Lorestan:** Aligoodarz (2081 m), 3♂♂, June 2009.

**Distribution outside Iran:** Austria, Finland, France, Germany, Poland, Romania, Russia, Switzerland, Turkey, UK, Ukraine (Yu *et al.* 2012).

***Ichneumon sexcinctus* Gravenhorst, 1829**

**Material examined: Province of Lorestan:** Sefid Dasht (1122 m), 2♀♀, April 2009; Khorramabad (1126 m), 1♀, August 2009.

**Distribution outside Iran:** Croatia, France, Germany, Hungary, Italy, Kazakhstan, Mongolia, Poland, Romania, Spain, Switzerland, Turkey (Yu *et al.* 2012).

**Genus *Neotypus* Förster, 1869**

***Neotypus coreensis* Uchida, 1930**

**Material examined: Province of Lorestan:** Kouhestak (1215 m), 2♀♀, August 2009. **New record for the fauna of Iran.**

**Distribution outside Iran:** Austria, Canada, Czech Republic, France, Germany, Hungary, Japan, Korea, Lithuania, Moldova, Mongolia, Poland, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Turkey, UK, USA (Yu *et al.* 2012).

**Genus *Probolus* Wesmael, 1845**

***Probolus crassulus* Horstmann, 2000**

**Material examined: Province of Lorestan:** Dorood (1683 m), 1♂, October 2009. **New record for the fauna of Iran.**

**Distribution outside Iran:** Austria, Czech Republic, France, Germany, Hungary, Ireland, Italy, Norway, Slovakia, Spain, Turkey, UK (Yu *et al.* 2012).

**Genus *Stenichneumon* Thomson, 1893**

***Stenichneumon culpator* (Schrank, 1802)**

**Material examined: Province of Lorestan:** Alashtar (1255 m), 3♀♀, April 2009; Azna (1875 m), 1♀, July 2013.

**Distribution outside Iran:** Austria, Azerbaijan, Belarus, Belgium, Bosnia-Herzegovina, Bulgaria, Canada, Czech Republic, Finland, France, Germany, Hungary, Ireland, Italy, Japan, Kazakhstan, Korea, Latvia, Lithuania, Luxembourg, Moldova, Netherlands, Norway, Poland, Romania, Russia, Spain, Sweden, Tunisia, Turkey, UK, Ukraine, USA (Yu *et al.* 2012).

**Genus *Vulgichneumon* Heinrich, 1962**

***Vulgichneumon saturatorius* (Linnaeus, 1758)**

**Material examined:** Province of Lorestan: Sefid Dasht (1122 m), 2♂♂, April 2009.

**Distribution outside Iran:** Austria, Azerbaijan, Belarus, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Japan, Kazakhstan, Latvia, Lithuania, Netherlands, Norway, Pakistan, Poland, Romania, Russia, Spain, Sweden, Switzerland, Turkey, UK, Ukraine (Yu et al. 2012).

**Subfamily Pimplinae**

**Genus *Itoplectis* Förster, 1869**

***Itoplectis maculator* (Fabricius 1775)**

**Material examined:** Province of Lorestan: Dorood (1683 m), 1♂, October 2009.

**Distribution outside Iran:** Albania, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Mongolia, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Montenegro, Slovakia, Spain (Canary Islands), Switzerland, Tunisia, Turkey, UK, Ukraine (Yu et al. 2012).

**Genus *Pimpla* Fabricius, 1804**

***Pimpla spuria* Gravenhorst 1829**

**Material examined:** Province of Lorestan: Azna (1875 m), 1♀, 1♂, July 2009.

**Distribution outside Iran:** Afghanistan, Albania, Algeria, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bulgaria, China, Croatia, Czech Republic, Denmark, Egypt, Finland, France, Georgia, Germany, Greece, Hungary, Ireland, Israel, Italy, Japan, Kazakhstan, Kyrgyzstan, Libya, Lithuania, Macedonia, Malta, Moldova, Mongolia, Morocco, Netherlands, Norway, Poland, Romania, Russia, Spain (Canary Islands), Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, UK, Ukraine, Uzbekistan (Yu et al. 2012).

***Pimpla rufipes* (Miller 1759)**

**Material examined:** Province of Lorestan: Noor Abad (1756 m), 2♀♀, June 2009.

**Distribution outside Iran:** Argentina, Brazil, Germany, Turkey, Uruguay (Yu et al. 2012).

**Genus *Strongyloopsis* Brauns, 1896**

***Strongyloopsis belua* Kuzin, 1950**

**Material examined:** Province of Lorestan: Darreh-Asbar (1673 m), 2♂♂, August 2009.

**Distribution outside Iran:** Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Mongolia, Russia, Tajikistan, Turkey, Ukraine (Yu et al. 2012).

**Discussion**

This faunistic paper, just focused on 4 ichneumonid subfamilies, Acaenitinae, Cryptinae, Ichneumoninae, and Pimplinae, indicates that there is a diverse fauna of these beneficial insects in the



province of Lorestan. Continuing the faunistic surveys on other subfamilies and also in other regions of the province especially the areas not sampled in this research, surely many more species will be found in the future. Additionally, most species of Ichneumonidae are natural enemies of many economically important agricultural pests. Despite their efficient role in the biological control of agricultural and forest pests, the biology, ecology, and geographical distribution of many groups remain insufficiently known (Çoruh *et al.* 2011). Therefore, studies on the biological aspects of these beneficial insects can be valuable topics for researchers.

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