

A Contribution to the Fauna of Asilidae (Diptera, Brachycera) in Fars Province, Southern Iran

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(Received: 28 January 2015; accepted: 20 March 2015)

A survey was conducted to study the species of Asilidae (Diptera, Brachycera) in Fars province, southern Iran during year 2012. A total of 12 species belonging to 12 genera and 6 subfamilies Apocleinae, Asilinae, Dasypogoninae, Leptogastrinae, Ommatinae and Stenopogoninae were collected and identified. Among them, *Tolmerus paganus* Becker, 1923 is recorded for the first time in Iran. Additionally one subfamily, two genera and four species are recorded for the first time from Fars province. Distributional data for each species are given. An updated list of all known species of Asilidae from Fars province is also included.

Keywords: Diptera, distribution, Fars province, fauna, Iran, robber flies.

Asilidae is a large, diverse, cosmopolitan family of flies commonly known as robber flies that consists of over 7000 species and subspecies in 530 genera, but with many further species yet to be described (Geller-Grimm et al., 2015). The name “robber flies” reflects their aggressive predatory habits; they feed mainly on other arthropods, which may help to maintain a balance between insect populations in various ecosystems (Londt, 1993, 1994, 1995, 1996, 2006; Dennis and Lavigne, 2007). The majority of species of Asilidae frequent in the warm temperate and tropical areas of the world (Theodor, 1980; Wood, 1981).

In recent years some faunistical studies have been conducted on Iranian Asilidae and currently the number of species of this family recorded in Iran has grown (Tomasovic, 2002; Lehr et al., 2007; Saghaei et al., 2008, 2009, 2010). Hayat et al. (2008) provided a checklist of the Iranian species, including of 156 species and subspecies. Later, Saghaei et al. (2009) have added some species records from Iran and have provided a list of 232 asilid species and subspecies from Iran. Also, Tomasovic and Saghaei (2009) described three new species and one new subspecies from the country. However, the Asilidae fauna of Iran is still not fully studied.

Fars province (coordinates 27°–31°N, 50°–55°E), with an area of about 1,333,000 km², is located in the southern part of Iran (Fig. 1). Fars consists of three completely different regions. (1) The mountain area north and northwest, with moderate cold

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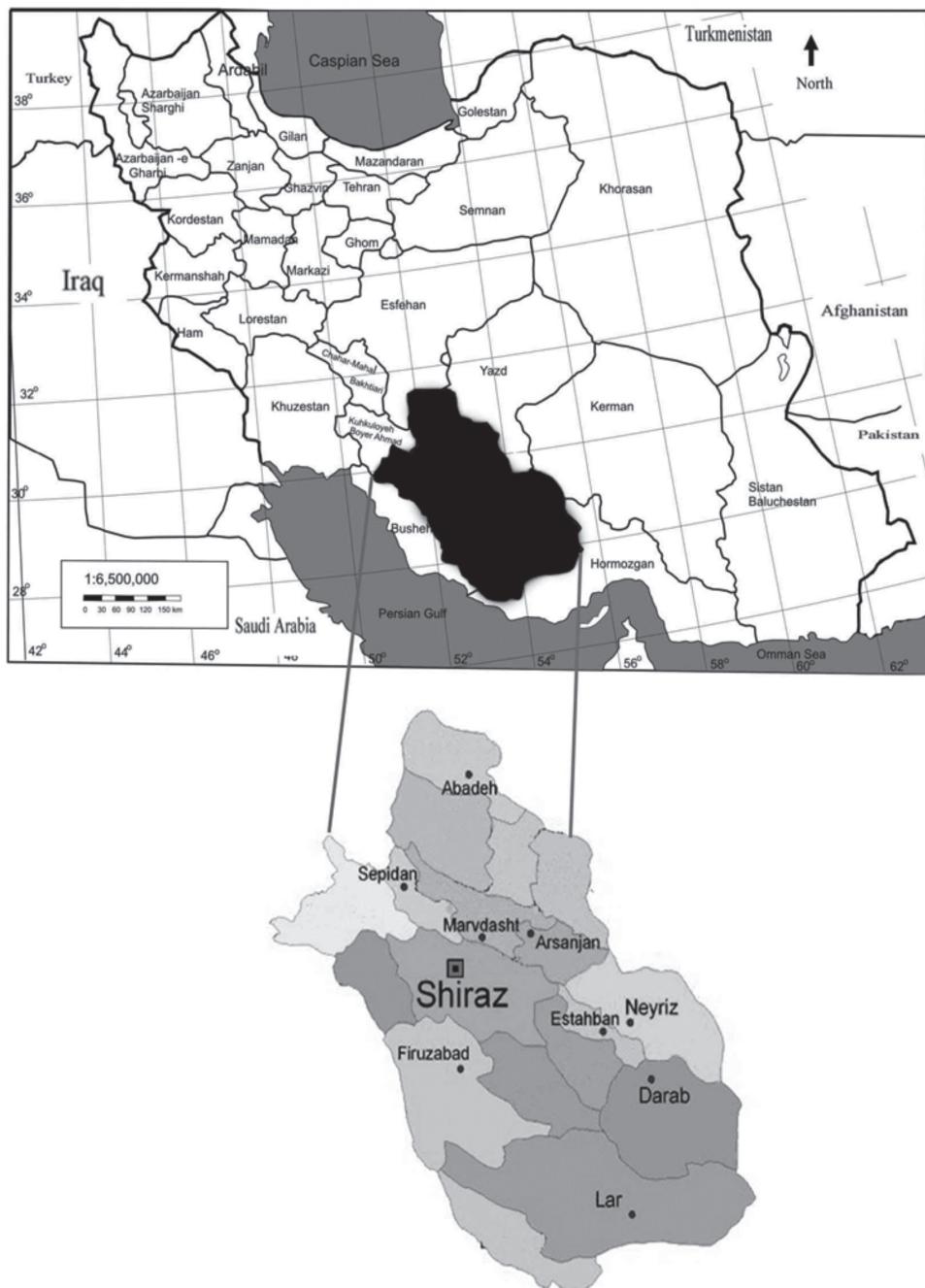


Fig. 1. Map of Iran and Fars province. Upper panel: Location of Fars province (black) in Iran; Lower panel: Location of the sampling localities in Fars province

winters and mild summers, (2) the central region, with relatively rainy mild winters, and hot dry summers, (3) the south and southeast, with moderate winters and very hot summers. This province with having such climate and geographic diversity is a very interesting area with a richly varied fauna and flora of native species.

The present article continues a series of publications on the asilid fly fauna from Fars province (Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009). Here, I provide some additional data on Asilidae in South-West Iran, add one species to the published records, and provide an updated list of all known species of Asilidae from Fars province.

Materials and Methods

The specimens were collected using a standard Malaise trap from different places (i.e. Marvdasht, Shiraz, Darab, Abadeh, Neyriz, Arsanjan, Estahban, Sepidan and Lar) in Fars province, Iran. The collected specimens were pinned, labeled, and put into collection boxes, subsequently. The voucher specimens are deposited in the Department of Entomology, College of Agriculture, Marvdasht Branch, Islamic Azad University, Marvdasht, Iran. Identifications were made using published keys of Engel (1930), Oldroyd (1958), Abbassian-Lintzen (1964), Tsacas (1968), Theodor (1980) and Lehr (1988). The taxonomic arrangement and distributional data for regions outside Iran used in this paper were adapted from Lehr (1988), Bosák and Hradský (2001), Hayat et al. (2008) and Geller-Grimm et al. (2015).

Results

The asilid species collected and identified during this study are listed as follows:

Subfamily Apocleinae Papavero, 1973
Genus *Apoclea* Macquart 1838

***Apoclea femoralis* (Wiedemann, 1828)**

Distribution in Iran: Iran (Engel, 1930; Theodor 1980), Kerman, Khorasan (Becker and Stein, 1913), Baluchestan (Becker and Stein, 1913; Oldroyd 1958), Khuzestan, Mazandaran (Ghahari et al., 2007a), Golestan, Guilan (Hayat et al., 2008); Fars (Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009).

Distribution outside Iran: Afghanistan, Azerbaijan, Greece, Iraq, Israel, Russia, Turkey.

Subfamily Asilinae Latreille, 1802
Genus *Aneomochtherus* Lehr, 1996

***Aneomochtherus perplexus* (Becker, 1923)**

Material examined: 3 ♀♀: Marvdasht, 29°52'N, 52°48'E, 11.V.2012; 4 ♀♀: Arsanjan, 29°29'N, 53°15'E, 22.VI.2012; 1♀: Estahban, 29°08'N, 54°03'E, 10.IX.2012.

Distribution in Iran: Iran (Tsacas, 1968), Khuzestan (Oldroyd, 1958), Khuzestan, Mazandaran (Ghahari et al., 2007a), Guilan (Hayat et al., 2008), Fars (Tomasovic and Saghaei, 2009), Semnan (Sakenin et al., 2010).

Distribution outside Iran: Armenia, Azerbaijan, Russia, Turkey, Ukraine.

Genus *Antiphrisson* Loew, 1849

***Antiphrisson adpressus* (Loew, 1849)**

Material examined: 1♀: Marvdasht, 29°52'N, 52°48'E, 18.V.2012; 1♀: Estahban, 29°08'N, 54°03'E, 10.IX.2012.

Distribution in Iran: Khuzestan (Oldroyd, 1958), Fars (Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009).

Distribution outside Iran: Azerbaijan, Egypt, Israel, Kazakhstan, Russia, Tunisia, Turkey.

Genus *Satanas* Jacobson, 1908

***Satanas gigas* (Eversmann, 1855)**

Material examined: 1♀: Lar, 27°32'N, 54°22'E, 5.VI.2012.

Distribution in Iran: Baluchestan, Kerman, Khorasan, Sistan (Becker and Stein, 1913), Iran (Engel, 1930), Baluchestan (Oldroyd, 1958), Mazandaran (Ghahari et al., 2007a), Semnan (Hayat et al., 2008; Sakenin et al., 2010), Fars (Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009).

Distribution outside Iran: Algeria, Azerbaijan, China, Egypt, Greece, Israel, Kazakhstan, Libya, Mongolia, Romania, Russia, Turkey.

Genus *Tolmerus* Loew, 1849

***Tolmerus paganus* Becker, 1923**

Material examined: 1♀: Marvdasht, 29°52'N, 52°48'E, 29.V.2012; 1♀: Shiraz, 29°35'N, 52°39'E, 6.VI.2012; 1♀, 1♂: Sepidan, 30°13'N, 52°04'E, 30.VI.2012.

Distribution outside Iran: Russia South. This is a new record for the fauna of Fars province and Iran.

Subfamily Dasypogoninae Macquart, 1838

Tribe Dasypogonini Macquart, 1838

Genus *Dasypogon* Meigen, 1803

***Dasypogon magisi* Tomasovic, 1999**

Material examined: 2♀♀: Lar, 27°32'N, 54°22'E, 5.VI.2012; 1♀: Abadeh, 31°09'N, 52°37'E, 14.VII.2012.

Distribution in Iran: Fars (Tomasovic, 1999; Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009).

Distribution outside Iran: Iraq.

Subfamily Leptogastrinae Schiner, 1862
Genus *Leptogaster* Meigen, 1803

***Leptogaster nartshukae* Lehr, 1961**

Material examined: 1♀: Darab, 28°40'N, 54°50'E, 19.V.2012.

Distribution in Iran: Iran (Lehr, 1988). This is a new record for the fauna of Fars province.

Distribution outside Iran: Kazakhstan, Mongolia, Russia (West and East Siberia).

Subfamily Ommatiinae Hardy, 1927
Genus *Ommatius* Wiedemann, 1821

***Ommatius tenellus* Wulp, 1889**

Material examined: 1♀, 1♂: Marvdasht, 29°52'N, 52°48'E, 18.V.2012; 3♂♂: Shiraz, 29°35'N, 52°39'E, 6.VI.2012; 2♀♀, 1♂: Arsanjan, 29°29'N, 53°15'E, 22.VI.2012; 1♀: Abadeh, 31°09'N, 52°37'E, 14.VII.2012; 3♂♂: Estahban, 29°08'N, 54°03'E, 10.IX.2012; 3♂♂: Neyriz, 29°16'N, 54°19'E, 12.IX.2012.

Distribution in Iran: Baluchestan (Oldroyd, 1958). This is a new record for the fauna of Fars province.

Distribution outside Iran: Algeria, Azerbaijan, Chad, China, Egypt, Ethiopia, India, Israel, Niger, Senegal, Sudan, Yemen.

Subfamily Stenopogoninae Hull, 1962
Tribe Stichopogonini Hardy, 1930
Genus *Stichopogon* Loew, 1847

***Stichopogon chrysostoma* Schiner, 1867**

Material examined: 1♀: Shiraz, 29°35'N, 52°39'E, 6.VI.2012.

Distribution in Iran: Khorasan (Becker and Stein, 1913), Tehran (Abbassian-Lintzen, 1964). This is a new record for the fauna of Fars province.

Distribution outside Iran: Cyprus, Egypt, Israel, Kazakhstan, Libya, Mongolia, former Soviet Middle Asia, Turkey.

Tribe Stenopogonini Hardy, 1930
Genus *Galactopogon* Engel, 1929

***Galactopogon hispidus* Engel, 1929**

Material examined: 1♀: Marvdasht, 29°52'N, 52°48'E, 11.V.2012; 3♂♂: Marvdasht, 29°52'N, 52°48'E, 18.V.2012; 1♀: Darab, 28°40'N, 54°50'E, 19.V.2012; 2♂♂: Marvdasht, 29°52'N, 52°48'E, 29.V.2012; 2♀♀: Shiraz, 29°35'N, 52°39'E, 30.V.2012; 3♀♀, 2♂♂: Lar, 27°32'N, 54°22'E, 5.VI.2012; 2♀♀, 2♂♂: Shiraz, 29°35'N, 52°39'E, 6.VI.2012; 1♀: Shiraz, 29°35'N, 52°39'E, 10.VI.2012; 2♀♀, 3♂♂: Arsanjan, 29°29'N, 53°15'E, 22.VI.2012; 4♀♀, 2♂♂: Sepidan, 30°13'N, 52°04'E, 30.VI.2012; 1♀, 1♂: Abadeh, 31°09'N, 52°37'E,

14.VII.2012; 2♀, 1♂: Estahban, 29°08'N, 54°03'E, 10.IX.2012; 2♀, Neyriz, 29°16'N, 54°19'E, 12.IX.2012.

Distribution in Iran: Baluchestan, Khuzestan (Oldroyd, 1958), Khuzestan, SE Iran (Abbassian-Lintzen, 1964), Fars (Abbassian-Lintzen, 1964; Saghaei et al., 2008, 2009, 2010).

Distribution outside Iran: Algeria, Jordan, Israel.

Genus *Stenopogon* Loew, 1847

Stenopogon sciron (Loew, 1873)

Material examined: 1♀: Marvdasht, 29°52'N, 52°48'E, 11.V.2012; 1♂: Abadeh, 31°09'N, 52°37'E, 14.VII.2012;

Distribution in Iran: Kerman (Abbassian-Lintzen, 1964), Iran (Engel, 1930; Theodor, 1980), Fars (Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009).

Distribution outside Iran: Afghanistan, Azerbaijan, China, Egypt, Turkey.

Table 1

List of the Asilidae known from Fars province south of Iran

No.	Subfamily, Tribe, Genus and Species	References
Subfamily Apocleinae Papavero, 1973		
Genus <i>Apoclea</i> Macquart 1838		
1	<i>Apoclea femoralis</i> (Wiedemann, 1828)	Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009; Present study
Genus <i>Philodicus</i> Loew, 1847		
2	<i>Philodicus ponticus</i> (Bigot, 1880)	Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009; Present study
3	<i>Philodicus spectabilis</i> Loew, 1871	Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009
Genus <i>Promachus</i> Loew, 1848		
4	<i>Promachus canus</i> (Wiedemann, 1818)	Saghaei et al., 2008, 2009, 2010
5	<i>Promachus leoninus</i> Loew, 1848	Saghaei et al., 2008, 2009; Tomasovic and Saghaei, 2009
6	<i>Promachus maculatus</i> (Fabricius, 1775)	Sakenin et al., 2008
Subfamily Asilinae Latreille, 1802		
Genus <i>Aneomochtherus</i> Lehr, 1996		
7	<i>Aneomochtherus macropygus</i> Tsacas, 1968	Saghaei et al., 2010

Table 1 (cont.)

No.	Subfamily, Tribe, Genus and Species	References
8	<i>Aneomochtherus mundus</i> (Loew, 1849)	Saghaei et al., 2010
9	<i>Aneomochtherus ochriventris</i> (Loew, 1854)	Saghaei et al., 2008; Tomasovic and Saghaei, 2009
10	<i>A. ochriventris caucasicus</i> Tsacas, 1968	Saghaei et al., 2010
11	<i>A. ochriventris persicus</i> Tomasovic and Saghaei, 2009	Tomasovic and Saghaei, 2009
12	<i>Aneomochtherus perplexus</i> (Becker, 1923)	Tomasovic and Saghaei, 2009; Present study
Genus <i>Antipalus</i> Loew, 1849		
13	<i>Antipalus truncatus</i> (Loew, 1849)	Lehr et al., 2007
Genus <i>Antiphrisson</i> Loew, 1849		
14	<i>Antiphrisson adpressus</i> (Loew, 1849)	Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009; Present study
15	<i>Antiphrisson trifarius</i> (Loew, 1849)	Saghaei et al., 2008, 2009, 2010
Genus <i>Cerdistus</i> Loew, 1849		
16	<i>Cerdistus zelleri</i> Schiner, 1862	Samin et al., 2011a
Genus <i>Didysmachus</i> Lehr, 1996		
17	<i>Didysmachus picipes</i> (Meigen, 1820)	Lehr et al., 2007
Genus <i>Dysmachus</i> Loew, 1860		
18	<i>Dysmachus cephalenus</i> Loew, 1871	Lehr et al., 2007
19	<i>Dysmachus fuscipennis</i> (Meigen, 1820)	Lehr et al., 2007
20	<i>Dysmachus praemorsus</i> (Loew, 1854)	Lehr et al., 2007
Genus <i>Echthistus</i> Loew, 1849		
21	<i>Echthistus rufinervis</i> (Meigen, 1820)	Lehr et al., 2007
Genus <i>Engelopogon</i> Lehr, 1992		
22	<i>Engelopogon idiorrhytmicus</i> (Janssen, 1960)	Saghaei et al., 2008, 2009, 2010
Genus <i>Erax</i> Scopoli, 1763		
23	<i>Erax grootaerti</i> Tomasovic, 2002	Tomasovic 2002; Tomasovic and Saghaei, 2009
24	<i>Erax tenuicornis</i> (Loew, 1848)	Samin et al., 2011a
Genus <i>Eutolmus</i> Loew, 1848		
25	<i>Eutolmus mordax</i> (Loew, 1848)	Lehr et al., 2007
Genus <i>Machimus</i> Loew, 1849		
26	<i>Machimus annulipes</i> (Brulle, 1832)	Saghaei et al., 2010
27	<i>Machimus aradensis</i> Theodor, 1980	Saghaei et al., 2008, 2009, 2010
28	<i>Machimus caliginosus</i> (Meigen, 1820)	Sakenin et al., 2008
29	<i>Machimus nahalalensis</i> Theodor, 1980	Saghaei et al., 2008, 2009, 2010

Table 1 (cont.)

No.	Subfamily, Tribe, Genus and Species	References
30	<i>Machimus rufus</i> Becker, 1923	Lehr et al., 2007
31	<i>Machimus rusticus</i> (Meigen, 1820)	Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009
Genus <i>Paramochtherus</i> Theodor, 1980		
32	<i>P. persicus</i> Tomasovic and Saghaei, 2009	Tomasovic and Saghaei, 2009
Genus <i>Philonicus</i> Loew, 1849		
33	<i>Philonicus albiceps</i> (Meigen, 1820)	Saghaei et al., 2010; Tomasovic and Saghaei, 2009
Genus <i>Satanas</i> Jacobson, 1908		
34	<i>Satanas gigas</i> (Eversmann, 1855)	Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009; Present study
Genus <i>Tolmerus</i> Loew, 1849		
35	<i>Tolmerus atricapillus</i> (Fallen, 1814)	Sakenin et al., 2008
36	<i>Tolmerus paganus</i> Becker, 1923	Present study
Genus <i>Trichomachimus</i> Engel, 1934		
37	<i>Trichomachimus pubescens</i> Moucha and Hradský, 1964	Sakenin et al., 2008
Subfamily Dasypogoninae Macquart, 1838		
Tribe Dasypogonini Macquart, 1838		
Genus <i>Dasypogon</i> Meigen, 1803		
38	<i>Dasypogon diadema</i> (Fabricius, 1781)	Abbassian-Lintzen, 1964
39	<i>Dasypogon iriniae</i> Weinberg, 1986	Saghaei et al., 2010
40	<i>Dasypogon magisi</i> Tomasovic, 1999	Tomasovic, 1999; Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009; Present study
Genus <i>Saropogon</i> Loew, 1847		
41	<i>Saropogon albicans</i> Janssens, 1961	Sakenin et al., 2008
42	<i>Saropogon distinctus</i> Becker, 1906	Saghaei et al., 2008, 2009, 2010
43	<i>Saropogon leucocephalus</i> (Meigen, 1820)	Sakenin et al., 2008
Subfamily Laphriinae Macquart, 1838		
Tribe Laphriini Macquart, 1838		
Genus <i>Choerades</i> Walker, 1851		
44	<i>Choerades fuliginosa</i> (Panzer, 1798)	Samin et al., 2011b
45	<i>Choerades fulva</i> (Meigen, 1804)	Samin et al., 2011a
Genus <i>Laphria</i> Meigen, 1803		
46	<i>Laphria dizonias</i> Loew, 1847	Abbassian-Lintzen, 1964; Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009

Table 1 (cont.)

No.	Subfamily, Tribe, Genus and Species	References
Tribe Andrenosomini Hull, 1962		
Genus <i>Andrenosoma</i> Ronndani, 1856		
47	<i>Andrenosoma farsicola</i> Tomasovic and Saghaei, 2009	Tomasovic and Saghaei, 2009
Tribe Ctenotini Hull, 1962		
Genus <i>Stiphrolamyra</i> Engel, 1928		
48	<i>Stiphrolamyra rubicunda</i> Oldroyd, 1947	Saghaei et al., 2008, 2009, 2010
Subfamily Laphystiinae Hendel, 1936		
Genus <i>Laphystia</i> Loew, 1847		
49	<i>Laphystia erberi</i> (Schiner, 1865)	Saghaei et al., 2008, 2009, 2010
50	<i>Laphystia latiuscula</i> Loew, 1871	Abbassian-Lintzen, 1964
51	<i>Laphystia sabulicola</i> Loew, 1847	Ghahari et al., 2007b
Subfamily Leptogastrinae Schiner, 1862		
Genus <i>Leptogaster</i> Meigen, 1803		
52	<i>Leptogaster cylindrica</i> (De Geer, 1776)	Saghaei et al., 2008, 2009, 2010
53	<i>Leptogaster nartshukae</i> Lehr, 1961	Present study
Subfamily Ommatiinae Hardy, 1927		
Genus <i>Ommatius</i> Wiedemann, 1821		
54	<i>Ommatius tenellus</i> Wulp, 1889	Present study
Subfamily Stenopogoninae Hull, 1962		
Tribe Dioctriini Enderleini, 1936		
Genus <i>Dioctria</i> Meigen, 1803		
55	<i>Dioctria striata</i> Theodor, 1980	Lehr et al., 2007
Genus <i>Molobratia</i> Hull, 1958		
56	<i>Molobratia egregia</i> (Loew, 1869)	Lehr et al., 2007
57	<i>Molobratia teutonus</i> (Linnaeus, 1767)	Tomasovic and Saghaei, 2009
Tribe Stichopogonini Hardy, 1930		
Genus <i>Stichopogon</i> Loew, 1847		
58	<i>Stichopogon chrysostoma</i> Schiner, 1867	Present study
Tribe Stenopogonini Hardy, 1930		
Genus <i>Amphisbetetus</i> Hermann, 1906		
59	<i>Amphisbetetus favillaceus</i> (Loew in Rosenhauer, 1856)	Saghaei et al., 2008, 2009
Genus <i>Ancylorhynchus</i> Berthold, 1827		
60	<i>Ancylorhynchus argyrogaster</i> (Seguy, 1932)	Tomasovic and Saghaei, 2009

Table 1 (cont.)

No.	Subfamily, Tribe, Genus and Species	References
Genus <i>Anisopogon</i> Loew, 1874		
61	<i>Anisopogon hermanni</i> (Engel, 1930)	Lehr et al., 2007
Genus <i>Crobilocerus</i> Loew, 1847		
62	<i>Crobilocerus megilliformis</i> (Loew, 1847)	Abbassian-Lintzen, 1964
63	<i>C. spinosus persianus</i> Geller-Grimm and Hradský, 1999	Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009
Genus <i>Cyrtopogon</i> Loew, 1847		
64	<i>Cyrtopogon gorodkovi</i> Lehr, 1966	Sakenin et al., 2008
Genus <i>Galactopogon</i> Engel, 1929		
65	<i>Galactopogon hispidus</i> Engel, 1929	Abbassian-Lintzen, 1964; Saghaei et al., 2008, 2009, 2010; Present study
Genus <i>Habropogon</i> Loew, 1847		
66	<i>Habropogon decipiens</i> Theodor, 1980	Saghaei et al., 2008, 2009
Genus <i>Heteropogon</i> Loew, 1847		
67	<i>Heteropogon nubilus</i> (Wiedeman in Meigen, 1820)	Lehr et al., 2007
68	<i>Heteropogon pyrinus</i> Hermann, 1906	Saghaei et al., 2008, 2009
Genus <i>Iranopogon</i> Timon-David, 1955		
69	<i>Iranopogon brandti</i> Timon-David, 1955	Timon-David, 1955
Genus <i>Pycnopogon</i> Loew, 1847		
70	<i>Pycnopogon mixtus</i> (Loew, 1847)	Saghaei et al., 2008, 2009, 2010
Genus <i>Sisyrnodytes</i> Loew, 1856		
71	<i>Sisyrnodytes nilicola</i> (Rondani, 1850)	Sakenin et al., 2008
Genus <i>Stenopogon</i> Loew, 1847		
72	<i>Stenopogon callosus</i> (Pallas in Wiedemann, 1818)	Lehr et al., 2007
73	<i>Stenopogon elongatus</i> (Meigen, 1804)	Saghaei et al., 2010
74	<i>Stenopogon heteroneurus</i> (Macquart, 1838)	Abbassian-Lintzen, 1964; Saghaei et al., 2010
75	<i>Stenopogon junceus</i> (Wiedemann in Meigen, 1820)	Abbassian-Lintzen, 1964; Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009
76	<i>Stenopogon laevigatus</i> (Loew, 1851)	Abbassian-Lintzen, 1964
77	<i>Stenopogon sciron</i> (Loew, 1873)	Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei, 2009; Present study
78	<i>Stenopogon shirazi</i> Tomasovic and Saghaei, 2009	Tomasovic and Saghaei, 2009
79	<i>Stenopogon strataegus</i> Gerstaecker, 1862	Lehr et al., 2007

Discussion

In the course of the present study a total of 12 species belonging to 12 genera and 6 subfamilies were collected and identified. Of these, one species (*Tolmerus paganus* Becker, 1923) is considered as new record for Iranian Asilid fauna. As a result of this study one subfamily (Ommatiinae Hardy, 1927), 2 genera (*Ommatius* Wiedemann, 1821 and *Stichopogon* Loew, 1847), and four species were added, bringing the totals to 79 asilid species in 43 genera and 8 subfamilies in Fars province (Table 1).

The greatest number of species was that of the subfamily Asilinae, with 31 species and 16 genera. The proportions in other subfamilies were as followed: Stenopogoninae (25 species and 15 genera), Apocleinae (6 species and 3 genera), Dasypogoninae (6 species and 2 genera), Laphriinae (5 species and 2 genera), Laphystiinae (3 species and 1 genus), Leptogastrinae (2 species and 1 genus) and Ommatiinae (1 species and 1 genus).

Currently, the subfamily Atomosiinae, are not present in Fars province. In other parts of Iran, from this subfamily, two species *Amathomyia persiana* Hermann, 1912 and *Loewinella virescens* (Loew, 1871) have been recorded from Baluchestan (Becker and Stein, 1913) and Khuzestan (Oldroyd 1958) provinces respectively before.

One subspecies: *Aneomochtherus ochriventris persicus* Tomasovic and Saghaei, 2009 and 6 species: *Erax grootaerti* Tomasovic, 2002; *Paramochtherus persicus* Tomasovic and Saghaei, 2009; *Andrenosoma farsicola* Tomasovic and Saghaei, 2009; *Ancylorhynchus argyrogaster* (Seguy, 1932); *Iranopogon brandti* Timon-David, 1955; *Stenopogon shirazi* Tomasovic and Saghaei, 2009 have been described from Fars province and they haven't been cited from other parts of Iran and the world from today.

Although the fauna of Asilidae in Fars province were studied (Saghaei et al., 2008, 2009, 2010; Tomasovic and Saghaei 2009), but co-evolution and biology of almost species and their prey are unknown. The species of Asilidae are important in biological control of other arthropods (Lavigne and Dennis, 1994; Londt, 1994, 2006; Dennis and Lavigne, 2007), so further study of their occurrence, distribution, biology and behavior in Iran should be encouraged.

Acknowledgements

The research was supported by Islamic Azad University, Marvdasht Branch, Marvdasht, Iran. The author is indebted to Dr. Guy Tomasovic (Belgium) for his invaluable help with the project.

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