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A contribution to the tachinid flies of the subfamilies Exoristinae and Tachininae (Diptera: Tachinidae) from Fars province, Iran

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Abstract: Data are given on the distribution of 40 species belonging to the subfamilies Exoristinae and Tachininae that were collected by the first author in Fars province, Iran, during 2006-2007. In all, 22 species were recorded for the first time from Iran and 34 species from Fars province. *Erynniopsis antennata* (Rondani, 1861) was reared for the first time on the host *Diorhabda elongate* (Coleoptera: Chrysomelidae).

Key words: Diptera, Tachinidae, Iran, Fars, distribution

Introduction

The family Tachinidae forms the largest and one of the most diverse families of flies (Diptera, Brachycera). Worldwide, this family comprises more than 8000 described species in 4 subfamilies: Exoristinae, Tachininae, Dexiinae, and Phasiinae (Herting, 1984). The actual number of the family is much larger, as the Neotropical, Afrotropical, Oriental, and Australasian regions are not well studied and contain large numbers of undescribed species (O'Hara, 2005). More than 1600 species are known from the Palaearctic region (Tschorsnig and Richter, 1998).

The most reliable characters for recognizing a tachinid fly are the presence of hypopleural (meral) bristles and the well-developed sub-scutellum. Members of the family are often conspicuously bristly, whilst others, especially many species from the subfamily Phasiinae, are often quite bare. The larvae live as endoparasitoids in Arthropoda, almost exclusively in insects. Insects known as tachinid hosts belong to 11 orders, and Lepidoptera caterpillars serve as hosts for the majority of species.

Exoristinae and Tachininae are 2 large subfamilies in Tachinidae, comprising 7 and 14 tribes, respectively. Exoristinae females are oviparous or ovo-

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larviparous. The macrotype egg is deposited on the host or in its vicinity, rarely directly into the host body, and microtype eggs are deposited on the food plant of the host. Females of Tachininae are ovolarviparous and eggs are deposited on the host, or more often on its food plant or in its vicinity (Herting, 1984; Tschorsnig and Richter, 1998).

The Iranian fauna of Tachinidae is not well known. Most of the tachinid records in Iran are scattered in the literature and there are only some short notes on Iran's Tachinidae. For the first time, Samet et al. (1977) reported 17 species. Modarres-Awal (1994) cited 50 valid species of Tachinidae in his list of agricultural pests and their natural enemies in Iran. Only 5 species are recorded in Fars province. Although some studies have recently been conducted by various local scientists on the species of Tachinidae in Fars and Iran (Abai, 1976; Esmaili, 1983; Salehi and Kharazi Pakdel, 1983; Parchami, 1994; Mahani et al., 2003; Alizadeh and Javan Moghaddam, 2004; Dehghani et al., 2006), the Iranian fauna of this family is not well known. The geographic location of Fars province is interesting from a biogeographic point of view. Fars is a large area incorporating various geographical regions and climates (Figure). Fars (27°2'-31°4'N, 50°42'-55°36'E) occupies a surface area of about 1,333,000 km², 12% of which is forested, especially with oak and pistachio trees. Concerning other groups of animals and plants this area, it has a peculiar mixture of Palaearctic, Mediterranean, and Iranian faunal elements, and stenochorous species, and is influenced by the nearby Afrotropical and Oriental faunas. Fars is situated between the Irano-Turanian and Saharo-Sindian regions. The Irano-Turanian region has always been distinguished from the adjacent Euro-Siberian and Mediterranean regions by a series of floristic and vegetation characteristics. Most of the Irano-Turanian region is dominated by a continental climate, widely ranging in temperature. Rainfall is limited to the winter season, which is less extreme in temperature. In Iran, the Saharo-Sindian region covers the subtropical flora of the southern part of the country. This region contains representatives of Saharo-Arabian, Sudanese, and Irano-Turanian species. Herein we report some known tachinid species of the subfamilies Exoristinae and Tachininae from Fars province, Iran. A second paper concerning the subfamilies Dexiinae and Phasiinae is being prepared.

Materials and methods

This paper is the result of more than 30 field trips to different locations in Fars province during 2006-2007. The tachinids were captured selectively by hand net or sweeping. Also, the Malaise trap and light trap were used. The materials are deposited in the Department of Plant Protection, College of Agriculture, Islamic Azad University. The Tachinidae were identified by the first author to genus level using the key by Tschorsnig and Richter (1998) for the Palaearctic region. Identification and confirmation of species were performed by Dr. J. Ziegler (Germany), Dr. H.P. Tschorsnig (Germany), and Dr. T. Tachi (Japan). Following the collection data, observations on ecology are given; this concerns, in particular, the flowers visited by the Tachinidae. The flowers were identified by Dr. M. Moeini (Botanic Department, Islamic Azad University, Shiraz). The taxonomic arrangement of Herting and Dely-Draskovits (1993) for subfamilies and species is followed in this paper.

Collecting periods are arranged chronologically. Roman numerals are used for the months (day.month.year). Latitude (N), longitude (E), and elevation (meters above sea level [m]) of the main collection localities are as follows:

Akbar Abad Beltway (Shiraz - Shahrak-e Akbar Abad): 29°40'N, 52°33'E, 1731 m; Arsanjan (Bonab Forest): 29°29'N, 53°15'E, 1840 m; Darab: 28°43'N, 54°31'E, 1545 m; Darian: 29°33'N, 52°52'E, 1600 m; Dashte Arjan: 29°34'N, 51°56'E, 2090 m; Firouz Abad: 28°52'N, 52°35'E, 1450 m; Hosein Abad: 29°37'N, 52°13'E, 1988 m; Kaftarak: 29°38'N, 52°40'E, 1640 m; Kian Abad: 29°31'N, 52°27'E, 1500 m; Kohmare Sorkhi: 29°32'N, 52°21'E, 1910 m; Maharloo: 29°27'N, 52°44'E, 1470 m; Qalat: 29°48'N, 52°19'E, 2090 m; Shahrak-e Akbar Abad: 29°40'N, 52°32'E, 1720 m; Shiraz Refinery: 29°47'N, 52°37'E, 1840 m.

The distribution data in the results section are arranged from northwest to southeast. For Europe the data of *Fauna Europaea* were used (Tschorsnig et al., 2004) and the main references for the non-European parts of the Palaearctic region were Herting (1984), Herting and Dely-Draskovits (1993), and Ziegler and Shima (1996). Additional references have been cited separately.

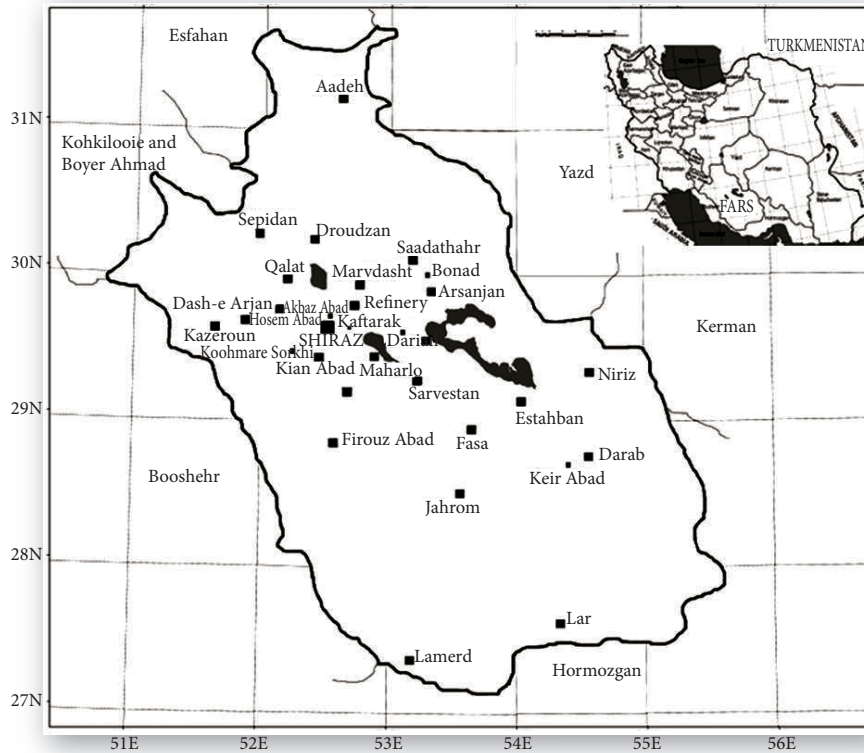


Figure. Collection localities in Fars province, Iran.

Results

In total, 23 species from 20 genera of Exoristinae and 17 species from 12 genera of Tachininae were collected and identified. Tachinid species are listed below.

Subfamily: Exoristinae

Tribe: Exoristini

Exorista (Podotachina) longicercus Kugler, 1980

Material Examined: Fars: Firouz Abad, Old Way Firouz Abad-Meimand, Pistachio Forest, 23.VI.2006, 2♀♀. The specimens were collected by light trap.

Distribution: Israel, Iran.

Exorista (Ptilotachina) deligata Pandellé, 1896

Material Examined: Fars: Dasht-e Arjan, Arjan-Parishan Protected Area, 25.V.2007, 2♂♂; Shiraz-Kazeroun road, Koohmareh Sorkhi, Bid Korpe, 4.VI.2007, 1♂. The specimens were collected from flowers of *Euphorbia* sp. and *Apiaceae*.

Distribution: The Mediterranean (incl. Morocco and Israel), Europe northwards to Sweden (Bergström, 1988) and Finland, Transcaucasia, Central Asia, and East Siberia. This is a new record for the fauna of Iran.

Chetogena nigrofasciata (Strobl, 1902)

Material Examined: Fars: 15 km on Shiraz-Kherameh road, Darian, 16.IV.2006, 4♀♀. The specimens were collected from stones on hilltops. This is a new record for the fauna of Fars province.

Distribution: The Mediterranean (incl. Morocco and Israel), Southern Europe (Macedonia, Bulgaria, Greece, Serbia, and Montenegro), Turkey, Transcaucasia, Iran, Central Asia.

Chaetoria stylata Becker, 1908

Material Examined: Fars: Darab, Kheir Abad, 26.X.2006, 4♀♀. The specimens were collected from leaves of *Zea maiz*.

Distribution: The Mediterranean (incl. North Africa), Southern Europe (incl. the Canary Islands, Malta, Greece), Yemen (Zeegers, 2007), and Central Asia. This is a new record for the fauna of Iran.

Tribe: Blondeliini

***Meigenia incana* (Fallén, 1810)**

Material Examined: Fars: Dasht-e Arjan, Arjan-Parishan Protected Area, 8.VI.2007, 2♂♂, 1♀; Shiraz-Sarvestan, Maharloo, 1.V.2006, 1♀. The specimens were collected from flowers of *Euphorbia* sp. and from stones.

Distribution: Temperate Europe [incl. Sweden, Germany, Austria, Czech Republic (Vanhara and Tschorsnig, 2006), and Hungary], the Middle East, Transcaucasia, Mongolia, and East Siberia. This is a new record for the fauna of Iran.

***Zaira cinerea* (Fallén, 1810)**

Material Examined: Fars: Dasht-e Arjan, Arjan-Parishan Protected Area, 8.VI.2007, 1♂, 1♀. The specimens were swept from flowers of *Euphorbia* sp. and *Thapsia* sp.

Distribution: The Mediterranean, Europe (northwards to England, Scandinavia, and Russia), Northwest Russia, Transcaucasia, Central Asia, Mongolia, East Siberia, the Russian Far East, and Japan. This is a new record for the fauna of Iran.

***Erynniopsis antennata* (Rondani, 1861)**

Material Examined: Fars: 10 km on Shiraz-Marvdasht road, Shiraz Refinery, pine wood, 17.VII.2006, 21.VII.2005, 30.V.2006, 5♂♂, 4♀♀. The specimens were swept from leaves of *Glycyrrhiza glabra* and some specimens were reared on *Diorhabda elongate* (Coleoptera: Chrysomelidae), a new host in Iran. *E. antennata* confirmed the previous host *Xanthogaleruca luteola* (Mahani et al., 2003). This is a new record for the fauna of Fars province.

Distribution: Southern Europe (Italy, France, and Bulgaria), Transcaucasia, Israel, and Iran.

***Compsilura concinnata* (Meigen, 1824)**

Material Examined: Fars: Saadat Shahr, Abol Mahdi Cheshmeh, 16.VII.2006, 5♀♀; Arsanjan-Saadat Shahr, Bonab Forest, 18.IV.2007, 4♂♂, 2♀♀.

The specimens were collected from flowers of *Isatis* sp. and the females were collected by light trap in Saadat Shahr.

Distribution: Widespread in the Palearctic region, including the Mediterranean, Europe, Turkey (Kara, 2001), Israel, Transcaucasia, Iran, Central Asia, West Siberia, East Siberia, and Japan. Also in the Nearctic, Afrotropical, Oriental, and Australian regions.

Tribe: Winthemiini

***Nemorilla maculosa* (Meigen, 1824)**

Material Examined: Fars: Shiraz-Sepidan road, Qalat, 2.VII.2006, 27.VII.2006, 3♀♀; Shiraz-Kazeroun, Dasht-e Arjan, 21.X.2007, 2♂♂. The specimens were swept from flowers of *Medicago sativa* and from flowers of some Compositae. This is a new record for the fauna of Fars province.

Distribution: The Mediterranean (incl. the Canary Islands and Israel), Europe (northward to Sweden), Transcaucasia, Iran, Siberia, Central Asia, Mongolia, Russia Far East. Also in the Nearctic and Oriental regions.

Tribe: Eryciini

***Aplomya confinis* (Fallén, 1820)**

Material Examined: Fars: Shiraz-Sepidan road, Qalat, 27.VII.2006, 3♂♂, 2♀♀, 1.X.007, 2♀♀; Dasht-e Arjan, Arjan-Parishan Protected Area, 25.V.2007, 8.VI.2007, 3♂♂, 5♀♀. The materials were collected from various flowers (Rosaceae, *Euphorbia* sp., *Convolvulus* sp.) or swept from low vegetation. This is a new record for the fauna of Fars province.

Distribution: The Mediterranean (incl. the Canary Islands and Israel), Europe, the Middle East, Yemen, Transcaucasia, Iran, Central Asia, Mongolia, East Siberia, the Russian Far East, and Japan.

***Gymnophryxe theodori* (Kugler, 1968)**

Material Examined: Fars: North Eastern Shiraz, Kaftarak, 10.III.2007, 2♀♀. The specimens were collected from stones.

Distribution: Transcaucasia, Israel, and Central Asia. This is a new record for the fauna of Iran.

***Drino atropivora* (Robineau-Desvoidy, 1830)**

Material Examined: Fars: Darab, Kheir Abad, 26.X.2006, 4♂♂, 3♀♀. The specimens were collected

from leaves of a *Gossypium* sp. This is a new record for the fauna of Fars province.

Distribution: The Mediterranean (incl. North Africa), Europe (northwards to southern Sweden and England), the Middle East, Transcaucasia, Iran, Central Asia, and Japan.

***Drino imberbis* (Wiedemann, 1830)**

Material Examined: Fars: Dasht-e Arjan, Arjan-Parishan Protected Area, 8.IV.2006, 5♀♀; 21 km on Shiraz-Kazeroun road, Seed Production Institute, 20.IV.2007, 7♂♂, 8♀♀; Shiraz-Sepidan road, Qalat, 28.VI.2006, 3♀♀; Shiraz-Sarvestan, Mian Forest Fasa, 7.IV.2007, 4♂♂, 3♀♀. The materials were collected from flowers of a *Euphorbia* sp. and *Lepidium draba*, or were swept from low vegetation. This is a new record for the fauna of Fars province.

Distribution: The Mediterranean (incl. Madeira, the Canary Islands, North Africa, and Israel), Turkey, Iran, and Turkmenistan, as well as Afrotropical.

Tribe: Goniini

***Synamphichaeta* spec.**

Material Examined: Fars: 10 km on Shiraz-Marvdasht road, Shiraz Refinery, pine wood, 11.VIII.2006, 1♂, 1♀. The species was not identified. The specimens were collected from flowers of a *Euphorbia* sp.

Note: According to Herting and Dely-Draskovits, 1993, there is only 1 species of the genus *Synamphichaeta* Villeneuve, 1936 in the Palaearctic Region and its distribution is restricted to the Canary Islands. This is a new record of the genus for the fauna of Iran.

***Pales murina* Mesnil, 1970**

Material Examined: Fars: Shiraz-Sepidan road, Qalat, 25.VI.2006, 2♀♀. The materials were collected from leaves of *Alopecurus myosuroides*.

Distribution: Iran, Pakistan (see also Cerretti, 2005).

***Prosopea nigricans* (Egger, 1861)**

Material Examined: Fars: Dasht-e Arjan, Arjan-Parishan Protected Area, 8.VI.2007, 5♂♂, 3♀♀. The specimens were collected from flowers of a *Euphorbia* sp.

Distribution: The Mediterranean, warmer parts of central and southern Europe, the Middle East, Transcaucasia, Central Asia, South Siberia, and Mongolia. This is a new record for the fauna of Iran.

***Gaedia distincta* Egger, 1861**

Material Examined: Fars: South of Shiraz, Kian Abad, Ghara Bolagh, 13.IV.2007, 1♀. The specimen was swept from low vegetation.

Distribution: Central and southern Europe, the Middle East, Transcaucasia, and West Siberia. This is a new record for the fauna of Iran.

***Baumhaueria goniaeformis* (Meigen, 1824)**

Material Examined: Fars: 21 km on Shiraz-Kazeroun road, Seed Production Institute, 18.III.2007, 1♀. The specimen was swept on flowers of *Lepidium draba*.

Distribution: Europe (northwards to Sweden and Finland), Transcaucasia, and Israel. This is a new record for the fauna of Iran.

***Brachychaeta petiolata* Mesnil, 1953**

Material Examined: Fars: Northeast Shiraz, Kaftarak, 10.III.2007, 2♀♀. The specimens were collected from large stones.

Distribution: Armenia, Azerbaidzhan, and Palestine. This is a new record for the fauna of Iran.

***Gonia bimaculata* Wiedemann, 1819**

Material Examined: Fars: Dasht-e Arjan, Arjan-Parishan Protected Area, 20.IV.2007, 2♀♀, Dasht-e Borm, 8.IV.2006, 2♂♂, 3♀♀; Kazeroun, Deriis, 28.IV.2006, 2♀♀; Shiraz-Sarvestan, Mian Forest Fasa, 7.IV.2007, 5♀♀; 10 km on Shiraz-Marvdasht road, Shiraz Refinery, pine wood, 9.V.2006, 17.V.2007, 1♂, 7♀♀; 21 km on Shiraz-Kazeroun road, Seed Production Institute, 18.III.2007, 5♂♂, 7♀♀; Shiraz-Sepidan road, Qalat, 2.VIII.2006, 2♀♀. Some specimens (both males and females) were collected from stones or when flying in fresh grass, while others were collected from flowers of a *Euphorbia* sp. and Apiaceae. This is a new record for the fauna of Fars province.

Distribution: The Mediterranean (incl. the Canary Islands, North Africa, and Israel), southern Europe, the Middle East, Transcaucasia, Yemen (Zeegers, 2007), Iran, Central Asia, and South Africa.

***Gonia umbripennis* Herting, 1958**

Material Examined: Fars: Dasht-e Arjan, Arjan-Parishan Protected Area, Dasht-e Borm, 8.IV.2006, 3♀♀; 21 km on Shiraz-Kazeroun road, Seed Production Institute, 18.III.2007, 20.IV.2007, 6♂♂, 9♀♀; 10 km on Shiraz-Marvdasht road, Shiraz Refinery, pine wood, 12.III.2007, 1♀. The specimens were collected from flowers of a *Euphorbia* sp., *Lepidium draba*, and some Apiaceae.

Distribution: Only known from Lanzarote (the Canary Islands) and Israel. This is a new record for the fauna of Iran.

Crapivnicia spec.

Material Examined: Fars: Dasht-e Arjan, Arjan-Parishan Protected Area, 8.VI.2007, 2♀♀. The specimens were swept from flowers of a *Euphorbia* sp.

Note: According to Richter, 1996, 2 species of the genus *Crapivnicia* Richter were recorded from Dagestan. This is a new record of the genus for the fauna of Iran.

***Spallanzania griseiventris* Herting, 1967**

Material Examined: Fars: Dasht-e Arjan, Arjan-Parishan Protected Area, 8.VI.2007, 2♀♀. The specimens were collected from flowers of a *Euphorbia* sp.

Distribution: Spain, Italy, France, Uzbekistan, and East Siberia. This is a new record for the fauna of Iran.

Subfamily: Tachininae

Tribe: Tachinini

***Tachina (Eudoromyia) fera* (Linnaeus, 1761)**

Material Examined: Fars: Shiraz-Booshehr, Akbar Abad Beltway, 12.IV.2006, 3♂♂. Some specimens were swept from flowers of *Lepidium draba* and some from low vegetation. This is a new record for the fauna of Fars province.

Distribution: Widespread in the Palaearctic region: The Mediterranean (incl. North Africa), Europe (northwards to Scotland and northern Sweden), Israel, Transcaucasia, Iran, Central Asia, Mongolia, East Siberia, the Russian Far East, and Japan.

***Tachina (Eudoromyia) magnicornis* (Zetterstedt, 1844)**

Material Examined: Fars: South of Shiraz, Kian Abad, Ghara Bolagh, 15.V.2006, 3♂♂. The specimens were collected from flowers of *Lepidium draba* or from the ground. This is a new record for the fauna of Fars province.

Distribution: The Mediterranean, Europe (northwards to Sweden), Turkey, Palestine, Transcaucasia, Iran, Central Asia, Mongolia, East Siberia, the Russian Far East, China, Korea, and Japan.

***Tachina (Eudoromyia) rohdendorfi* Zimin, 1935**

Material Examined: Fars: Dasht-e Arjan, Arjan-Parishan Protected Area, 6.X.2007, 2♂♂. One specimen was collected from the leaf of a *Quercus* sp.

Distribution: Armenia, Turkmenia, and Uzbekistan. This is a new record for the fauna of Iran.

***Tachina (Servillia) lurida* (Fabricius, 1781)**

Material Examined: Fars: Dasht-e Arjan, Arjan-Parishan Protected Area, Dasht-e Borm, 8.IV.2006, 3♀♀. The specimens were swept from flowers of *Lepidium draba* and from stones.

Distribution: Europe (northwards to England and northern Germany), the Mediterranean, Transcaucasia, and Iran (Ziegler and Shima, 1996, 474).

***Tachina (Echinogaster) praeceps* Meigen, 1824**

Material Examined: Fars: Shiraz-Kazeroun, Kohmareh Sorkhi, Biid korpe, 5.VI.2007, 1♂. The specimen was collected from a *Euphorbia* sp. flower. This is a new record for the fauna of Fars province.

Distribution: The Mediterranean, central and southern Europe, the Middle East, Transcaucasia, Iran, and Central Asia.

***Cnephaotachina danilevskyi* (Portschinsky, 1882)**

Material Examined: Fars: Shiraz-Sepidan road, Qalat, 25.VI.2006, 27.VI.2006, 2.VII.2006, 8♂♂, 5♀♀; Dasht-e Arjan, Arjan-Parishan Protected Area, 25.V.2007, 1.VI.2007, 8.VI.2007, 7♂♂, 4♀♀; Shiraz-Kazeroun, Hosein Abad, Haft Barm, 24.V.2007, 1♂. The specimens were collected from flowers of a *Euphorbia* sp., *Lepidium draba*, Rosaceae, and some undetermined vegetation.

Distribution: The Mediterranean (France, Serbia and Montenegro, and Greece), Ukraine (Crimea), Turkey, Transcaucasia, Kazakhstan, and Central Asia. This is a new record for the fauna of Iran.

***Peleteria meridionalis* (Robineau-Desvoidy, 1830)**

Material Examined: Fars: 21 km on Shiraz-Kazeroun road, Pasture Seeds Production Institute, 18.III.2007, 1♂, 2♀♀. The male was collected from the ground and the females were collected from flowers of *Lepidium draba*. This is a new record for the fauna of Fars province.

Distribution: Western Europe (Portugal, Spain, France, and Italy), North Africa, southern Russia, Ukraine, Transcaucasia, Israel, Iran, and Central Asia.

Germaria spec.

Material Examined: Fars: Dasht-e Arjan, Arjan-Parishan Protected Area, 25.V.2007, 1.VI.2007, 1♂, 2♀♀. The specimens were collected from flowers of a *Euphorbia* sp.

Note: The specimens examined could not be assigned to any of the known species of the genus *Germaria* Robineau-Desvoidy, 1830 and are probably not yet described. A taxonomic revision of the genus is being prepared (see Ziegler, 2006). This is a new record of the genus for the fauna of Iran.

Tribe: Linnaemyiini

***Linnaemya (Linnaemya) neavei* Curran, 1934**

Material Examined: Fars: Shiraz-Sarvestan, Maharloo, 14.X.2006, 1♀. The specimen was collected from a *Zea maiz* leaf in a corn field.

Distribution: Greece, Turkey (Kara et al., 2007), Israel, and Jordan, as well as the Afrotropical region. This is a new record for the fauna of Iran.

***Linnaemya (Linnaemya) vulpina* (Fallén, 1810)**

Material Examined: Fars: Shiraz, Shahrak-e Akbar Abad, 20.X.2006, 24.X.2006, 1.XI.2006, 15♂♂, 9♀♀; 10 km on Shiraz-Marvdasht road, Shiraz Refinery, pine wood, 16.IX.2007, 2♂♂; Dasht-e Arjan, Arjan-Parishan Protected Area, 6.X.2007, 3♂♂. Some specimens were collected from *Glycyrrhiza glabra* leaves or dried leaves, and some were collected from the ground or when flying in low vegetation. Additionally, some specimens were collected by

Malaise trap in Akbar Abad and by light trap in Firouz Abad.

Distribution: The Mediterranean, Europe (northwards to Ireland, England, Sweden, and Finland), Russia, the Middle East, and Iran.

***Microcerophina planifacies* Kugler, 1977**

Material Examined: Fars: Dasht-e Arjan, Arjan-Parishan Protected Area, 18.VI.2007, 1♀. The specimen was collected from a *Euphorbia* sp. flower.

Distribution: Israel (Kugler, 1977). This is a new record for the fauna of Iran.

Tribe: Macquartiini

***Macquartia tessellum* (Meigen, 1824)**

Material Examined: Fars: Shiraz-Booshehr, Akbar Abad Beltway, 12.IV.2006, 15.IV.2007, 17.IV.2007, 3.V.2006, 20.VI.2006, 11♂♂, 2♀♀. Most specimens were collected from large stones.

Distribution: The Mediterranean (incl. the Canary Islands and Israel), western, central, and southern Europe, Transcaucasia, Iran, and Central Asia.

Tribe: Leskiini

***Aphria longirostris* (Meigen, 1824)**

Material Examined: Fars: South of Shiraz, Kiian Abad, Ghara Bolagh, 14.IV.2006, 1♂; Shiraz, Akbar Abad Beltway, 24.IV.2006, 1♀; Darab, 5.IV.2007, 1♀. Two specimens were collected from stones on hilltops. One specimen was collected from a *Potentilla* sp. flower.

Distribution: Europe (northwards to England and Sweden), Transcaucasia, the Middle East, West Siberia, Mongolia, and East Siberia. This is a new record for the fauna of Iran.

***Bithia* nov. spec.**

Material Examined: Fars: North Eastern of Shiraz, Kaftarak, 10.III.2007, 17.III.2007, 4♂♂, 3♀♀. The specimens were collected from large stones.

Note: This species is undescribed and its description is being prepared by Ziegler (Berlin).

Tribe: Minthoini

***Mintho rufiventris* (Fallén, 1817)**

Material Examined: Fars: Dasht-e Arjan, Arjan-Parishan Protected Area, 18.VI.2007, 2♂♂. Both specimens were collected from small stones.

Distribution: The Mediterranean, Europe (northwards to England, Sweden, and Finland), Israel, Transcaucasia, West Siberia, Central Asia, Mongolia, East Siberia, and the Russian Far East. This is a new record for the fauna of Iran.

***Pseudomintho atra* Kugler, 1971**

Material Examined: Fars: Dasht-e Arjan, Arjan-Parishan Protected Area, 25.V.2007, 2♂♂. The specimens were collected from a *Quercus* sp. leaf.

Distribution: The Middle East, including Turkey (Kara, 1999) and Israel, and Transcaucasia. This is a new record for the fauna of Iran.

Tribe: Microphthalmini

***Microphthalma europaea* Egger, 1860**

Material Examined: Fars: Dasht-e Arjan, Arjan-Parishan Protected Area, 18.VI.2007, 6.X.2007, 1♂, 4♀♀. The specimens were collected from flowers of a *Euphorbia* sp. or swept from low vegetation near water. This is a new record for the fauna of Fars province.

Distribution: The Mediterranean (incl. North Africa), southern and central Europe, Turkey, Transcaucasia, Iran, Turkmenia, and West Siberia.

Discussion

During this study 40 tachinid species belonging to 32 genera of the 2 subfamilies Exoristinae and Tachininae were identified. Among them, 22 species are considered new records for the fauna of Iran. Four genera—*Synamphichaeta* Villeneuve, *Crapivnicia* Richter, *Bithia* Robineau-Desvoidy and *Germaria* Robineau-Desvoidy—were identified only to genus level. There is only 1 known species from *Synamphichaeta* Villeneuve in the Palaearctic region (*S. tricincta* Villeneuve, 1936, from the Canary Islands). To date, 2 species of *Crapivnicia* Richter are

reported from the Palaearctic fauna. Our *Crapivnicia* sp. is probably *C. donabilis* Richter or close by; its ocelli are medium in size and the distance between the posterior ocelli is 1.2 times greater than the distance between the postocellar setae, tergite 2 has 2 median setae and the tibia is black (Richter, 1996). *Bithia* was identified as a new species by Dr. Ziegler and it is still in the description stage. Except for *Exorista longicercus* Kugler, *Compsilura concinnata* Meigen, *Pales murina* Mesnil, *Tachina lurida* (Fabricius), *Linnaemya vulpina* Fallén, and *Macquartia tessellum* Meigen, which have been recorded previously, all the species are new records for the Fars tachinid fauna. In this study *Erynniopsis antennata* (Rondani, 1861) was reared on *Diorhabda elongate* (Col.: Chrysomelidae), a new host in Iran.

Tachinid flies are not well known in Iran. It seems that the Iranian fauna of Tachinidae is rich and further studies are needed, as the number of species described probably accounts for only 10%-20% of the total existing number of species in the region.

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