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An annotated checklist of Iranian Cephidae (Hymenoptera: Symphyta: Cephoidea)

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ABSTRACT. The fauna of Cephidae (Hymenoptera: Symphyta: Cephoidea) is reported from Iran based on literature records and specimens collected. Totally, 15 species and subspecies of six genera, *Calameuta* Konow (three species), *Cephus* Latreille (five species), *Phylloecus* Newman (two species), *Pachycephus* Stein (two subspecies), *Syrista* Konow (one species) and *Trachelus* Jurine (two species), are listed. *Phylloecus niger* (Harris, 1776), *Pachycephus smyrnensis smyrnensis* Stein, 1876 and *Trachelus libanensis* (André, 1881) are recorded from Iran for the first time.

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Introduction

The Cephidae is a relatively well-known phytophagous family of Hymenoptera and commonly referred as stem-boring sawflies because their larvae bore and feed in the stems or twigs of various plants including grasses, shrubs, berry canes and trees (Shanower & Hoelmer, 2004; Budak et al., 2011). This family is the only representative of the Cephoidea comprising roughly 165 species in three subfamilies and 25 genera (Benson, 1935, 1946; Smith & Schmidt, 2009; Taeger et al., 2010; Budak et al., 2011; Wei & Xiao, 2011). Most species occur in the Northern Hemisphere, but several species have been reported in the Southern Hemisphere or from the tropics (Smith & Schmidt, 2009). On the other hand, this family is quite numerously, copiously, richly represented in East Asia where nearly about one third of the identified species and half the known genera are endemic (Wei & Nie, 2007; Liu et al., 2018).

A number of cephid species are economically important pests causing severe losses particularly in cereal grains, and occasionally in many edible fruits, ornamental trees and shrubs of the Rosaceae (Benson, 1968; Shanower & Hoelmer, 2004; Korkmaz et al., 2010a; Wei & Smith, 2010). We have only few papers on the Iranian cephids; these papers shall be completed with further studies based on collecting

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results (Behdad, 1982; Ghadiri, 1994; Khalaf, 1995; Shahrokhi & Zare, 1995; Ghadiri & Safai, 2001; Esmaili et al., 2006; Khanjani, 2006). The aim of the present paper is to catalogue of all the data on the Iranian Cephidae together with introducing of three new country records.

Material and methods

We processed all available literature on the Iranian cephids and the results are digested in the present paper. The materials of new records were collected by Malaise traps and sweeping. The following keys were applied to identify the specimens: Benson, 1946, 1951, 1968; Muche, 1981; Zhelochovtsev, 1988; Jansen 1998; Liston & Jacobs 2012. Electronic World Catalog of Symphyta was consulted for valid names and distribution data (Taeger et al., 2018). The provinces of Iran are shown in the Fig. 1.

Results

A checklist of Cephidae of Iran are resulted the presence of 15 species and subspecies within six genera. Two species and one subspecies, *Pachycephus smyrnensis smyrnensis* Stein, 1876, *Trachelus libanensis* (André, 1881) and *Hartigia nigra* (Harris, 1776), are newly recorded from Iran. The list of species is given below alphabetically including synonymies and distribution data.

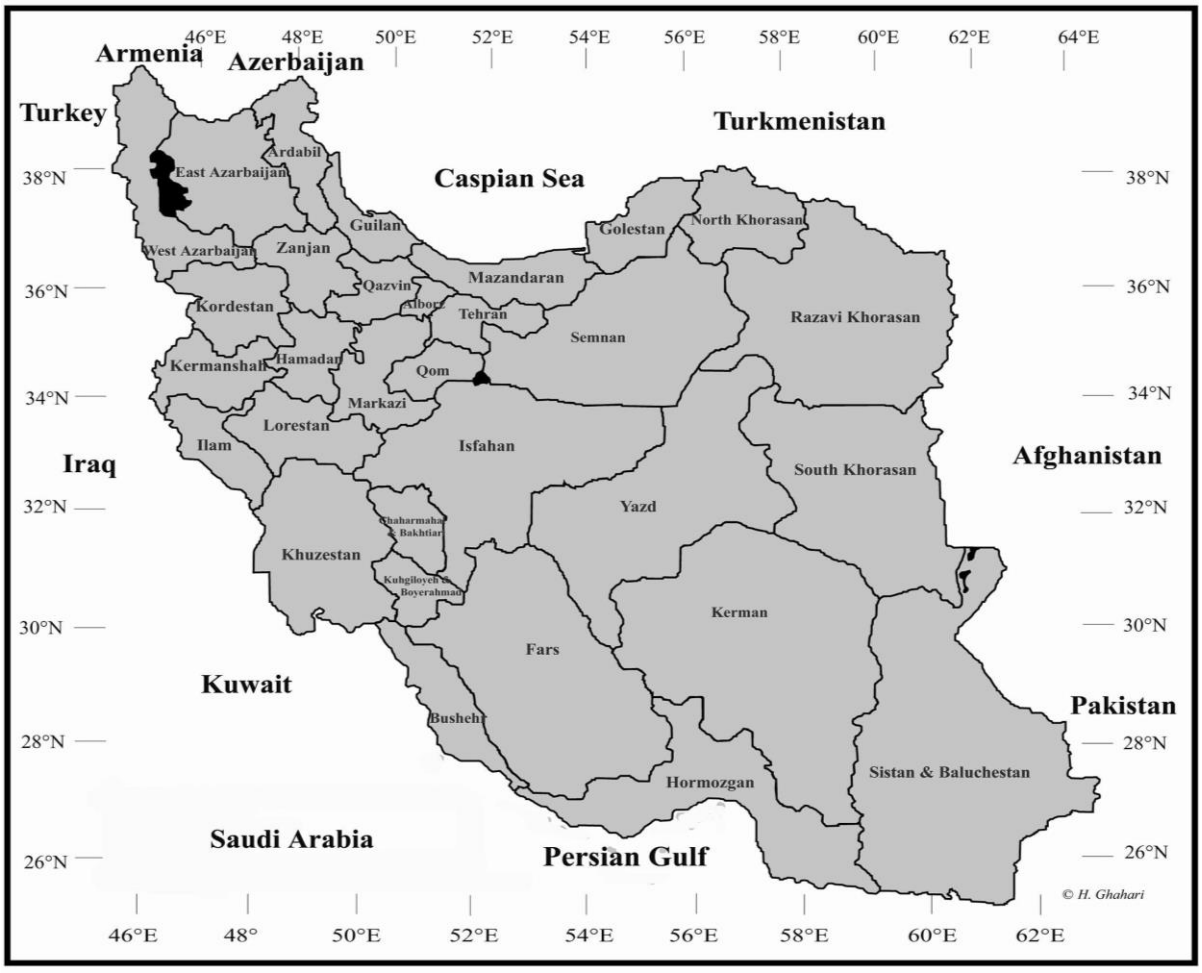

Figure 1. Map of Iran with boundaries of provinces.

Superfamily Cephoidea Newman, 1834

Family Cephidae Newman, 1834

Subfamily Cephinae Newman, 1834

Tribe Cephini Newman, 1834

Genus *Calameuta* Konow, 1896

***Calameuta* (*Calameuta*) *filiformis* (Eversmann, 1847)**

Cephus quadricinctus Dahlbom, 1835; *Cephus filiformis* Eversmann, 1847; *Cephus elongatus* Vollenhoven, 1858 Vollenhoven, 1858; *Cephus arundinis* Giraud, 1863; *Cephus marginatus* Kawall, 1864; *Cephus erberi* Damianitsch 1866; *Cephus vagabundus* Mocsáry, 1886; *Cephus grombczewskii* Jakovlev, 1892; *Calameuta rugosa* Dovnar Zapolskij, 1931; *Cephus infernalis* Dovnar Zapolskij, 1926; *turanicus* Dovnar Zapolskij, 1931; *Calameuta atrata* Dovnar-Zapolskij, 1931; *Calameuta turanicus* Dovnar-Zapolskij, 1931; *Calameuta amurensis* Gussakovskij, 1935; *Calameuta filiformis amurensis* Gussakovskij, 1935.

Distribution in Iran: East Azarbaijan (Gussakovskij, 1935; Khayrandish et al., 2017), Guilan (Khayrandish et al., 2017), Lorestan (Khayrandish & Ebrahimi, 2018), Northern Iran (no locality cited) (Klima, 1937; Dadurian, 1962; Benson, 1968; Schedl, 2009; Taeger et al., 2018).

General distribution: Palaearctic species. Austria, Belgium, China, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, Iran, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lebanon, Morocco, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Turkey, Ukraine.

Host plants: *Arhenatherum*, *Calamagrostis*, *Elytrigia*, *Phalaris*, *Phragmites* (all Poaceae) (Taeger et al., 1998).

***Calameuta* (*Calameuta*) *grombczewskii* (Jakowlew, 1891)**

Calameuta grombczevskii Jakowlew, 1891; *Cephus grombczevskii* Jakowlew, 1891; *Calameuta grombczewskii* (Jakowlew, 1891); *Cephus grombczewskii* Jakowlew, 1891; *Calameuta* (*Calameuta*) *filiformis grombczewskii* (Jakowlew, 1891); *Calameuta grombtschewskii* (Jakowlew, 1891); *Calameuta gromczevskii* (Jakowlew 1891).

Distribution in Iran: Alborz, Qazvin (Khayrandish et al., 2017), East Azarbaijan (Sakenin et al., 2008), Golestan (Taeger et al., 2018), Mazandaran (Samin & Farzaneh, 2016; Khayrandish et al., 2017).

General distribution: Middle Eastern species. Iran, Kazakhstan, Turkmenistan, Tajikistan, Uzbekistan.

Host plants: Unknown.

Comments: *C.* (*Calameuta*) *grombczewskii* was reported as the prey of *Tolmerus atricapillus* (Fallén, 1814) (Diptera: Asilidae) by Sakenin et al. (2008).

***Calameuta* (*Calameuta*) *idolon* (Rossi, 1794)**

Ichneumon idolon Rossi, 1794; *Cephus mittrei* Guerinmeneville, 1844; *Cephus bellieri* Sichel, 1860; *Cephus variegatus* Stein, 1876; *Monoplopus apicicornis* Pic, 1916.

Distribution in Iran: Guilan, Qazvin (Khayrandish et al., 2017), Iran (no locality cited) (Benson, 1968; Schedl, 2009; Korkmaz et al., 2010a).

General distribution: European and Middle Eastern species. Albania, Algeria, Armenia, Bulgaria, Croatia, Cyprus, France, Greece, Hungary, Italy, Jordan, Portugal, Serbia and Montenegro, Spain, Turkey, Ukraine.

Host plants: Unknown.

Genus *Cephus* Latreille, 1802

***Cephus brachycercus* Thomson, 1871**

Cephus pallipes Eversmann, 1847; *Cephus brachycercus* Thomson, 1871; *Cephus punctulatus* Konow, 1896; *Cephus brachycercus* var. *tibialis* Dovnar-Zapolskij, 1926.

Distribution in Iran: West Azarbaijan (Ghahari & Huang, 2012).

General distribution: Palaearctic species. Austria, Belgium, China, Croatia, Czech Republic, Estonia, Finland, France, Germany, Hungary, Italy, Japan, Morocco, Netherlands, Norway, Poland, Russia, Slovakia, Sweden, Switzerland, Turkey, Ukraine.

Host plants: Unknown.

Comments: *Norbanus scabriculus* (Nees, 1834) (Hymenoptera: Pteromalidae) was recorded as the parasitoid of *C. brachycercus* in West Azarbaijan (Ghahari & Huang, 2012).

***Cephus fumipennis* Eversmann, 1847**

Cephus carbonarius Jakowlew, 1891.

Distribution in Iran: Northern Khorasan (Samin & Farzaneh, 2016).

General distribution: China, Europe, Kazakhstan, Russia, Tajikistan, Turkey (Taeger et al., 2018).

Host plants: *Phalaris* (Poaceae) (Taeger et al., 1998).

***Cephus nigrinus* Thomson, 1871**

Cephus pallipes Stephens, 1835; *Cephus nigrinus* Thomson, 1871.

Distribution in Iran: Iran (no locality cited) (Burggraaf-van Nierop & van Achterberg, 1990; Taeger et al., 2018).

General distribution: European and Middle Eastern species. Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Hungary, Iran, Italy, Luxembourg, Macedonia, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Syria, Turkey, Ukraine.

Host plants: *Milium*, *Poa* (Poaceae) (Taeger et al., 1998).

***Cephus pygmeus* (Linnaeus, 1767)**

Sirex pygmaeus Linné, 1767; *Tenthredo longicornis* Fourcroy, 1785; *Tenthredo polygonus* Gmelin, 1790; *Tenthredo polyona* Gmelin, 1790; *Banchus spinipes* Panzer, 1801; *Banchus viridator* Fabricius, 1805; *Cephus subcylindricus* Gravenhorst, 1807; *Cephus leskii* Lepeletier, 1823; *Cephus flavisternum* Costa, 1882; *Cephus clypealis* Costa, 1894; var. *Cephus pygmaeus* var. *palaestinus* PIC, 1918; *tanaiticus* Donvar-Zapolskij, 1926; *notatus* Kokujev, 1910.

Distribution in Iran: Alborz (Farahbakhsh, 1961; Ghadiri, 1993, 1994, 2000; Khanjani, 2006; Esmaili et al., 2006; Khayrandish et al., 2017; Khayrandish & Ebrahimi, 2018), East Azarbaijan, Isfahan, Kuhgiloyeh & Boyerahmad, Lorestan, Qom, Razavi Khorasan (Khayrandish & Ebrahimi, 2018), Fars (Nemati & Pezhman, 2014; Khayrandish & Ebrahimi, 2018), Golestan (Chevin, 1985; Khayrandish & Ebrahimi, 2018), Markazi and other northern and central provinces (Farahbakhsh, 1961; Behdad, 1982; Khanjani, 2006; Esmaili et al., 2006; Modarres Awal, 2012), Qazvin (Khayrandish et al., 2017; Khayrandish & Ebrahimi, 2018), Tehran (Farahbakhsh, 1961; Behdad, 1982; Ghadiri, 1993, 1994, 2000; Khanjani, 2006; Esmaili et al., 2006; Modarres Awal, 2012; Khayrandish et al., 2017; Khayrandish & Ebrahimi, 2018), Northern Iran (no locality cited) (Gussakovskij, 1935; Ushinskij, 1936; Dadurian, 1962; Benson, 1968; Shanower & Hoelmer, 2004; Schedl, 2009).

General distribution: Holarctic species. Algeria, Austria, Belgium, Bulgaria, Canada, China, Croatia, Czech Republic, Denmark, Egypt, Estonia, France, Germany, Great Britain, Greece, Hungary, Iran, Iraq, Israel, Italy, Latvia, Luxembourg, Macedonia, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, USA.

Host plants: Wheat and sometimes barley (Farahbakhsh, 1961; Esmaili et al., 2006; Modarres Awal, 2012), *Avena sativa* L., *Bromus secalinus* L., *Hordeum vulgare* L., *Secale cereale* L. and *Triticum aestivum* L. (Poaceae) (Farahbakhsh, 1961; Ghadiri,

1993; Modarres Awal, 2012; Khayrandish & Ebrahimi, 2018); *Avena*, *Bromus*, *Elytrigia*, *Hordeum*, *Phleum*, *Secale*, *Triticum* (Poaceae) (Taeger et al., 1998).

Comments: *Aprostocetus forsteri* (Walker, 1847) and *Necremnus tidius* (Walker, 1839) (Hymenoptera: Eulophidae) have been recorded by Yefremova et al. (2007), *Elachertus fenestratus* Nees, 1834 (Hymenoptera: Eulophidae) by Sahragard (1977) and Behdad (1982) and *Elachertus proteoteratis* Howard, 1885 by Esmaili et al. (2006) as the parasitoids of *C. pygmeus*. Additionally, *Cantharis melaspis* Chevrolat, 1854 (Coleoptera: Cantharidae) is the predator of *C. pygmeus* (Khanjani, 2006).

***Cephus spinipes* (Panzer, 1800)**

Cephus cultratus auct.; *Astatus spinipes* (Panzer, 1800); *Banchus spinipes* Panzer, 1800 [not 1801]; *Cephus spinipes* (Panzer, 1800) [not 1801]; *Cephus cultratus* Eversmann, 1847; *Cephus pilosulus* Thomson, 1871; *Cephus cultratus* forma *pilosulus* Thomson, 1871; *Cephus affinis* Kokujev, 1910; *Cephus exilis* Kokujev, 1910.

Distribution in Iran: Tehran (Samin et al., 2010).

General distribution: European and Middle Eastern species. Austria, Belgium, Bulgaria, China, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, Italy, Kyrgyzstan, Luxembourg, Macedonia, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Turkey, Ukraine.

Host plants: *Dactylis*, *Phleum* (Poaceae) (Taeger et al., 1998).

Comments: *C. spinipes* has been reported as the prey of *Rhadinus ungulinus* Loew (Diptera: Asilidae) by Samin et al. (2010).

Genus *Trachelus* Jurine, 1807

***Trachelus libanensis* (André, 1881) (Fig. 2)**

Cephus libanensis André, 1881; *Ateuchopus armenius* Konow, 1896; *Trachelus armenius* (Konow, 1896); *Atenchopus libanensis* var. *intermedius* Pic, 1917.

Material examined: East Azarbaijan province, Kaleybar (in wheat field), 38°53′N 47°05′E, 2♂, leg. M. Havaskary, 28.V.2013. **New record for Iran.**

General distribution: East Mediterranean and Middle Eastern species. Armenia, Cyprus, Georgia, Israel, Lebanon, Russia, Syria, Turkey.

Host plants: *Triticum* (Poaceae) (Taeger et al., 1998).

Host records in Iran: Unknown.

Comments: *Trachelus libanensis* is a pest on wheat (Altınayar, 1975, Miller et al., 1993; Korkmaz et al., 2010b) but its population density is very low in Iran.

***Trachelus tabidus* (Fabricius, 1775)**

Sirex tabidus Fabricius, 1775; *Tenthredo longicollis* Frurcroy, 1785; *Trachelus haemorrhoidalis* Jurine, 1807; *Cephus mandibularis* Lepeletier, 1823; *Cephus nigritus* Lepeletier, 1823; *Calameuta johnsoni* Ashmead, 1900.

Distribution in Iran: Alborz, Qazvin (Khayrandish et al., 2017; Khayrandish & Ebrahimi, 2018), Fars (Khalaf, 1995; Modarres Awal, 2012; Khayrandish et al., 2017; Khayrandish & Ebrahimi, 2018), Tehran (Farahbakhsh, 1961; Behdad, 1982; Modarres Awal, 2012; Ghahari et al., 2010; Khayrandish et al., 2017; Khayrandish & Ebrahimi, 2018), and probably other northern and central provinces (Farahbakhsh, 1961; Modarres Awal, 2012), Iran (no locality cited) (Shanower & Hoelmer, 2004).

General distribution: Holarctic species. Algeria, Austria, Belgium, Bulgaria, Croatia, Cyprus Egypt, France, Germany, Great Britain, Greece, Iraq, Israel, Italy, Libya, Morocco, Netherlands, Portugal, Romania, Russia Slovakia, Spain, Switzerland, Syria, Tunisia, Turkey, Ukraine, USA.

Host plants: Wheat (*Triticum aestivum*) and sometimes barley (*Hordeum vulgare*) (Farahbakhsh, 1961; Modarres Awal, 2012); *Avena*, *Hordeum*, *Secale*, *Triticum* (Poaceae) (Taeger et al., 1998).

Comments: *Panstenon oxylus* (Walker, 1839) (Hymenoptera: Pteromalidae) has been recorded as the parasitoid of *T. tabidus* in wheat field (Ghahari et al., 2010).

Tribe Hartigiini Enslin, 1914

Genus *Phylloecus* Newman, 1823

***Phylloecus niger* (M. Harris, 1779) (Fig. 3)**

Sirex nigra Harris, 1776; *Astatus satyrus* Panzer, 1801; *Cerobactrus major* Costa, 1860; *Cephus brachyptera* Damianitsch, 1866; *Cephus helleri* Taschenberg, 1871; *Cephus glabellifer* Thomson, 1871; *Phylloecus rubi* Perris, 1873; *Cephus albomaculata* Stein, 1876; *Phylloecus giraudi* Schlechtendal, 1880; *Cephus fumipennis* André, 1881; *Cephosoma syringae* Gradl, 1881; *Phylloecus cruciatus* Costa, 1894.

Material examined: Guilan province, Astara (Sheykh-Mahalleh), 38°22′N 48°41′E, 1♀, leg. S. Ashkani, 6.VII.2012. **New record for Iran.**

General distribution: European and Holomediterranean species. Algeria, Armenia, Austria, Belgium, Bulgaria, China, Croatia, Czech Republic, Estonia, France, Germany, Great Britain, Greece, Hungary, Italy, Luxembourg, Macedonia, Morocco, Netherlands, Poland, Russia, Serbia and Montenegro, Slovakia, Spain, Sweden, Switzerland, Tunisia, Turkey, Ukraine.

Host plants: *Rosa*, *Rubus* (Rosaceae) (Taeger et al., 1998).

***Phylloecus* nr. *xanthostoma* (Eversmann, 1847)**

Cephus xanthostoma Eversmann, 1847; *Cerobactrus facialis* Costa, 1864; *Macrocephus ulmariae* Schlechtendal, 1878; *Phyllaecus giraudi* Schlechtendal, 1880; *Hartigia semenovi* Dovnar-Zapolskij, 1931; *Hartigia jakovlevi* Dovnar-Zapolskij, 1931.

Distribution in Iran: Alborz, Guilan (Khayrandish et al., 2017).

General distribution: Holomediterranean and Middle Eastern species. Algeria, Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Netherlands, Norway, Poland, Russia, Spain, Sweden, Switzerland, UK, Ukraine.

Host plants: *Filipendula* (Rosaceae) (Taeger et al., 1998).

Genus *Syrista* Konow, 1896

***Syrista parreyssii* (Spinola, 1843)**

Cephus parreysi Spinola, 1843; *orientalis* Tischbein, 1852; *spectabilis* Stein, 1876; *Macrocephus robustus* Mocsáry, 1883; *Cephus parreyssi* (Sic!) var. *rufiventris* Jakovlev, 1888. Primary homonym of *Cephus rufiventris* Cresson, 1880.

Distribution in Iran: Alborz (Chevin, 1985; Khayrandish et al., 2017), Mazandaran, Qazvin (Khayrandish et al., 2017), Southern Khorasan (Shahrokhi & Zare, 1995; Abai, 2009; Modarres Awal, 2012), Tehran and other northern provinces (Farahbakhsh, 1961; Chevin, 1985; Behdad, 1988; Wei, 2008; Abai, 2009; Modarres Awal, 2012), Iran (no locality cited) (Wei & Smith, 2010; Taeger et al., 2018).

General distribution: Holomediterranean and Middle Eastern species. Albania, Armenia, Azerbaijan, Bulgaria, Croatia, Cyprus, Greece, Israel, Italy, Jordan, Macedonia, Serbia and Montenegro, Slovenia, Spain, Turkey, Turkmenistan

Host plants: Barberry, dog-rose and other roses (Farahbakhsh, 1961; Modarres Awal, 2012); larvae of *S. parreyssii* attack to newly grown twigs of *Berberis* sp. (Berberidaceae) (Shahrokhi & Zare, 1995).

Comments: Larvae of *Syrista parreyssi* are parasitized by Braconidae and Eurytomidae (Hymenoptera) and rate of parasitism is 25-80% (Shahrokhi & Zare, 1995).

Figure 2. *Trachelus libanensis* (André, 1881) (♂).

Figure 3. *Phylloecus niger* (M. Harris, 1779) (♀).

Tribe Pachycephini Benson, 1946

Genus *Pachycephus* Stein, 1876

***Pachycephus smyrnensis smyrnensis* J.P.E.F. Stein, 1876 (Fig. 4)**

Cephus smyrnensis Stein, 1876; *Pachycephus* (*Pachycephus*) *smyrnensis smyrnensis* J.P.E.F. Stein, 1876; *Pachycephus aeneo-varius* Kohl, 1905; *Pachycephus aeneovarius* Kohl, 1905; *Pachycephus aenovarius* Kohl, 1905; *Pachycephus brevis* Ghigi, 1915; *Spatulocephus sanctus* Pic., 1916; *Spatulocephus sanctus* var. *notativentris* Pic, 1916.

Material examined: West Azarbaijan province, Piranshahr (Kulij), 36°37′N 45°12′E, 2♀, leg. N. Samin, 19.V.2011. **New record for Iran.**

General distribution: East-Mediterranean and Middle Eastern species. Armenia, Bulgaria, Cyprus, Greece, Israel, Lebanon, Macedonia, Romania, Syria, Turkey.

Host plants: Unknown.

***Pachycephus smyrnensis persicus* Gussakovskij, 1935**

Pachycephus persicus Gussakovskij, 1935; *Pachycephus* (*Pachycephus*) *smyrnensis persicus* Gussakovskij, 1935.

Distribution in Iran: Lorestan [= Luristan], (Gussakovskij, 1935; Benson, 1968), Iran (no locality cited) (Scheibelreiter, 1978; Taeger et al., 2018).

General distribution: East Mediterranean and Middle Eastern species. Azerbaijan, Iran, Lebanon, Turkey.

Host plants: Unknown.

Discussion

Study of specimens collected from Iranian provinces revealed the presence of 15 species and subspecies in six genera (Fig. 5). Two species and one subspecies, *Pachycephus smyrnensis smyrnensis*, *Trachelus libanensis* and *Phylloecus niger* are new records for Iran. In Turkey as adjacent country of Iran, totally 25 species of Cephidae have been recorded (Korkmaz et al., 2010a). Since Iran is a large country comprising various geographical regions and climates, we expect that number of recorded species of Cephidae will be increased; because most areas of Iran have not been sampled systematically so far; so more faunistic studies are necessary in order to find new data (new records and probably new species).

Additionally, all the 15 species have been reported from only 17 of the 31 Iranian provinces. Among them, Alborz and Qazvin with five recorded species have the highest diversity following by East Azarbaijan, Guilan and Tehran provinces with four species. Exact localities for one species (*Cephus nigrinus* Thomson, 1871) are unknown - Iran (no locality cited). No sampling has been done in southern regions of Iran but a diverse fauna of Cephidae is expected in these areas.

Previous studies on the fauna of Iranian Cephidae are very limited and most of investigations are focused on the biology of *Cephus pygmeus* (e.g., Sahragard, 1977; Behdad, 1982; Ghadiri, 1994; Ghadiri & Safai, 2001; Esmaili et al., 2006; Khanjani, 2006). Additionally, one study was done on biology and control of the wheat stem sawfly, *Trachelus tabidus* by Khalaf (1995), as an important pest on wheat and barley (Farahbakhsh, 1961; Modarres Awal, 2012). Also, the biology of *Syrista parreyssii* was studied by Shahrokhi & Zare (1995) and mentioned as the pest of barberry, dog-rose and other roses (Farahbakhsh, 1961; Modarres Awal, 2012). With exception of three species, *C. pygmeus*, *T. tabidus* and *S. parreyssii*, the host plants are unknown for most of the Iranian species which can be suggested to the researchers for this topic in future.

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Conflict of Interests

The authors declare that there is no conflict of interest regarding the publication of this paper.

Figure 4. *Pachycephus smyrnensis smyrnensis* J.P.E.F. Stein, 1876 (♀).

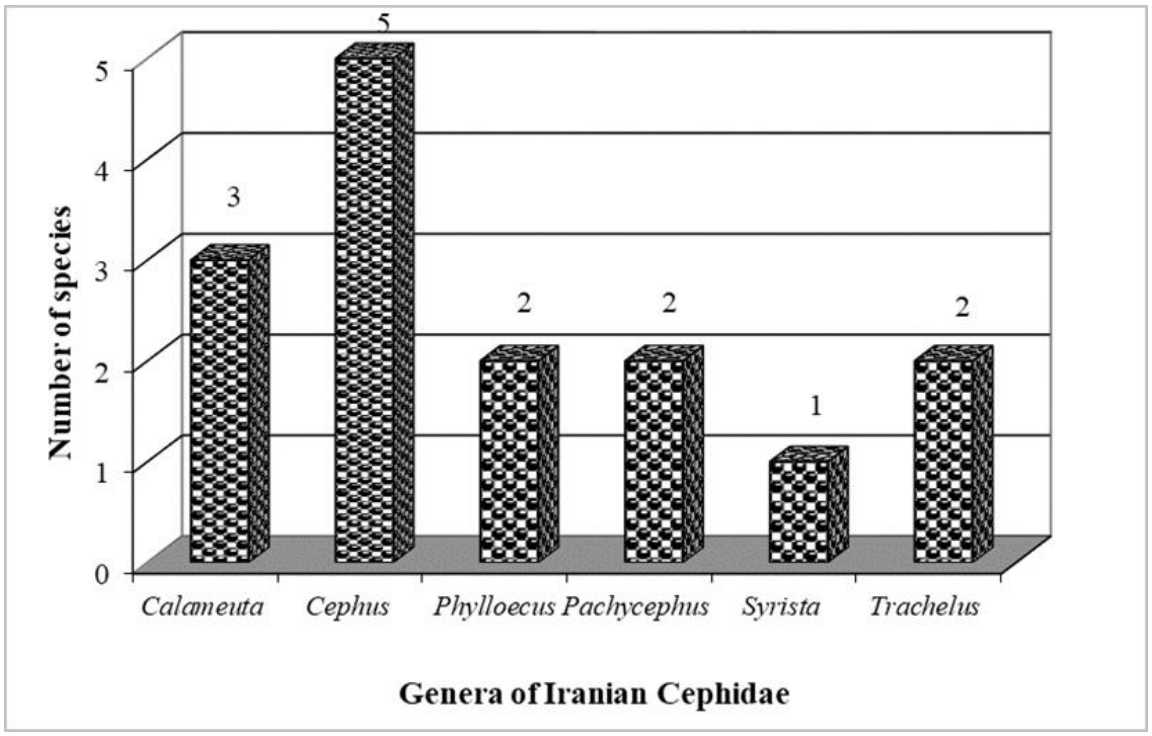

Figure 5. Species diversity of Iranian Cephidae (Hymenoptera).

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چک‌لیست مشروح زنبورهای خانواده Cephidae (Hymenoptera: Symphyta: Cephoidea) ایران

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چکیــده: فون زنبورهای خانواده Cephidae (Hymenoptera: Symphyta: Cephoidea) براساس منابع و نمونه‌های جمع‌آوری شده معرفی شد. در مجموع، ۱۵ گونه و زیرگونه متعلق به شش جنس، *Calameuta* Konow (سه گونه)، *Cephus* Latreille (پنج گونه)، *Phylloecus* Newman (دو گونه)، *Pachycephus* Stein (دو زیرگونه)، *Syrista* Konow (یک گونه) و *Trachelus* Jurine (دو گونه) ذکر گردید. گونه‌های *Phylloecus niger* (Harris, 1776)، *Pachycephus smyrnensis smyrnensis* Stein, 1876 و *Trachelus libanensis* (André, 1881) برای اولین بار از ایران گزارش شدند.

واژگــان کلیدی: ساقه‌خوار، گزارش‌های جدید، پراکنش، کاتالوگ، ایران