

SID



سرویس های ویژه



سرویس ترجمه تخصصی



کارگاه های آموزشی



بلاگ مرکز اطلاعات علمی



عضویت در خبرنامه



فیلم های آموزشی

کارگاه های آموزشی مرکز اطلاعات علمی جهاد دانشگاهی



مباحث پیشرفته یادگیری عمیق؛
شبکه های توجه گرافی
(Graph Attention Networks)



کارگاه آنلاین آموزش استفاده از
وب آو ساینس



کارگاه آنلاین مقاله روزمره انگلیسی

Short communication

A contribution to the sphecoid wasps of Iran (Hymenoptera: Sphecidae), including first record of six species

E. Ebrahimi

Insect Taxonomy Research Department, Iranian Research Institute of Plant Protection, P.O. Box 1454, Tehran 19395, Iran, E-mail: ebrahimi@ppdri.ac.ir

چکیده

مطالعات انجام شده در مورد زنبورهای خانواده‌ی Sphecidae توسط محققان ایرانی محدود است، اما محققان خارجی مطالعات نسبتاً زیادی در مورد زنبورهای این خانواده در ایران انجام داده‌اند. در این مقاله‌ی کوتاه ضمن بررسی اجمالی مطالب منتشر شده در مورد فون این خانواده در ایران، شش گونه برای اولین بار از کشور گزارش می‌شود.

Sphecidae (*sensu lato*) is a cosmopolitan family of aculeate wasps, comprising approximately 9578 described species worldwide (Pulawski, 2007). Up to now 65 species of the family have been reported from Iran by in-country authors (Esmaili & Rastegar, 1974; Ebrahimi, 1993a, 1993b, 2000a, 2000b, 2005; Ebrahimi *et al.*, 1995; Ghazi-Soltani *et al.*, 2006). Meanwhile many European and other specialists have had contributions on Iranian sphecids.

Morice (1921) recorded a number of species from northwest of Iran and expressed the similarity of the Iranian and European faunas. Gussakovskij (1933) published a list of 100 species including 23 new species collected from east and southeast of the country. de Beaumont (1957) reported 70 species of the family from north of Iran, mainly based on the specimens collected by F. Schmid during 1955 and 1956. Later, de Beaumont (1970) examined a collection of sphecids from southeast of Iran, at Staatlichen Beiträge zur Naturkunde in Stuttgart which had been assembled by Richter during 1954-1956. He improved the knowledge of Iranian fauna by reporting 55 sphecids, including four new species and one subspecies. During revising western and central Palaearctic species of *Tachysphex* Kohl, Pulawski (1971) listed 25 species from Iran: *Tachysphex pompiliformis* Panzer [Tehran, Mashad - Fazel]; *T. fulvitaris* A. Costa [Elburz - Abali, Mashad - Fazel]; *T. subdentatus* F. Morawitz [Mashad - Vakilabad]; *T. speciosissimus* Morice [Fars - Zenjun]; *T. nitidior* de Beaumont [Kerman]; *T. angustatus* Pulawski [Mashad - Fazel]; *T. consocius* Kohl [Tabriz]; *T. latifrons* Kohl [Shahrud - Sefid Khok]; *T. mediterraneus* Kohl [Babolsar]; *T. panzeri* Linden [Elburz - 50km N. Abali]; *T. panzeri pulverosus* Radoszkowski [Mashad-Fazel, Iranshahr - Karvandar, Khuzestan - Hafttapeh]; *T. micans* Radoszkowski [Bampur]; *T. longipalpis simplex* Pulawski [Tehran - Sorkhehesar]; *T. incertus* Radoszkowski [Tabriz, Fars

- Zenjun, Larijan - Rineh, Kerman - Podatch - Kouymour, Khuzestan - Hafttappah; *T. persa* Pulawski [Kerman - Sardag - Tchakhi - Zaman]; *T. persa nigripes* Pulawski [Elburz - Abali]; *T. dignus* Kohl [SE Iranshahr, Kuh-e Taftan]; *T. julliani* Kohl; *T. desertorum* F. Morawitz [Gourmouk]; *T. schmidkegnechti* Kohl [Sistan - Bendouk]; *T. costai* De Stefani [Fars - Daria Namak, Khorasan - Kouliouts - Langher]; *T. erythropus* Spinola [Khorasan, Baluchestan - Bazman]; *T. sordidus* Dahlbom [Aitak - Moghan, Poolikh - 80 km N.W. Tehran, Mashad, Kerman - Khunikaka]; *T. grandissimus* Gussakowski [Bampur - Kaskine - Gourmouk]; *T. laticauda* Gussakowski [Kerman - Saguch, SE Iranshahr - Hamantkuh].

Pulawski (1984) reported *Trypoxylon medium* de Beaumont from Gorgan, and later Pulawski (1992) recorded *Holotachysphex mochii* de Beaumont from Mashad. In an online catalog of Sphecidae, Pulawski (2007) has cited many sphecids from Iran, which for some of them no locality data in Iran is presented. From the genus *Bembix* Fabricius the following 19 species have been recorded in the catalog: *Bembix arlettae* de Beaumont [Holotype: Khuzestan - Shadegan]; *B. bicolor* Radowskowskij [Khorasan]; *B. bidentata* V. Linden [Talesh]; *B. diversipes* F. Morawitz [N. Iran]; *B. dubia* Gussakowskij [Syntype: Anarak]; *B. eburnea* Radowskowskij [Iran]; *B. heteracantha* Gussakowskij [Holotype: Mekran]; *B. isabellae* de Beaumont [Holotype: SW Iranshahr]; *B. kirgisica* F. Morawitz [N. Iran]; *B. melanura* F. Morawitz [N. Iran]; *B. oculata* Panzer [Anzali, Khorasan]; *B. olivacea* Fabricius [Anzali]; *B. parvula* F. Morawitz [Makran]; *B. persa* von Schilthess [Holotype: Bandar Abbas]; *B. planifrons* F. Morawitz [Baluchestan]; *B. portschinskii* Radoszkowskij [Iran]; *B. rostrata* (Linnaeus) [N. Iran]; *B. transcaspica* Radoszkowskij [Iran]; *B. zarudnyi* Gussakowskij [Bampur, Bazman]. From the genus *Sphex* Linnaeus, the species *S. cineracens* Dahlbom [NW Iran]; *S. flavipennis* Fabricius [N. Iran]; *S. funerarius* Gussakowskij [Rasht]; *S. leuconotus* Brullé [N. Iran]; *S. axianus* Gussakowskij [Khorasan] and *S. pruinosus* Germar [Iran] have been cited (Pulawski, 2007). The genus *Cerceris* Latreille is presented with these species in the mentioned site: *C. buprestida* Dufour [Khorasan]; *C. circularis* (Fabricius) [N. Iran]; *C. circularis dacica* Schletterer [Ghazvin]; *C. circularis magnifica* Schletterer [N. Iran]; *C. dispar* Dahlbom [N. Iran]; *C. eryngii* Marquet [N. Iran]; *C. flavilabris* (Fabricius) [N. Iran]; *C. gusenleitneri* K. Schmidt [Holotype: Iran, Elburz]; *C. media* Klug [Kermanshah province - Rijab; locality here presented]; *C. odontophora* Schletterer [N. Iran]; *C. pharaonum* Kohl [Baluchestan]; *C. quadricincta* (Panzer) [N. Iran]; *C. rubida* (Jurine) [N. Iran]; *C. sabulosa* (Panzer) [Gilan]; *C. schaeuffelei* de Beaumont [Holotype: Iranshahr]; *C. komarovii* Radoszkowskij [Khorasan]; *C. tricolorata* Spinola [N. Iran]; *C. tuberculata* (Villers) [Tehran province - Taleghan; locality here presented]; *C. turneri* Shestakov [Iran,

holotype or syntype]; *C. vegans* Radoszkowski [Khorasan]. Menke & Pulawski (2000) reported five species of *Sphex* from Iran. Schmid-Egger (2002 & 2004) reported *Gorytes quinquecinctus* (Fabricius) from Rasht and seven species of *Bembecinus* Costa from various parts of Iran as follows: *B. guichardi* Schmid-Egger [N. Minab - Rudan]; *B. gracilicornis* (Handlirsch) [Rafsanjan, Tehran]; *B. asiaticus iranicus* Schmid-Egger [Baluchestan - Bampur, Fars - Daria Namak, Mashad, Khuzestan - Hafttappeh]; *B. tridens tridens* (Fabricius) [Kerman - Rayen - Hezar, Elburz - Chalvervar, Tabriz]; *B. tridens cyanescens* (Radoszkowski) [Yazd]; *B. acanthomerus* (Morice) [Jiroft - Anbarabad]; *B. khuzestani* Schmid-Egger [Holotype: Khuzestan - Hafttappeh].

Here, the following six species are newly recorded from Iran:

***Liris atratus* (Spinola)**

Material examined – Tehran province, Varamin, Aliabad, 19.XI.1991, leg. Ebrahimi.

***Argogorytes fargeii* Schuckard**

Material examined – Ardebil province, Khalkhal-Asalem road, Azarab, 29.VI.1985, leg. Mirzayans/Pazuki.

***Prionyx vittatus* (Kohl)**

Material examined – Hamedan province, Asadabad, 1.VIII.1987, leg. Mirzayans/Hashemi.

***Philanthus coarctatus* Spinola**

Material examined – Sistan-Baluchestan province, Iranshahr, 1993, leg. Omara.

***Trirogma caerulea* Westwood**

Material examined – Tehran province, Tehran, 13.IX.1992, leg. Ebrahimi.

***Gorytes albidulus* (Lepeletier)**

Material examined – Azarbaijan-e Sharghi province, Marand, 29.V.1974, leg. Damanabi.

Acknowledgments

The specimens were partly identified by Dr. Christian Schmid-Egger from Germany whom I gratefully acknowledge.

References

- de Beaumont, J.** (1957) Sphecidae du nord de l'Iran (Hym.). *Mitteilungen der Schweizerischen Entomologischen Gesellschaft* 30, 127-139.
- de Beaumont, J.** (1970) Sphecidae de l'Iran (Hym.). *Stuttgarter Beiträge zur Naturkunde* 220, 1-18.
- Ebrahimi, E.** (1993) The sphecid wasps of subfamily Sphecinae in Iran. *Journal of Entomological Society of Iran* 12&13, 87-104. [In Persian with English summary].
- Ebrahimi, E.** (1993) Introduction of *Pemphredon lethifera* and its biological study in Iran. *Proceedings of 11th Iranian Plant Protection Congress*, 250.
- Ebrahimi, E.** (2000a) The first report on three orthopteran predator wasps in Iran. *Proceedings of 14th Iranian Plant Protection Congress, Vol. I, Pests*, 361.
- Ebrahimi, E.** (2000b) The first record of three predator wasps in Iran. *Proceedings of 14th Iranian Plant Protection Congress, Vol. I, Pests*, 362.
- Ebrahimi, E.** (2005) An identification guide to the Sphecidae of Iran (Insecta, Hymenoptera). *Journal of Entomological Society of Iran* 24(2), 109-135.
- Ebrahimi, E., Kharazi Pakdel, A. & Esmaili, M.,** (1995) The first record of four aphid predator wasps in Iran. *Proceedings of 12th Iranian Plant Protection Congress*, 290.
- Esmaili, M. & Rastegar, R.** (1974) Identified species of Aculeate Hymenoptera of Iran. *Journal of Entomological Society of Iran* 2(1), 41-52.
- Ghazi-Soltani, G., Ebrahimi, E. & Iranipur, Sh.** (2006) A new record of a crabronid wasp (Hym.: Sphecidae) for Iran from East Azarbaijan province. *VIIIth European Congress of Entomology, Izmir, Turkey, Supplementary Abstract Book 2, RVPP-08*.
- Gussakovskij, V.** (1933) Sphecidae et Psammocharidae (Hymenoptera) a cl. N. Zarudnyi in Persia orientali collectae. *Travaux de l'Institut Zoologique de l'Académie des Sciences de l'USSR* 1, 269-304.
- Menke, A. S. & Pulawski W. J.** (2000) A review of the *Sphex flavipennis* species group (Hymenoptera: Apoidea: Sphecidae: Sphecinae). *Journal of Hymenoptera Research* 9(2), 324-346.

- Morice, F. D.** (1921) Annotated lists of aculeate Hymenoptera and chrysidids recently collected in Mesopotamia and north-west Persia. *Journal of Bombay Natural History Society* 27, 816-826.
- Pulawski, W. J.** (1971) Les *Tachysphex* Kohl (Hym., Sphecidae) de la région paléarctique occidentale et centrale. *Zaklad Zoologii Systematycznej I Doswladczalnej Polskiej Akademii Nauk*, 464 pp.
- Pulawski, W. J.** (1984) The status of *Trypoxylon figulus* (L., 1758), medium de Beaumont, 1945, and minus de Beaumont, 1945 (Hymenoptera, Sphecidae). *Proceedings of the California Academy of Sciences* 43(10), 123-140.
- Pulawski, W. J.** (1992) World species of the wasp genus *Holotachysphex* de Beaumont (Hymenoptera, Sphecidae). *Proceedings of Entomological Society of Washington* 94(2), 223-242.
- Pulawski, W. J.** (2007) Catalog of Sphecidae. Available on: http://www.calacademy.org/research/entomology/Entomology_Resources/Hymenoptera/sphecidae/Genera_and_species_PDF/introduction.htm (accessed 24 December 2007).
- Schmid-Egger, C.** (2002) Key and new records for the western Palearctic species of *Gorytes* Latreille 1804 with description of a new species (Hymenoptera, Sphecidae, Bembicinae). *Linzer Biologie Beiträge* 34/1, 167-190.
- Schmid-Egger, C.** (2004) Revision of *Bembecinus* (Hymenoptera, Crabronidae) of the Palearctic region. *Notes fauniques de Gembloux*, 54, 3-69.

Received: 5 January 2008

Accepted: 6 May 2008

SID



سرویس های ویژه



سرویس ترجمه تخصصی



کارگاه های آموزشی



بلاگ مرکز اطلاعات علمی

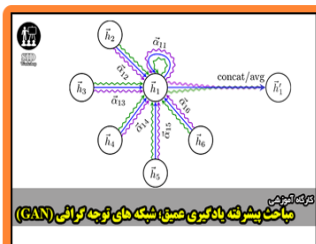


عضویت در خبرنامه



فیلم های آموزشی

کارگاه های آموزشی مرکز اطلاعات علمی جهاد دانشگاهی



مباحث پیشرفته یادگیری عمیق؛
شبکه های توجه گرافی
(Graph Attention Networks)



کارگاه آنلاین آموزش استفاده از
وب آوساینس



کارگاه آنلاین مقاله روزمره انگلیسی