

A survey of the genus *Chrysis* (Hyme., Chrysididae) in Fars province, with six new records for Iranian fauna

A. Falahatpisheh¹, M. Fallahzadeh^{2*}, A. F. Dousti², F. Strumia³, N. Saghaei⁴

1- Ph. D student, Department of Entomology, Jahrom Branch, Islamic Azad University, Jahrom, Iran

2- Associate Professor and Assistant Professor, Department of Entomology, Jahrom Branch, Islamic Azad University, Jahrom, Iran

3- Professor, Physics Department, Pisa University, Largo Pontecorvo, 3, 56127, Pisa, Italy.

4- Assistant Professor, Department of Entomology, Marvdasht Branch, Islamic Azad University, Marvdasht, Iran

Abstract

The Chrysididae (Hymenoptera: Chrysoidea), commonly known as cuckoo wasps or emerald wasps, are a cosmopolitan family of aculeate wasps and include about 3,000 species in the world. *Chrysis* Linnaeus, 1761 is a large, cosmopolitan and diverse genus in this family (Chrysidinae, Chrysidini), with over 1100 described species and subspecies and many more to be discovered. A list of twelve species of the genus *Chrysis* collected in the Fars Province of Iran is presented. Specimens were collected by Malaise traps during 2013-2017. The specimens were identified based on morphological characters mentioned in different taxonomic keys and their original descriptions. Six species: *Chrysis amneris* Balthasar, 1953, *Ch. dawahi* Strumia, 2011, *Ch. diacantha diacantha* Mocsáry, 1889, *Ch. laeta* Dahlbom, 1854, *Ch. santschii* Linsenmaier, 1959 and *Ch. taurica* Mocsáry, 1889 are newly added to the Iranian wasp fauna. The total number of Iranian *Chrysis* currently increased to 130 species and subspecies.

Key words: Cuckoo wasps, Chrysidini, Hymenoptera, new records, Iran.

* Corresponding Author, E-mail: mjalalm@yahoo.com

Received: 28 Oct. 2020 – Accepted: 27 Dec. 2020



Introduction

The family Chrysididae (Hymenoptera: Chrysidoidea) is an extremely large group of morphologically diverse wasps, including parasitoids or cleptoparasites of other wasps, bees, sawflies, Phasmatodea and Lepidoptera, with an inordinately wide range of behavioral and ecological plasticity (Kimsey & Bohart, 1991). In recent years, a number of authors have focused on Iranian cuckoo wasps (Pourrafehi *et al.*, 2011; Rosa *et al.*, 2013; Rosa & Lotfalizadeh, 2013; Torabipour *et al.*, 2013a, 2013b; Strumia & Fallahzadeh, 2015; 2016; Strumia *et al.*, 2016a; 2016b; Farzaneh *et al.*, 2017; Iranmanesh *et al.*, 2017; Farhad *et al.*, 2015; 2016; 2017; 2018), and as a result the number of known species and subspecies from the country has grown considerably around to 292 (see Falahatpisheh *et al.*, 2019; Farhad *et al.*, 2019; Rosa, 2020).

Chrysis Linnaeus, 1761 is the largest genus of the family Chrysididae, with more than 1100 described species globally, 708 species in the Palaearctic region (Kimsey & Bohart, 1991, Rosa *et al.*, 2017) and 124 species in Iran (Farhad *et al.*, 2019; Rosa, 2020).

The aim of present study was to document and increase of our knowledge regarding Iranian cuckoo wasp species of the genus *Chrysis* from the Fars Province in southern Iran.

Material and methods

Surveys in 2015 and 2017 using a number of standard Malaise traps in Fars province, south of Iran resulted in finding several species of *Chrysis*. Sampling localities are briefly described below.

loc. 1): IRAN, Fars, Shiraz, 29°59'6.65" N; 52°39'38.5" E, 1628 m. a. s. l, leg. B. Jahromi. The Malaise trap was situated in a garden with a large number of fruit trees and ornamental plants including walnut, pomegranate (*Punica granatum* L.), pine (*Pinus* ssp.) and cypress trees (*Cupressus sempervirens* L.).

loc. 2): IRAN, Fars, Jahrom, 28°30'31"N; 53°35'21"E, 1044 m. a. s. l, leg. B. Jahromi. The Malaise trap was placed in a mixed orange tree and palm date plantation

loc. 3): IRAN, Fars, Larestan, 27°39'12.6"N; 54°16'50"E, 829 m. a. s. l, leg. A. Falahatpisheh. The Malaise trap was located in a mixed orange tree and palm date orchard.

loc. 4): IRAN, Fars, Larestan, 27°39'8.39"N; 54°16'54"E, 827 m. a. s. l, leg. A. Falahatpisheh. The Malaise trap was located in a mixed orange tree and palm date orchard.

loc. 5): IRAN, Fars, Larestan, 27°39'54"N; 54°16'39"E, 831 m. a. s. l, leg. A. Falahatpisheh.

The Malaise trap was situated in a Eucalyptus plantation.

loc. 6): IRAN, Fars, Larestan, Nime, 27°31'55.4"N; 54°26'1.36"E, 779 m. a. s. l, leg. A. Falahatpisheh. The Malaise trap was located in an alfalfa field.

Voucher specimens are deposited in Department of Entomology, Jahrom Branch, Islamic Azad University, Jahrom, Iran (JIAU) and the Franco Strumia Collection, Pisa, Italy (FSC). Nomenclature follows Bohart & Kimsey (1982) and Kimsey & Bohart (1991). The species are arranged alphabetically.

Results

Subfamily Chrysidinae

Tribe Chrysidini

Genus *Chrysis* Linnaeus, 1761

Chrysis amneris Balthasar, 1953

Material Examined: 1♂: Iran, Fars, Jahrom (loc. 2), 21.v.2013, leg. B. Jahromi.

General distribution: Palestine, Sudan, Saudi Arabia, United Arab Emirates, Russia, (Strumia, 2008; Rosa *et al.*, 2017). New for Iranian fauna.

***Chrysis dawahi* Strumia, 2011**

Material Examined: 1♂: Iran, Fars, Jahrom (loc. 2), 01.vi.2015, leg. B. Jahromi; 2♂♂: same data, 21.v.2013; 1♂: Larestan (loc. 3), 31.v.2017, leg. A. Falahatpisheh; 1♂: Shiraz (loc. 1), 22.v.2016, leg. B. Jahromi.

General distribution: Saudi Arabia, UAE (Strumia, 2014). New for Iranian fauna.

***Chrysis diacantha diacantha* Mocsáry, 1889**

Material Examined: 1♀: Iran, Fars, Jahrom (loc. 2), 10.v.2015, leg. B. Jahromi, 1♂: same data, 12.v.2015.

General distribution: Europe (SE), Caucasus, Middle East, Central Asia, Russia (Rosa *et al.*, 2019). New for Iranian fauna.

***Chrysis laeta* Dahlbom, 1854**

Material examined: 1♀: Iran, Fars, Larestan, Nime (loc. 6), 10.v.2014, leg. A. Falahatpisheh.

General distribution: Algeria, Tunisia, Egypt, Oman, Yemen, UAE (Strumia, 2014). New for Iranian fauna.

***Chrysis leachii* Shuckard, 1837**

Material examined: 1♂: Iran, Fars, Jahrom (loc. 2), 15.vi.2015, leg. B. Jahromi.

General distribution: Russia, Azerbaijan, Caucasus, West-Palaeartic: central and southern Europe, northern Africa, Middle East, Iran (Rosa *et al.* 2013; 2019).

***Chrysis majidi* Strumia, 2015**

Material examined: 2♂♂: Iran, Fars, Jahrom (loc. 2), 15.vi.2015, leg. B. Jahromi; 1♂: Larestan (loc. 4), 10.v.2015, leg. A. Falahatpisheh.

General distribution: Saudi Arabia, Egypt, Palestine, Iran (Strumia & Fallahzadeh, 2015).

***Chrysis nilensis* Linsenmaier, 1959**

Material examined: 2♂♂, 2♀♀: Iran, Fars, Jahrom (loc. 2), 15.vi.2015, leg. B. Jahromi; 1♀: Larestan (loc. 3), 31.v.2017, leg. A. Falahatpisheh; 1♀: same data, 4.vi.2017; 1♂: Anbarabad-Bardeh, 28°28'04.1"N, 58°12'39.3"E, 21.v.2017, 1501m, Malaise trap, leg. Purrezaali.

General distribution: Egypt (Linsenmaier, 1959) Saudi Arabia (Strumia & Dawah, 2012), Iran (Tavassoli & Fallahzadeh, 2015).

***Chrysis palliditarsis* Spinola, 1838**

Material examined: 2♂♂: Iran, Fars, Jahrom (loc. 2), 05.v.2015, leg. B. Jahromi; 2♂♂: same data, 08.v.2015; 3♂♂: same data, 25.v.2015; 8♂♂: same data, 21.iv.2013; 2♂: Larestan, Nime (loc. 6), 25.v.2014, leg. A. Falahatpisheh; 1♂: same data, 03.iv.2014, leg. A. Falahatpisheh; 3♂♂: Larestan (loc. 3), 13.iv.2014, leg. A. Falahatpisheh; 3♂♂: Larestan (loc. 5), 31.v.2017, leg. A. Falahatpisheh; 1♂: same data, 26.v.2017.

General distribution: Central Asia, Northern Africa, widespread in sub-Saharan Africa (Kimsey & Bohart, 1991; Linsenmaier, 1994, 1999), Oman, Saudi Arabia (Linsenmaier, 1994; Strumia & Dawah, 2019), United Arab Emirates (Linsenmaier, 1994; Strumia, 2008, 2014), Yemen (Madl, 2018).

***Chrysis santschii* Linsenmaier, 1959**

Material examined: 1♀: Iran, Fars, Larestan (loc. 3), 6.vi.2017, leg. A. Falahatpisheh.

General distribution: North Africa (Linsenmaier, 1968). New for Iranian fauna.

***Chrysis taurica* Mocsáry, 1889**

Material examined: 1♂: Iran, Fars, Larestan, Nime (loc. 6), 10.v.2014, leg. A. Falahatpisheh.

General distribution: Crimea, Cyprus, Crete, Turkey, South European Russia (Kimsey & Bohart, 1991; Özbek & Strumia, 2018). New for Iranian fauna.

Remark: Strumia & Yıldırım (2009) treated *Ch. ragusae* and *Ch. taurica* as a separate species, which were noted as synonyms by Rosa et al. (2015). The two taxa have different male genitalia as showed by Linsenmaier (1959, figs. 264-265) and probably the proposed synonymy is wrong. *Ch. ragusae* is known from East Anatolia and Mediterranean regions, has a sporadic distribution, and is moderately recorded from Turkey (Özbek & Strumia, 2018).

***Chrysis viridissima* Klug, 1845**

Material examined: 1♀: Iran, Fars, Larestan, Nime (loc. 6), 10.v.2014, leg. A. Falahatpisheh; 1♀: same data, 10.v.2014; 1♀: Larestan (loc. 4), 31.v.2017, leg. A. Falahatpisheh; 1♀: same data, 6.vi.2017; 2♀♀: Larestan (loc. 5), 26.v.2017, leg. A. Falahatpisheh; 2♀♀: same data, 31.v.2017.

General distribution: Jordon, Mauritania, North of Africa, India, Afrotropical realm (Linsenmaier, 1959, 1999), Middle East, UAE (Strumia, 2008), Saudi Arabia (Strumia & Dawah, 2010), Iran (Rosa et al., 2013). *Ch. viridissima* is one of the most frequent *Chrysis* species in Near East and Arabia.

***Chrysis zobeida* du Buysson, 1896**

Material examined: 1♀: Iran, Fars, Larestan, Nime (loc. 6), 10.v.2014, leg. A. Falahatpisheh.

General distribution: Egypt, Iran, Palestine (Linsenmaier, 1968, 1994), Turkey (Strumia & Yıldırım, 2009, 2011), Saudi Arabia, UAE (Strumia, 2014; Strumia & Dawah, 2019), Yemen (du Buysson, 1896).

Discussion

In the present study, twelve species of *Chrysis* were collected and identified from Fars province. Of those, six species (*Chrysis amneris* Balthasar, 1953, *Ch. dawahi* Strumia, 2011, *Ch. diacantha diacantha* Mocsáry, 1889, *Ch. laeta* Dahlbom, 1854, *Ch. santschii* Linsenmaier, 1959 and *Ch. taurica* Mocsáry, 1889) are newly recorded for Iranian wasp fauna. According to recently published studies (Falahatpisheh et al. 2019; Farhad et al., 2019, Rosa, 2020) and the results of the present study, the number of species known from Iran is now increased to 298 species and subspecies, notable larger than the 185 species previously cited (Rosa et al., 2013). The Chrysididae Iranian fauna is now moderately known in some parts of the country (e.g. Fars), while in many other areas is still unknown. The richness of Iranian Chrysididae is very high, ranking second and approaching those of Turkey (Strumia & Yıldırım 2011).

Currently, no data are available about biology and behavior of species of *Chrysis* in Iran. Further investigations on distribution, biology as well as behavior of species of this genus, should be encouraged.

Acknowledgement

This research was supported by Department of Entomology, Jahrom Branch, Islamic Azad University, Jahrom, Iran and the Physics Department of Pisa University, Italy.

References

- Bohart, R. M. and Kimsey, L. 1982.** A synopsis of the Chrysididae in America North of Mexico. *Memoirs of the American Entomological Institute*, 33, 266 pp.
- du Buysson, R. du 1891–1896.** *Species des Hyménoptères d'Europe and d'Algerie. Tome Sixième. Les Chrysidés.* Vve Dubosclard, Paris, I–XII + 13–758 + 64 unnumbered pages + 32 pls. (1891) 1–88, (1892) 89–208, (1893) 209–272, (1894) 273–400, (1895) 401–624, (1896) 625–756 + 1*–22*, (1891–1896) 64 unnumbered pages + 32 pls. [Dating after Derksen and Scheiding 1963].
- Falahatpisheh, A., Fallahzadeh, M., Dousti, A. F., Strumia, F. and Saghaei, N. 2019.** A further contribution to the fauna of Iranian Elampini (Hymenoptera: Chrysididae, Chrysidinae). *Journal of Entomological Research*, 11 (1): 1–9.
- Farhad, A., Rosa, P. and Talebi, A. A. 2018.** Additions to the fauna of Iranian Elampini (Hymenoptera: Chrysididae, Chrysidinae), with key to species and taxonomic notes. *Journal of Crop Protection*, 7(2): 191–206.
- Fahrad, A., Rosa, P., Talebi, A. and Ameri, A. 2015.** The genus *Chrysis* (Hymenoptera: Chrysididae) in Hormozgan province of Iran, with four new records for Iranian fauna. *Entomofauna*, 36: 33–48.
- Farhad, A., Rosa, P., Talebi, A. A., Fathipour, Y., and Hajiqaanbar, H. 2019.** Two new species of *Chrysis* Linnaeus (Hymenoptera, Chrysididae) from Iran. *Journal of Asia-Pacific Entomology*, 22(4): 1005–1012.
- Farhad, A., Talebi, A., Rosa, P., Fathipour, Y. and Hajiqaanbar, H. 2016.** Contribution to the knowledge of the Chrysididae (Hymenoptera, Aculeata) in the south of Iran, with nine new records. *Turkish Journal of Zoology*, 40:1-13.
- Farhad, A., Talebi, A.A., Fathipour, Y., Hajiqaanbar, H. and Strumia, F. 2017.** The genus *Holopyga* (Hymenoptera: Chrysididae) in Iran, with five new records. *Journal of Agricultural Sciences and Technology*, 19: 877–888.
- Farzaneh, F.S., Saghaei, N., Asadi, R. and Strumia, F. 2017.** A contribution to the fauna of cuckoo wasps (Hymenoptera, Chrysididae) in southern Iran. *Entomofauna*, 38 (23), 493–504.
- Iranmanesh, S., Strumia, F., Madjdzadeh, S.M., Purrezaali, M. and Lashkari, M.R. 2017.** Fauna and species richness of chrysidid wasps (Hymenoptera: Chrysididae) in Mountains of Kerman province, south-east Iran. *Journal of Insect Biodiversity and Systematics*, 3 (4): 93–107.
- Kimsey, L. S. and Bohart, R. M. 1991 ["1990"].** *The Chrysidid wasps of the world.* Oxford Science Publications, Oxford, New York, 652 pp.
- Linsenmaier, W. 1959.** Revision der Familie Chrysididae (Hymenoptera). *Mitteilungen der Schweizerischen Entomologischen Gesellschaft*, 32: 1–240.
- Linsenmaier, W. 1968.** Revision der Familie Chrysididae (Hymenoptera). Zweiter Nachtrag. *Mitteilungen der Schweizerischen Entomologischen Gesellschaft*, 41: 1–144.
- Linsenmaier, W. 1994.** The Chrysididae of the Arabian Peninsula (Insecta: Hymenoptera). *Fauna of Saudi Arabia*, 14: 145–206.
- Linsenmaier, W. 1999.** Die Golwespen Nordafrikas. *Entomofauna, Supplement 10*: 1–281.
- Madl, M. 2018.** A preliminary catalogue of the Hymenoptera (Insecta) of the Republic of Djibouti. *Linzer biologische Beiträge*, 50 (2): 907–967.
- Özbek, H. and Strumia, F. 2018.** Research on the Subfamily Chrysidinae (Hymenoptera: Chrysididae) Fauna of Turkey with Distributional Evaluation. *Acta Entomologica Serbica*, 23(2): 75–104.

- Pourrafei, L., Lotfalizadeh, H., Shayesteh-Far, A. and Ramezani, M. 2011.** Cuckoo wasps of the subfamily Chrysidinae (Hymenoptera: Chrysididae) in the north-west of Iran. *Applied Entomology and Phytopathology*, 79(1): 87–116. [In Persian].
- Rosa, P. 2020.** New records of Chrysididae from Iran (Hymenoptera). *Linzer Biologische Beiträge*, 52 (1): 461–474.
- Rosa, P. and Lotfalizadeh, H. 2013.** A new species-group of *Chrysura* Dahlbom, 1845 (Hymenoptera: Chrysididae), with description of *Ch. baiocchii* sp. nov. from Iran. *Zootaxa*, 3737: 24–32.
- Rosa, P., Lotfalizadeh, H. and Pourrafei, L. 2013.** First checklist of the chrysidid wasps (Hymenoptera: Chrysididae) of Iran. *Zootaxa*, 3700 (1): 1–47.
- Rosa, P., Wiśniowski, B. and Xu, Z. F. 2015.** Annotated type catalogue of the Chrysididae (Insecta, Hymenoptera) deposited in the collection of Radoszkowski in the Polish Academy of Sciences, Kraków. *ZooKeys*, (486), 486: 1–100.
- Rosa, P., Lelej, A.S., Belokobylskij, S.A., Loktionov, V.M. and Zaytseva, L.A. 2017.** Family Chrysididae – Cuckoo Wasps. P. 126–144. In: Lelej, A.S., Proshchalykin, M.Yu., Loktionov, V.M. (Eds), *Annotated Catalogue of the Hymenoptera of Russia. Volume I. Symphyta and Apocrita: Aculeata*. Zoological Institute RAS, Saint Petersburg (Proceedings of the Zoological Institute RAS, Suppl. 6). 475 pp.
- Rosa, P., Lelej, A.S., Belokobylskij, S.A., Vinokurov, N.B. and Zaytseva, L.A. 2019.** Illustrated and annotated check-list of the Russian cuckoo wasps (Hymenoptera, Chrysididae). *Entomofauna, Supplement 23*, 1–360.
- Strumia F. 2008.** Order Hymenoptera, Family Chrysididae. pp. 375–387. In: *Arthropod Fauna of the U.A.E.*, vol. 1, (A. van Harten, editor). Dar Al Ummah Printing, Abu Dabi, 754 pp.
- Strumia F. 2014.** Order Hymenoptera, family Chrysididae. Upgraded checklist of the Chrysididae from the U.A.E. pp. 471–504. In: *Arthropod fauna of the U.A.E.*, vol. 5, (A. van Harten, editor), Dar Al Ummah Printing, Abu Dabi, 744 pp.
- Strumia, F. 2016.** Review of the genus *Haba* Semenov, 1954 (Hymenoptera Chrysididae) with the key to species. *Zootaxa*, 4161: 289–294.
- Strumia, F. and Dawah, H. 2010 [“2008–2009”].** Contribution to the knowledge of Chrysididae of Saudi Arabia (Hymenoptera, Aculeata). *Frustula Entomologica, New Series*, 31 (44): 1–10.
- Strumia, F. and Dawah, H. 2012 [“2010–2011”].** New Hymenoptera Chrysididae from South Western Saudi Arabia. *Frustula Entomologica, New Series*, 33 (46): 171–179.
- Strumia, F. and Dawah, H. 2019.** An overview of the Chrysididae (Hymenoptera) of the Red Sea Farasan Archipelago (Saudi Arabia). *Journal of Insect Biodiversity*, 9 (1): 1–17.
- Strumia, F. and Fallahzadeh, M. 2015.** New records and three new species of Chrysididae (Hymenoptera, Chrysididae) from Iran. *Journal of Insect Biodiversity*, 3 (15): 1–32.
- Strumia, F. and Fallahzadeh, M. 2016.** A new species of the genus *Haba* Semenov, 1954 (Hymenoptera, Chrysididae) from Iran with a key to species. *Zoology in the Middle East* 26 (4): 358–362.
- Strumia, F., Fallahzadeh, M. and Izadi, E. 2016a.** *Chrysura izadiae* sp. nov., a new cuckoo wasp (Hymenoptera, Chrysididae) from Southern Iran. *Zootaxa*, 4061: 281–285.
- Strumia, F., Fallahzadeh, M., Izadi, E. and Tavassoli, H. 2016b.** Additions to the tribe Elampini (Hymenoptera, Chrysididae) of southern Iran, with description of a new subspecies. *Trends in Entomology*, 12, 51– 61.
- Strumia, F. and Yildirim, E. 2009 [“2007”].** Contribution to the knowledge of Chrysididae fauna of Turkey (Hymenoptera Aculeata). *Frustula Entomologica*, 30 (43): 55–92.
- Strumia, F. and Yildirim, E. 2011.** The present situation of the Chrysididae fauna (Hymenoptera, Aculeata) of Turkey. *Frustula Entomologica*, 33: 1–21.

- Tavassoli, H. and Fallahzadeh, M. 2015.** A faunistic study of Chrysididae (Hymenoptera) in Fars province. Proceedings of the 1st Iranian International Congress of Entomology, Part I: Iranian Research Institute of Plant Protection, Tehran, p. 17.
- Torabipour, Sh., Ebrahimi, E., Lotfalizadeh, H. and Rosa, P. 2013a.** New records of two species of the genus *Pentachrysis* Lichtenstein (Hym.: Chrysididae) in Iran. Applied Entomology and Phytopathology, 81 (1): 85–86.
- Torabipour, Sh., Ebrahimi, E., Lotfalizadeh, H. and Rosa, P. 2013b.** Faunistic study of tribe Elampini (Hym.: Chrysididae) in Hayk Mirzayans Insect Museum (HMIM), Iran. Field Crop Entomology, 2 (1): 1–14.

مطالعه زنبورهای جنس *Chrysis* (Hym., Chrysididae) در استان فارس، به همراه شش گزارش جدید برای فون ایران

علی فلاحت پیشه^۱، مجید فلاح زاده^{۲*}، ابوفاضل دوستی^۲، فرانکو استرومیا^۳ و نازیلا سقایی^۴

- ۱- دانشجوی دکترای تخصصی، گروه حشره‌شناسی، واحد جهرم، دانشگاه آزاد اسلامی واحد، جهرم، ایران
- ۲- به ترتیب دانشیار و استادیار، گروه حشره‌شناسی، واحد جهرم دانشگاه آزاد اسلامی، جهرم، ایران
- ۳- استاد، گروه فیزیک، دانشگاه پیزا، ایتالیا
- ۴- استادیار، گروه حشره‌شناسی، واحد مرودشت، دانشگاه آزاد اسلامی، مرودشت، ایران

چکیده

خانواده Chrysididae (Hymenoptera: Chryridoidea) که معمولاً با اسامی زنبورهای زمردی یا زنبورهای فاخته شناخته می‌شوند یک خانواده از گروه زنبورهای Aculeata می‌باشند که پراکنش جهانی داشته و تاکنون نزدیک به ۳۰۰۰ گونه از آنها شناخته شده است. در این خانواده زنبورهای جنس *Chrysis* Linnaeus, 1761 (Chrysidinae, Chrysidini) یکی از جنس‌های متنوع و با پراکنش جهانی می‌باشند که تاکنون بیش از ۱۱۰۰ گونه و زیرگونه از آنها شناسایی شده و این در حالی است که تعداد زیادی از آنها هنوز کشف نشده و ناشناخته هستند. در مطالعه حاضر، یک لیست از دوازده گونه از زنبورهای این جنس، جمع‌آوری شده از استان فارس در جنوب ایران آرایه می‌شود. نمونه‌ها به وسیله تله مالیز و طی سال‌های ۱۳۹۲ تا ۱۳۹۶ جمع‌آوری شد. شناسایی گونه‌ها با استفاده از کلیدهای شناسایی معتبر و توصیف‌های اصلی انجام گردید. شش گونه *Chrysis amneris* Balthasar, 1953، *Ch. diacantha* Mocsáry, 1889، *Ch. taurica* Mocsáry, 1889، *Ch. laeta* Dahlbom, 1854، *Ch. santschii* Linsenmaier, 1959 و *Ch. diacantha* Mocsáry, 1889 برای اولین بار از ایران گزارش می‌شوند. با در نظر گرفتن نتایج این تحقیق، مجموع تاکساهای گزارش شده این جنس از ایران به ۱۳۰ گونه و زیرگونه افزایش یافت.

واژه‌های کلیدی: زنبورهای فاخته، Chrysidini، بال غشاییان، ایران، گزارش جدید، ایران

* نویسنده رابط، پست الکترونیکی: mfalahr@yahoo.com
تاریخ دریافت مقاله: ۹۹/۸/۷ - تاریخ پذیرش مقاله: ۹۹/۱۰/۷