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Short communication

First report of *Campoplex difformis* (Hymenoptera: Ichneumonidae) associated with the parasitoid wasps fauna of Iran

Somaye Allahvaisi 1,*, Mahdi Hassani 2 & Ali Ameri³

1. Plant Protection Research Department, Hamedan Agriculture and Natural Resources Research and Education Center, AREEO, Hamedan, Iran, 2. Sugar Beet Research Department, Hamedan Agriculture and Natural Resources Research and Education Center, AREEO, Hamedan, Iran, & 3. Insect Taxonomy Research Department, Iranian Research Institute of Plant Protection (IRIPP), Agricultural Research, Education and Extension Organization (AREEO), Tehran, Iran.

* Corresponding author, E-mail: allahvaisis@yahoo.com

اولین گزارش از (Campoplex difformis (Hymenoptera: Ichneumonidae) برای فون زنبورهای یارازیتوئید ایران

سمیه الهویسی او مهدی حسنی و علی عامری "

۱- بخش تحقیقات گیاه پزشکی، مرکز تحقیقات و آموزش کشاورزی و منابع طبیعی استان همدان، سازمان تحقیقات، آموزش و ترویج کشاورزی، همدان، ایران، ۲- بخش تحقیقات اصــــلاح و تهیه بذر چغنـــدرفند، مرکز تحقیقات و آموزش کشــــاورزی و منابع طبیعی استان همدان، سازمان تحقیقات، آموزش و ترویج کشاورزی، همدان، ایران و ۳ - بخش تحقیقات ردهبندی حشرات، مؤسسه تحقیقات گیاه پزشکی کشور، سازمان تحقیقات، آموزش و ترویج کشاورزی، تهران، ایران.

allahvaisis@yahoo.com :مسئول مكاتبات، پست الكترونيک *

چکیده

یک گونه زنبور پارازیتوئید داخلی، از روی لاروهای Gelechidae و احتمالاً بید چغندر قند با عنوان Campoplex یک گونه زنبور پارازیتوئید داخلی، از روی لاروهای Campopleginae از چغندرکاریهای استان همدان گزارش کرارش میشود. در آبان سال ۱۳۹۸، یازده نمونه از این زنبور، از روی ریشههای چغندرقند آلوده به بید چغندر قند (لیتا) جمع آوری شد. ریشههای آسیب دیده جمع آوری و در شرایط آزمایشگاهی تا زمان ظهور حشرات بالغ بید چغندر قند و زنبورهای پارازیتوئید لاروهای بید چغندرقند باشد.

واژههای کلیدی: بید چغندرقند، Campopleginae، پارازیتوئید، گزارش جدید، همدان

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Eleven specimens $(4 \stackrel{\frown}{\hookrightarrow}, 7 \stackrel{\frown}{\circlearrowleft})$ of adult wasps (Hymenoptera: Ichneumonidae) were collected from the sugar beet roots infested by *Scorbipalpa ocellatella* (Lep.: Gelechidae) eggs from the farmlands of the Hamedan province during October until November 2019.

Parasitoid wasps appeared in rearing containers from late October to early November, in a period of 12 - 14 days. In this time, the sugar beet moth larvae had appeared. These wasps deals with subfamily Campopleginae. The genus of Campoplex has 90 species (Anonymous, 2019). A new species of these wasps was recorded for the fauna of Iran:

* Campoplex difformis (Gmelin, 1790)

This species was identified by the third author of the report. This wasps were introduced as the type species of the genus *Campoplex* Gravenhorst, 1829 by Westwood (1840).

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It also gives the name to a complicated group of very similar species, with morphological characteristics insufficient to allow a definitive identification (Jenner *et al.*, 2005). Body length approximately 8-8.2 mm, Face longer than wide, the area superomedia of propodeum wide, and not clearly separated from the area petiolaris; both areas are clearly depressed occipital carina joining hypostomal carina at a right angle at the base of the mandibles and occipital carina turned outwards ventrally; slender body with apically compressed metasoma; hind tibia with the median outer part yellowish red; ovipositor sheath relatively long (at least as long as the hind tibia) (Fig. 1).



Fig. 1. Campoplex difformis female habitus, lateral view.

Campoplex difformis was previously reported by Nuzzaci & Triggiani (1982) from the Province of Puglia, Italy. This parasitoid is widely distributed in Europe up to the Caucasus and Uzbekistan, the Canary Islands and Madeira, Tunisia and Greenland (Yu et al., 2012; Zwakhals & van Achterberg, 2017). Yu et al. (2012) reported general distribution of these wasps in many countries including; Austria, Azerbaijan, Azores, Belgium, Bulgaria, Croatia, Czech Republic, Czechoslovakia, Finland, France-main, Germany, Greenland, Hungary, Ireland, Italy-main, Latvia, Moldova, Netherlands, Norway-main, Poland, Romania, Russia-Perm Oblast, Sweden, Switzerland, Tunisia, Turkey, Ukraine, United Kingdom and Yugoslavia. They reported 64 host species of *C. difformis* belonging to 18 different families (15 of Lepidoptera and 3 of Hymenoptera).

Campoplex difformis is a koinobiont larval endoparasitoid and causes mortality on larval stage of the host when is ready to pupate (Marchal, 1912; Voukassovitch, 1924). Respected to the study of Scaramozzino *et al.* (2018), probably larvae and pupae of *S. ocellatella* would be the host of this parasitoid wasp that is introduced for the first time here. However, more studies are needed for determination of its hosts. Emergence of *C. difformis* was reported previously from the lepidopteran larvae (Georgiev, 2000; Talebi *et al.*, 2005; Yu *et al.*, 2012; Lotfalizadeh *et al.*, 2012; Zikic *et al.*, 2017).

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