

Short communication

Colpoclypeus florus (Walker, 1938) (Hymenoptera: Eulophidae) record a new genus from Iran

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گزارش یک جنس جدید از ایران

Colpoclypeus florus (Walker, 1983) (Hymenoptera: Eulophidae)

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چکیده

در جریان نمونه‌برداری از شته‌های درختان سیب شهرستان مشهد در سال ۱۳۸۷، برخی از لاروهای متعلق به خانواده Tortricidae با نشانه‌های پارازیتسم جمع‌آوری شدند. لاروهای پارازیت در شرایط آزمایشگاه نگه‌داری و تا زمان خروج زنبورهای پارازیتوئید از آن‌ها به طور روزانه بازدید شد. زنبورهای خارج شده از لاروهای میزبان به‌عنوان گونه *Colpoclypeus florus* Walker شناسایی شدند. زنبور شناسایی شده، یک پارازیتوئید خارجی گروهی بوده و برای اولین بار از ایران گزارش می‌شود.

واژگان کلیدی: خانواده Eulophidae، ایران، پارازیتوئید

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Eulophidae is a large family of hymenoptera with over 4470 described species in 297 genera (Noyes, 2008). This family were introduced for the first time by Westwood (1840). Studies on Eulophid species of Iran include a list of 106 species belonging to 37 genera reported by Talebi *et al.* (2011). This family is divided into four sub-families including Eulophinae, Euderinae, Entendoninae and Tetrastichinae (Gibson *et al.*, 1999).

Eulophids have scattered in all tropical and temperate regions worldwide. Many species of Eulophidae have been identified as biological agents (Gauthier *et al.*, 2000). The majority of species in this family are parasitoids but there are a few phytophagous or predatory species. Parasitoids species can attack eggs, larvae, pupae or adult stages (Gauthier *et al.*, 2000). In this paper, we report a new specious of this family from Iran.

During a survey performed in May, 2009 from pome orchards in Mashhad, Razavi Khorasan province (36°:29' N, 59°:60' E), we observed incidence of parasitism on some leaf-roller larvae of tortricids among aphid's colonies. The parasitized larvae were transferred to the laboratory and reared in transparent glass vessels covered by mesh. The rearing vessels were held at room temperature for two weeks until the adult emergence. The emerged wasps were prepared for morphological identification and confirmed by Dr. T.C. Narendran from department of zoology, University of Calicut, Kerala, India.

In total two female and one male specimens of *Colpoclypeus florus* were collected and reported for the first time from Iran (fig. 1).

Colpoclypeus florus description: The female has a black thorax with a light brown to golden abdomen. On the underside of the female's abdomen, there are two small dark spots at the base of the ovipositor. The male is slightly smaller than the female and has a black thorax and abdomen. It has a creamy white area on the underside of the abdomen. The body length was 1.1 to 1.8 mm. Scutellum with grooved lines, coarsely reticulate all over, transverse; male funicle 3-segmented; body squat, clypeus bilobed. Antennal funicle in female 2-segmented, clava 3-segmentes; in male funicle with 2 or 3, clava with 3 or 2 segments respectively, with branches.



Fig. 1. Adult of *Colpoclypeus florus*

Colpoclypeus florus has been already reported from USA (Brunner, 1996), Italy (Veen *et al.*, 1985), Netherlands (Dijkstra, 1983) and all over the Europe. This genus and species is reported now for the first time from Iran as an ectoparasitoid of pests. *C. florus* is a gregarious ectoparasitic eulophid that is known to attack over 30 species of tortricid

larvae in Europe (Dijkstra, 1983). It has successfully suppressed populations of leafrollers on both apple and strawberries to an economically acceptable level (Gruys & Vaal, 1984). This parasitoid attacks third to fifth instar leafroller larvae but prefers fourth and fifth instars (Gruys & Vaal, 1984).

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