

SCIENTIFIC NOTE

**SEVEN SPECIES AS NEW RECORDS FOR HOVER FLIES
FAUNA OF IRAN (DIPTERA, SYRPHIDAE)
FROM QARADAG FORESTS****Samad Khaghaninia*, Reza Farshbaf Pour Abad*
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Syrphidae is one of the largest families of the order Diptera with more than 6000 described species over the world. This large family consists of small to medium flies 6- 18 mm long, most of which have yellow and black striped bodies resembling bees or wasps. Adults often hover near flowers and feed on nectar and pollen (Faegri and van der Pijl, 1979 and Sarıbyık, 2003). These floral resources enhance the longevity and fecundity of adult flies (Topham and Beardsley, 1975). These flies are common pollinators almost wherever flowers are found. Larvae are pale green to yellow maggots resembling slugs which pupate on plants or in the soil enclosed in a puparium. Larvae prey on aphids, scales and other insects. They may consume up to 400 aphids as larvae so they are good natural enemies particularly in the Syrphinae subfamily. Recently, the fauna of syrphids has been studied by the related taxonomists in Iran (Khiaban et al. 1998, Alichı et al. 2002, Gharali et al. 2002, Goldasteh et al. 2002, Gilasian, 2005). Checklists of Iranian hover flies were listed by Peck (1988) and Dousti and Hayat (2006). Unfortunately, so far the syrphid fauna of Qaradag forests, registered biosphere in East Azarbaijan province, has not been well known thus it is the subject of this present study. Studied specimens were collected twice a month, during 2009. Flies were caught using common handy entomological net and malaise trap in 35 localities which are situated in forests as well as grasslands in studied area. The identification was made up to the specific level with the help of relevant literature such as Bei- Bienko (1988), Stubbs and Falk (2002) and Lyneborg and Barkemeyer (2005). Seven species introduced for Iran Syrphid fauna as new records by present study which are listed as follows:

Cheilosia aerea Dufour, 1848

Cheilosia cumanica Szilády, 1938

Chrysogaster basalis Loew, 1857

Eumerus lucidus Loew, 1848

Melanogaster nuda (Macquart, 1829)
Merodon aberrans Egger, 1860
Pipizella divicoi (Goeldlin de Tiefenau, 1974)

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LITERATURE CITED

- Alichi, M., Asadi, G. H. & Gharali, B.** 2002. Aphidophagus syrphids of Fars province. Proceedings of 14th Iranian Plant Protection Congress, p. 181.
- Bei- Bienko, G.** 1988. Keys to the insects of the European part of the USSR. Volume V. Diptera and Siphonaptera. Part II. Smithsonian Institution Libraries and the National Science Foundation Washington, D.C. 10- 148.
- Dousti, A. F. & Hayat, R.** 2006. A catalogue of the Syrphidae (Insecta: Diptera) of Iran. J. Entomol. Res. Soc., 8 (3): 5-38.
- Faegri K. & van der Pijl, L.** 1979. The principles of pollination ecology. Pergamon, Oxford, England.
- Gharali, B., Alichi, M. & Radjabi, G. R.** 2002. The new records of syrphid flies (Diptera: Syrphidae). Proceedings of 14th Iranian Plant Protection Congress, p. 348.
- Gilasian, E.** 2005. New record of one genus and six species of Syrphidae (Diptera) from Iran. Journal of Entomological Society of Iran, 25 (1): 75-76.
- Goldasteh, Sh., Bayat Asadi, H., Shojaee, M. & Baniameri, V. A.** 2002. Afaunistic survey of Syrphidae (Diptera) in Gorgan region. Proceeding of the 15th Iranian Plant Protection Congress, p. 168.
- Khiaban, N. G., Hayat, R., Safaralizadeh, M. & Parchami, M.** 1998. Afaunistic survey of Syrphidae in Uromieh region. Proceeding of the 13th Iranian Plant Protection Congress, p. 231.
- Peck, L. V.** 1988. Family Syrphidae. pp. 11- 230 in Soos, A. (Ed.) Catalogue of Palearctic Diptera. Vol. 8, 363 pp. Akademiai Kiado, Budapest.
- Lyneborg, L. & Barkemeyer, W.** 2005. The genus *Syrpitta*: A world revision of the genus *Syrpitta*. Volume 15. Apollo Books Pub.
- Sarbiyuk, S.** 2003. Fauna of Syrphinae and Milesinae (Diptera: Syrphidae) around Tuz lake. Kastamonu Education Journal, 11 (2): 439- 450.
- Stubbs, A. E. & Falk, S. J.** 2002. British hover flies. An illustrated identification guide. Pub. The british Entomology and Natural History Society, Reading, UK.
- Topham, M. & Beardsley, J. W.** 1975. Influence of nectar source plants on the New Guinea sugarcane weevil parasite, *Lixophaga sphenophori* (Villeneuve). Proc. Hawaii Entomol. Soc., 22: 145- 155.