

SCIENTIFIC NOTE

**TWO GENERA AND FIVE SPECIES AS NEW
RECORDS FOR FRUIT FLIES FAUNA OF IRAN
FROM EAST AZARBAIJAN PROVINCE**

**Ebrahim Zarghani*, Samad Khaghaninia*,
Reza Farshbaf Pour Abad* and Babak Gharali****

* Dept. of Plant Protection, Faculty of Agriculture, University of Tabriz, IRAN. E-mail: khsz.zarghani@yahoo.com

** Dept. Plant Protection, Ghazvin Research Station for Agriculture and Natural Resource, IRAN.

[Zarghani, E., Khaghaninia, S., Pour Abad, R. F. & Gharali, B. 2010. Two genera and five species as new records for fruit flies fauna of Iran from East Azarbaijan province. *Munis Entomology & Zoology*, 5 (2): 823-824]

Tephritidae (true fruit flies) is a large family of the order Diptera with more than 4400 described species over the world. Considering their damage on fruit plantations, they are important insects from the agricultural point of view as well as forest entomology (Merz, 2001). Some of species are important as one of the biological agents in weeds control programs (White & Elson-Harris, 1992). This family consist of small to medium flies in 2–12 mm long, fronto-orbital plate usually bears one or more frontal bristles, antennae with bare or plumose arista, wings usually with a pattern consisting of brown strips and spots, costal vein with two interruptions (White & Elson-Harris, 1992). These flies are important widespread pests of crop fruits and vegetables, which infest a great variety of native and exotic fruits (White, 1988). A few species induce the formation of galls in the upper or subterranean parts of stems of Asteraceae (Freidberg, 1984; Korneyev, 2003). The fruit fly fauna of Iran was studied by Becker (1913), Parchami (1995), Gharali et al. (2006), Karimpour & Merz (2006), Gilasian & Merz (2008), Mohamadzade & Rasoulia (2009), Mohamadzade, Nozari & Rasoulia (2010), Mohamadzade & Nozari (2010). So far the Tephritid fauna of Arasbaran forests, which are registered as biosphere in East Azarbaijan Province, remained poorly studied.

Fruit flies of Arasbaran forests was the subject of this present study revealed two genera (marked with an asterisk) and five species previously not recorded from Iran as follows:

****Acinia biflexa* (Loew, 1844)**

Material examined. 2♂♂: Chichekli; 38°35' N 46°14' E, 1223 m, 21 Jul. 2009 (Collected by S. Khaghaninia, Deposited at Insect Museum of Tabriz University).

***Campiglossa absinthii* (Fabricius, 1805)**

Material examined: 1♂, 1♀: Aynalu; 38°39' N 46°15' E, 1272 m, 2 Jun. 2009 (Collected by S. Khaghaninia, Deposited at Insect Museum of Tabriz University).

****Noeeta pupillata* (Fallén, 1814)**

Material examined: 1♂: Chichekli; 38°41' N 46°31' E, 2163 m, 21 Jul. 2009 (Collected by S. Khaghaninia, Deposited at Insect Museum of Tabriz University).

***Tephritis dioscurea* (Loew, 1865)**

Material examined: 1♂: Uskuli; 38°51' N 46°59' E, 1367 m, 1 Jul. 2009 (Collected by S. Khaghaninia, Deposited at Insect Museum of Tabriz University).

***Tephritis hyoscyami* (Linnaeus, 1758)**

Material examined: 1♂: Qaradervish; 38°56' N 47°27' E, 1439 m, 31 May. 2009 (Collected by S. Khaghaninia, Deposited at Insect Museum of Tabriz University).

ACKNOWLEDGEMENTS

The authors greatly appreciate kind assistance of Prof. Valery A. Korneyev, Schmalhausen Institute of Zoology, National Academy of Sciences of Ukraine, Kiev, for determination most of material, language improvements and general editing of the manuscript at its early stage.

LITERATURE CITED

- Becker, T.** 1913. Persische Dipteren von den Expeditionen des Herrn N. Zarudny 1898 und 1901. *Ezheg. Zool. Muz.*, (1912) 17: 503-654.
- Freidberg, A.** 1984. Gall Tephritidae (Diptera). In: Ananthakrishnan, T. N. (ed.), *Biology of Gall Insects*, Oxford and IBH Publishing Co., New Delhi: 129-167.
- Gharali, B., Merz, B. & Lotfalizadeh, H.** 2006. The first report of *Urophora impicta* (Hering, 1942) (Diptera: Tephritidae) from Iran. *Proceedings of the 18th Iranian plant protection congress*. p. 96.
- Gilasian, E. & Merz, B.** 2008. The first report of three genera and fifteen species of Tephritidae (Diptera) from Iran. *Journal of Entomological Society of Iran*, 27: 11-14.
- Karimpour, Y. & Merz, B.** 2006. The first report of *Urophora quadrifasciata* and *Urophora xantippe* (Diptera, Tephritidae) from Iran. *Proceedings of the 17th Iranian plant protection congress*, p. 73.
- Korneyev, V. A.** 2003. New and little-known Tephritidae (Diptera, Cyclorhapha) from Europe. *Vestnik zoologii*, 37: 3-12.
- Merz, B.** 2001. Faunistics of the Tephritidae (Diptera) of the Iberian Peninsula and the Balears. *Bulletin de la Societe Entomologique Suisse*, 74: 91-98.
- Mohammadzade Namin, S. & Rasolian, G. H.** 2009. Fruit flies of the genus *Rhagoletis* Loew (Diptera: Tephritidae) of Iran and bordering countries, with the key to species. *Vest. Zool.*, 43 (1): 81-86.
- Mohammadzade Namin, S., Nozari, J. & Rasolian, G. H.** 2010. The fruit flies (Diptera, Tephritidae) in Tehran province, with new records for Iranian fauna. *Vestnik zoologii*, 44 (1): 20-31.
- Mohammadzade Namin S. & Nozari, J.** 2010. The first report of two new genera of the subfamily Tephritinae (Diptera: Tephritidae) from Iran. *Journal of Iranian Entomological Society*, in press.
- Parchami Araghi, M.** 1995. Introduce of *Dacus ciliatus* Loew (Dip.: Tephritidae) from Iran. *Proceedings of the 12th Iranian plant protection congress*, 160-161.
- White, I. M.** 1988. Tephritid flies: Handbooks for the identification of British insects. Vol. 10, part 5a. London: Royal Entomological Society of London. 134 pp.
- White, I. M. & Elson-Harris, M. M.** 1992. Fruit flies of economic significance: their identification and bionomics. 601 pp. CAB international.