

**A NEW RECORD FOR FLOWER FLIES FAUNA OF TURKEY,
CHRYSOTOXUM LESSONAE (GIGLIO-TOS, 1890)
(DIPTERA: SYRPHIDAE)**

Süleyman Sarıbiyik*

* Kastamonu Üniversitesi, Eğitim Fakültesi, 37200, Kastamonu, TÜRKİYE. E-mail: suleyman4606@gmail.com

[Sarıbiyik, S. 2011. A new record for flower flies fauna of Turkey, *Chrysotoxum lessonae* (Giglio-Tos, 1890) (Diptera: Syrphidae). Munis Entomology & Zoology, 6 (1): 422-424]

ABSTRACT: *Chrysotoxum lessonae* (Giglio-Tos, 1890) is recorded for the first time from Turkey in Bolu, Çankırı and Kastamonu provinces.

KEY WORDS: Syrphidae, New record, Turkey.

Hoverflies (Syrphidea) are distributed worldwide, with the greatest species diversity in the New World Tropics. More than 6000 species have been described so far, but probably about 14000 species could belong to the family. Many books are available for the identification of adult stages, at least for Western Palaearctic taxa. The genus *Chrysotoxum* has been recognised from the beginning of XIX century as *Antiopa*. While most authors agree in placing the genus within the Syrphini the taxonomic ranks of several entities it comprises are contested. More than 110 *Chrysotoxum* species have been described so far and, according to Peck (1988), 19 are present in Europe (Caucasus excluded). Several of these species have been described on the basis of small differences in abdomen or leg colour and in other subtle morphological traits (Masetti et. al., 2006).

Until now, ten species of the genus *Chrysotoxum* have been recorded from Turkey, by Turkish and foreign researchers (Table 1).

MATERIAL AND METHODS

The specimens were collected from yellow flowered compositae found near the small water flows in the *Abies* sp. and *Pinus* sp. (Pinaceae) forests in Ilgaz Mountains (Çankırı). With the present work, five specimens were collected from Bolu (Abant), Çankırı (Ilgaz Mountains) and Kastamonu (Küre, Masruf pass). Flies were prepared and labelled following standart protocols for museum material. The following works were used for species identification: Sack, (1932), Violovich, (1974) and Bradescu, 1991. The samples were collected by the author. The specimens are preserved in the personal collection of the author.

RESULTS

Chrysotoxum lessonae (Giglio-Tos, 1890)

Material examined: 1 ♂, Bolu, Abant, 1120m., 19.VII.1995., 1 ♂, Çankırı, Ilgaz Mountain National Park, 1900 m., 08.VIII.1997, 2 ♂♂, Çankırı, Ilgaz Mountain National Park, 1900 m., 18.VIII.2004, 1 ♀, Kastamonu, Küre Masruf pass, 1250 m., 30.VIII.1996.

Flower visited: Yellow flowered Compositae.

Range: Italy, Roumania (Peck, 1988).

This is a new record for the Turkish fauna.

Table 1. The list is included known Turkish *Chrysotoxum* species.

Genus	Species	References pertaining to Turkey
<i>Chrysotoxum</i>	1. <i>Chrysotoxum bicinctum</i> (L., 1758)	Dirickx (1994), Sarıbiyik (2000, 2003a,b,d), Sarıbiyik & Hasbenli (2006), Speight (2008)
	2. <i>Chrysotoxum cautum</i> (Haris, 1776)	Tuatay et. al. (1967, 1972), Dirickx (1994), Hurkmans et al. (1997), Sarıbiyik (1999, 2003a, b, d), Sarıbiyik & Hasbenli (2006), Reemer & Smit (2007), Speight (2008)
	3. <i>Chrysotoxum elegans</i> Loew, 1841	Dirickx (1994), Speight (2008)
	4. <i>Chrysotoxum fasciolatum</i> (de Geer, 1776)	Sarıbiyik (2000, 2003b, d)
	5. <i>Chrysotoxum festivum</i> (L., 1758)	Bischof (1902), Hayat & Alaoğlu (1990), Dirickx (1994), Sarıbiyik & Aktaş (1996), Hurkmans & Hayat (1997), Hurkmans et al. (1997), Sarıbiyik (1999, 2000, 2003a,b,d), Sarıbiyik & Hasbenli (2006), Reemer & Smit (2007), Speight (2008)
	6. <i>Chrysotoxum impressum</i> Becker, 1921	Dirickx (1994)
	7. <i>Chrysotoxum intermedium</i> Meigen, 1822	Bischof (1902), Sack (1932), Gadeau De Kerville (1939), Özgür (1987), Claussen & Lucas (1988), Dirickx (1994), Sarıbiyik & Aktaş (1996), Sarıbiyik (1999, 2000, 2003a,b,c,d), Sarıbiyik & Hasbenli (2006), Reemer & Smit (2007)
	8. <i>Chrysotoxum octomaculatum</i> Curtis, 1837	Hurkmans et al. (1997)
	9. <i>Chrysotoxum parmense</i> Rondani, 1845	Sack (1932), Violovich, (1974), Özgür (1987), Claussen & Lucas (1988), Dirickx (1994), Sarıbiyik & Aktaş (1996), Hurkmans et al. (1997), Sarıbiyik (1999, 2000, 2003a,b,d), Sarıbiyik & Hasbenli (2006), Speight (2008)
	10. <i>Chrysotoxum vernale</i> Loew, 1841	Hurkmans et al. (1997)

LITERATURE CITED

- Bischof, J.** 1902. Ergebnisse einer naturwissenschaftlichen Reise zum Erdschias Dagh (Kleinasien). Annales des k. naturhistorischen Hofmuseums, 20: 1-9.
- Bradescu, V.** 1991. Les syrphides de Roumanie (Diptera: Syrphidae) cles de determinationet repartition. Trav. Mus. Hist. nat. "Grigore Antipa", 31: 7-83.
- Claussen, C. & Lucas, Jan, A. W.** 1988. Zur Kenntnis der Schwebfliegenfauna der Insel Kreta mit der Beschreibung von *Eumerus minotaurus* sp. n. (Diptera: Syrphidae). Zeitschrift Entomologie, 9: 133-168.
- Dirickx, H. G.** 1994. Atlas des Diptères syrphides de la région méditerranéenne. Studiedocumenten van het Koninklijk Belgisch Instituut voor Natuurwetenschappen, 75: 1-317.
- Gadeau De Kerville, H.** 1939. Voyage Zoologique Liste méthodique des invertébrés et des vertébrés récoltés en Asie-Mineure (avril-mai 1912). Paul le chevalier, 1-148, Paris.

- Hayat, R. & Alaoğlu, Ö.** 1990. Fauna of Syrphidae (Diptera) in the vicinity of Erzurum (Part I) Syrphinae. Türkiye Entomoloji Dergisi, 14 (3): 173-182.
- Hurkmans, W., Hayat, R. & Özbek, H.** 1997. Insect and plants of a marsh at Küçükgeçit, Aşkale, Erzurum, Turkey: A preview on preservation. Türkiye Entomoloji Dergisi, 21 (2): 95-108.
- Hurkmans, W. & Hayat, R.** 1997. Ethology and ecology of Merodon (Diptera: Syrphidae) in Turkey II: descriptions of new species and notes on other syrphid flies. Dipterists Digest., 3: 62-79.
- Masetti A., Luchetti A., Sommaggio D., Burgio G. & Mantovani B.** 2006. Phylogeny of *Chrysotoxum* species (Diptera: Syrphidae) inferred from morphological and molecular characters. Eur. J. Entomol., 103: 459-467.
- Özgür, A. F.** 1987. Akdeniz Bölgesi kıyı şeridi Syrphidae (Diptera) faunası II. Altfamilya: Cheilosiniinae, Spheginiinae, Pelecocerinae, Milesiinae, Chysotoxinae, Volucellinae, Çukurova Üniversitesi, Ziraat Fakültesi Yayınları, 2 (3): 67-81.
- Reemer, M. & Smit, J.** 2007. Some hoverfly records from Turkey (Diptera: Syrphidae), Volucella, 8: 135-146.
- Sack, P.** 1928-1932. Syrphidae. In, Lindner, E. Die Fliegen der paläarktischen Region, IV (6). Stuttgart, Germany. +451 pp. 18 pls.
- Sarıbiyik, S.** 1999. Syrphinae Fauna of the West Blacksea Region, (Diptera: Syrphidae), Gazi Üniversitesi Kastamonu Eğitim Dergisi, 7 (1): 185-194.
- Sarıbiyik, S.** 2000. Fauna of Syrphidae in Ilgaz and Işık Mountains and their vicinity (Diptera: Syrphinae). Gazi Üniversitesi Fen Bilimleri Dergisi, 13 (1): 55-70.
- Sarıbiyik, S.** 2003a. Fauna of Syrphinae and Milesiinae (Diptera: Syrphidae) Around Tuz Lake. Gazi Üniversitesi Kastamonu Eğitim Dergisi, 11 (2): 439-450.
- Sarıbiyik, S.** 2003b. The Evaluation of the Works on Syrphidae (Diptera) Fauna in the Western Blacksea Region. Gazi Üniversitesi Kastamonu Eğitim Dergisi, 11 (2): 461-466.
- Sarıbiyik, S.** 2003c. Syrphinae Fauna of the Kahramanmaraş's Andırın Town (Diptera: Syrphidae). Gazi Üniversitesi Kastamonu Eğitim Dergisi, 11 (1): 193-198.
- Sarıbiyik, S.** 2003d. Kastamonunun Syrphid Sinekleri (Diptera: Syrphidae). II. Kastamonu Kültür Sempozyumu (18-20 Eylül 2003), 707-719.
- Sarıbiyik, S. & Aktas, M.** 1996. Contribution to the Syrphidae fauna of Turkey (Diptera: Syrphidae) (1). Gazi Üniversitesi Fen Bilimleri Dergisi, 9 (1): 1-13.
- Sarıbiyik, S. & Hasbenli, A.** 2006. Fauna of Syrphinae and Milesiinae (Diptera, Syrphidae) in the Region of South-West Anatolia. Journal of the Entomological Research Society, 8 (1): 43-52.
- Speight M. C. D.** 2008. Species accounts of European Syrphidae (Diptera) 2008. In: Speight, M. C. D., Castella, E., Sarthou, J. P. & Monteil, C. (eds). Syrph the Net, the database of European Syrphidae, 55: 262 pp.
- Tuatay, N., Gül, S., Demirtola, A., Kalkandelen A. & Çagatay, N.** 1967. Nebat Koruma Müzesi Böcek Kataloğu (1961-1966). Zirai Mücadele ve Zirai Karantina Genel Müdürlüğü Yayınları, Mesleki Kitaplar Serisi, Ankara 66 pp.
- Tuatay, N., Kalkandelen, A. & Aysev (Çagatay), N.** 1972. Nebat Koruma Müzesi Böcek Kataloğu (1961-1971). Zirai Mücadele ve Zirai Karantina Genel Müdürlüğü Yayınları Mesleki Kitaplar Serisi, Ankara p. 119.
- Violovich, N. A.** 1974. A review of the palearctic species of the genus *Chrysotoxum* Mg. (Diptera: Syrphidae). Ent. Review., 53 (1): 140-153.