

FAUNA OF FRUIT FLIES (DIPTERA: TEPHRITIDAE) IN KIRŞEHİR PROVINCE

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ABSTRACT: This study depends on Tephritidae (Diptera) samples collected from Kırşehir province during the years of 2012-2013. Specimens were collected from host plants using an insect net. Also photos of the wing patterns were given in this paper.

KEY WORDS: Diptera, Tephritidae, Kırşehir, Turkey

Fruit flies show a wide distribution in the world and these are high profile insects among commercial fruit and vegetable growers, marketers, exporters, government regulatory and the scientific community. Producers encounter significant losses without controlling methods against fruit fly populations locally. So that plant protection agencies strictly regulate the transportation of potentially infested products at both national and international levels (McPherson & Steck, 1996). Koçak & Kemal (2013) reported 156 fruit fly species from Turkey. Yaran & Kütük (2014) described *Urophora turkeyensis* from Niğde. Yaran (2014) recorded *Dioxyina sororcula*, *Terellia ivannikovi* and *Urophora trinervii* in his PhD. thesis for the first time from Turkey. Thus, 160 fruit fly species are known to date from Turkey.

In this study, we collected 1019 fruit flies specimens from Kırşehir province in 2012-2013 spring and summers and identified 36 species of fruit flies belongs to 12 genera of 3 subfamilies.

MATERIALS AND METHODS

Adult fruit flies materials were collected from host plants using an insect net in various locations of Kırşehir province in 2012 and 2013. Species were identified using the keys of Hendel (1927), White (1988), Freidberg & Kugler (1989), Merz (1994), Korneyev & White (1993 and 1999), Kütük (2003, 2006), Korneyev (2003, 2006), and Korneyev et al. (2013). Materials are deposited at the insect museum of Gaziantep University.

RESULTS

At the end of study, 36 species belonging to 12 genera in 3 subfamilies were determined listed below from Kırşehir province. In this study, 33 species of fruit flies recorded from Kırşehir for the first time. Faunistic findings and the diagnostic wing pattern of the species are given as pictures.

Acanthiophilus helianthi (Rossi, 1794); (Fig. 1)

Material examined: 1 ♂, Kırşehir, Kesikköprü, 38° 58' K, 34° 11' D, 859 m, 08.05.2013; 2 ♂♂, 2 ♀♀, Center, 39° 23' K, 34° 14' D, 1168 m, 19.06.2013; 1 ♂, Akçakent, 39° 34' K, 34° 19' D, 1307 m, 19.06.2013; 1 ♀, Center, 38° 50' K, 34° 08' D, 981 m, 20.06.2013; 1 ♀, Mucur, 39° 01' K, 34° 26' D, 1051 m, 03.07.2013; 1 ♂, Center, 39° 19' K, 34° 09' D, 1110 m, 03.07.2013.

Campiglossa producta (Loew, 1844); (Fig. 2)

Material examined: 2 ♂♂, 4 ♀♀, Kırşehir, Çiçekdağı, 39° 27' K, 34° 18' D, 1279 m, 08.05.2013; 2 ♂♂, Akçakent, 39° 34' K, 34° 18' D, 1363 m, 19.06.2013; 1 ♂, Mucur, 39° 01' K, 34° 26' D, 1051 m, 03.07.2013.

Chaetorellia carthami Stackelberg, 1929; (Fig. 3)

Material examined: 1 ♀, Kırşehir, Center, 39° 01' K, 34° 10' D, 967 m, 08.05.2013; 1 ♂, Mucur, 39° 04' K, 34° 17' D, 1181 m, 09.05.2013; 1 ♂, Mucur, 39° 03' K, 34° 26' D, 1108 m, 27.05.2013; 2 ♂♂, 2 ♀♀, Center, 38° 50' N, 34° 08' D, 974 m, 27.05.2013; 9 ♂♂, Center, 39° 03' K, 34° 10' D, 1011 m, 27.05.2013; 1 ♂, Mucur, 39° 01' K, 34° 26' D, 1043 m, 19.06.2013; 1 ♂, Center, 39° 05' K, 34° 14' D, 1161 m, 19.06.2013; 1 ♀, Center, 39° 23' K, 34° 14' D, 1168 m, 19.06.2013; 1 ♂, Akçakent, 39° 34' K, 34° 23' D, 1257 m, 19.06.2013; 2 ♀♀, Center, 38° 50' K, 34° 08' D, 981 m, 20.06.2013; 1 ♂, Center, 38° 56' K, 34° 11' D, 899 m, 20.06.2013; 1 ♂, Center, 39° 19' K, 34° 09' D, 1110 m, 03.07.2013.

Chaetorellia loricata (Rondani, 1830); (Fig. 4)

Material examined: 1 ♂, 1 ♀, Kırşehir, Center, 38° 50' N, 34° 08' D, 974 m, 27.05.2013; 7 ♂♂, 3 ♀♀, Center, 39° 03' K, 34° 10' D, 1011 m, 27.05.2013; 1 ♂, Center, 39° 05' K, 34° 14' D, 1161 m, 19.06.2013; 2 ♀♀, Center, 39° 23' K, 34° 14' D, 1168 m, 19.06.2013; 1 ♂, Akçakent, 39° 34' K, 34° 23' D, 1257 m, 19.06.2013; 1 ♀, Center, 38° 56' K, 34° 11' D, 899 m, 20.06.2013; 1 ♂, 1 ♀, Center, 38° 50' K, 34° 08' D, 981 m, 20.06.2013.

Chaetorellia succinea (Costa, 1844); (Fig. 5)

Material examined: 1 ♂, 1 ♀, B145- Kırşehir, Mucur, 39° 04' K, 34° 17' D, 1181 m, 09.05.2013; 1 ♂, Center, 39° 01' K, 34° 10' D, 967 m, 08.05.2013; 1 ♂, 1 ♀, Boztepe, 39° 10' K, 34° 11' D, 1157 m, 08.05.2013; 1 ♂, 3 ♀♀, Mucur, 39° 03' K, 34° 26' D, 1108 m, 27.05.2013; 1 ♂, Center, 39° 03' K, 34° 10' D, 1011 m, 27.05.2013; 1 ♂, Center, 38° 50' N, 34° 08' D, 974 m, 27.05.2013; 2 ♂♂, Mucur, 39° 01' K, 34° 26' D, 1043 m, 19.06.2013; 2 ♂♂, Center, 39° 05' K, 34° 14' D, 1161 m, 19.06.2013; 4 ♂♂, 3 ♀♀, Center, 39° 23' K, 34° 14' D, 1168 m, 19.06.2013; 1 ♀, Akçakent, 39° 34' K, 34° 19' D, 1307 m, 19.06.2013; 1 ♂, 1 ♀, Center, 38° 50' K, 34° 08' D, 981 m, 20.06.2013; 1 ♂, Center, 39° 01' K, 34° 10' D, 965 m, 20.06.2013.

Chaetostomella cylindrica (Robineau - Desvoidy, 1830); (Fig. 6)

Material examined: 1 ♂, Kırşehir, Çoğun, 39° 15' K, 34° 07' D, 1050 m, 27.06.2012; 2 ♀♀, Center, 39° 19' K, 34° 09' D, 1114 m, 19.06.2013; 2 ♀♀, Center, 38° 50' K, 34° 12' D, 991 m, 20.06.2013; 4 ♂♂, 2 ♀♀, Akçakent, 39° 34' K, 34° 19' D, 1307 m, 19.06.2013; 1 ♂, 1 ♀, Center, 38° 50' K, 34° 08' D, 981 m, 20.06.2013; 1 ♂, Mucur, 39° 04' K, 34° 17' D, 1181 m, 09.05.2013; 4 ♂♂, 1 ♀, Mucur, 39° 01' K, 34° 26' D, 1043 m, 19.06.2013; 1 ♀, Center, 38° 50' K, 34° 12' D, 991 m, 20.06.2013; 1 ♂, Center, 38° 56' K, 34° 11' D, 899 m, 20.06.2013; 1 ♂, 1 ♀, Center, 39° 19' K, 34° 09' D, 1110 m, 03.07.2013; 1 ♂, Center, 39° 01' K, 34° 10' D, 967 m, 08.05.2013; 1 ♀, Akçakent, 39° 34' K, 34° 23' D, 1257 m, 19.06.2013.

Euaresta bullans (Wiedemann, 1830); (Fig. 7)

Material examined: 1 ♂, Kırşehir, Çoğun, 39° 19' K, 34° 09' D, 1121 m, 27.06.2012; 1 ♀, Mucur, 39° 01' K, 34° 26' D, 1043 m, 19.06.2013; 1 ♂, Center, 39° 19' K, 34° 09' D, 1114 m, 19.06.2013; 13 ♀♀, Akçakent, 39° 34' K, 34° 19' D, 1307 m, 19.06.2013; 1 ♀, Center, 38° 50' K, 34° 08' D, 981 m, 20.06.2013; 1 ♂, Center, 39° 19' K, 34° 09' D, 1110 m, 03.07.2013; 1 ♂, 1 ♀, Center, 39° 19' K, 34° 09' D, 1113 m, 03.07.2013.

Orellia falcata Scopoli, 1763; (Fig. 8)

Material examined: 4 ♂♂, 5 ♀♀, Kırşehir, Mucur, 39° 04' K, 34° 17' D, 1181 m, 09.05.2013; 1 ♀, Center, 39° 01' K, 34° 10' D, 967 m, 08.05.2013; 4 ♂♂, 4 ♀♀, Mucur, 39° 03' K, 34° 26' D, 1108 m, 27.05.2013.

Orellia stictica (Gmelin, 1790); (Fig. 9)

Material examined: 1 ♀, Kırşehir, Mucur, 39° 01' K, 34° 26' D, 1051 m, 03.07.2013; 1 ♀, Mucur, 39° 04' K, 34° 17' D, 1181 m, 09.05.2013.

Oxyina flavipennis (Loew, 1844); (Fig. 10)

Material examined: 5 ♂♂, Kırşehir, Akçakent, 39° 34' K, 34° 18' D, 1363 m, 19.06.2013;

4 ♂♂, 2 ♀♀, Akçakent, 39° 34' K, 34° 19' D, 1307 m, 19.06.2013.

Sphenella marginata (Fallen, 1814); (Fig. 11)

Material examined: 1 ♂, 1 ♀, Kırşehir, Boztepe, 39° 10' K, 34° 11' D, 1157 m, 08.05.2013; 1 ♀, Mucur, 39° 01' K, 34° 26' D, 1051 m, 03.07.2013; 1 ♀, Center, 39° 27' K, 34° 18' D, 1274 m, 03.07.2013; 1 ♂♂, 1 ♀, Center, 39° 19' K, 34° 09' D, 1113 m, 03.07.2013.

Tephritis cometa (Loew, 1840); (Fig. 12)

Material examined: 1 ♂, Kırşehir, Çoğun, 39° 19' K, 34° 09' D, 1121 m, 27.06.2012.

Tephritis dioscurea (Loew, 1856); (Fig. 13)

Material examined: 2 ♂♂, 1 ♀, Kırşehir, Çiçekdağı, 39° 27' K, 34° 18' D, 1279 m, 08.05.2013.

Tephritis formosa (Loew, 1844); (Fig. 14)

Material examined: 1 ♀, Kırşehir, Center, 38° 50' K, 34° 08' D, 981 m, 20.06.2013; 1 ♂, 1 ♀, Center, 39° 19' K, 34° 09' D, 1113 m, 03.07.2013.

Tephritis frauenfeldi Hendel, 1927; (Fig. 15)

Material examined: 1 ♂, Kırşehir, Akçakent, 39° 34' K, 34° 19' D, 1307 m, 19.06.2013.

Tephritis hyoscyami (Linnaeus, 1758); (Fig. 16)

Material examined: 1 ♂, Kırşehir, Çiçekdağı, 39° 27' K, 34° 18' D, 1279 m, 08.05.2013; 1 ♀, Center, 39° 23' K, 34° 14' D, 1168 m, 19.06.2013.

Tephritis postica (Loew, 1844); (Fig. 17)

Material examined: 3 ♂♂, 2 ♀♀, Kırşehir, Çoğun, 39° 21' K, 34° 10' D, 1182 m, 27.06.2012; 2 ♂♂, Kesikköprü, 38° 58' K, 34° 11' D, 859 m, 08.05.2013; 1 ♀, Boztepe, 39° 10' K, 34° 11' D, 1157 m, 08.05.2013; 7 ♂♂, 10 ♀♀, Mucur, 39° 03' K, 34° 26' D, 1108 m, 27.05.2013; 1 ♂, Center, 38° 50' N, 34° 08' D, 974 m, 27.05.2013; 1 ♀, Mucur, 39° 01' K, 34° 26' D, 1043 m, 19.06.2013; 10 ♂♂, 4 ♀♀, Center, 39° 19' K, 34° 09' D, 1114 m, 19.06.2013; 3 ♂♂, 1 ♀, Center, 39° 23' K, 34° 14' D, 1168 m, 19.06.2013; 3 ♀♀, Akçakent, 39° 34' K, 34° 19' D, 1307 m, 19.06.2013.

Tephritis praecox (Loew, 1844); (Fig. 18)

Material examined: 1 ♀, Kırşehir, Çiçekdağı, 39° 27' K, 34° 18' D, 1279 m, 08.05.2013; 1 ♀, Akçakent, 39° 34' K, 34° 19' D, 1307 m, 19.06.2013.

Terellia gynaecochroma (Hering, 1937); (Fig. 19)

Material examined: 5 ♂♂, 1 ♀, Kırşehir, Çoğun, 39° 21' K, 34° 10' D, 1182 m, 27.06.2012; 5 ♂♂, 6 ♀♀, Mucur, 39° 03' K, 34° 26' D, 1108 m, 27.05.2013; 7 ♂♂, 4 ♀♀, Center, 38° 50' N, 34° 08' D, 974 m, 27.05.2013; 20 ♂♂, 19 ♀♀, Mucur, 39° 01' K, 34° 26' D, 1043 m, 19.06.2013; 11 ♂♂, 6 ♀♀, Center, 39° 01' K, 34° 10' D, 967 m, 08.05.2013; 10 ♂♂, 7 ♀♀, Center, 38° 56' K, 34° 11' D, 899 m, 20.06.2013; 2 ♂♂, Center, 39° 27' K, 34° 18' D, 1274 m, 03.07.2013; 1 ♂, Center, 39° 23' K, 34° 14' D, 1168 m, 19.06.2013; 1 ♀, Center, 39° 19' K, 34° 09' D, 1113 m, 03.07.2013; 1 ♂, 1 ♀, Center, 39° 19' K, 34° 09' D, 1114 m, 19.06.2013; 1 ♀, Mucur, 39° 01' K, 34° 26' D, 1051 m, 03.07.2013; 1 ♂, Akçakent, 39° 34' K, 34° 19' D, 1307 m, 19.06.2013; 1 ♀, Center, 39° 03' K, 34° 10' D, 1011 m, 27.05.2013; 2 ♀♀, Çiçekdağı, 39° 27' K, 34° 18' D, 1279 m, 08.05.2013; 2 ♂♂, 2 ♀♀, Kesikköprü, 38° 58' K, 34° 11' D, 859 m, 08.05.2013; 1 ♂, Center, 39° 19' K, 34° 09' D, 1110 m, 03.07.2013; 2 ♀♀, Center, 38° 50' K, 34° 08' D, 981 m, 20.06.2013.

Terellia luteola (Wiedemann, 1830); (Fig. 20)

Material examined: 2 ♂♂, 1 ♀, Kırşehir, Çoğun, 39° 15' K, 34° 07' D, 1050 m, 27.06.2012; 7 ♂♂, 6 ♀♀, Center, 39° 01' K, 34° 10' D, 965 m, 20.06.2013; 5 ♂♂, 4 ♀♀, Center, 38° 56' K, 34° 11' D, 899 m, 20.06.2013; 1 ♂, Mucur, 39° 01' K, 34° 26' D, 1043 m, 19.06.2013; 3 ♂♂, Center, 39° 05' K, 34° 14' D, 1161 m, 19.06.2013; 1 ♀, Center, 39° 03' K, 34° 10' D, 1011 m, 27.05.2013; 1 ♀, Center, 38° 50' N, 34° 08' D, 974 m, 27.05.2013; 1 ♂, Kesikköprü, 38° 58' K, 34° 11' D, 859 m, 08.05.2013; 1 ♂, Center, 39° 19' K, 34° 09' D, 1113 m, 03.07.2013.

Terellia quadratula (Loew, 1869); (Fig. 21)

Material examined: 1 ♂, 1 ♀, Kırşehir, Çoğun, 39° 31' K, 34° 22' D, 1060 m, 27.06.2012; 8 ♂♂, 1 ♀, Center, 39° 05' K, 34° 14' D, 1161 m, 19.06.2013; 1 ♀, Akçakent, 39° 34' K, 34° 19' D, 1307 m, 19.06.2013.

Terellia ruficauda (Fabricius, 1794); (Fig. 22)

Material examined: 2 ♂♂, 1 ♀, Kırşehir, Çoğun, 39° 19' K, 34° 09' D, 1121 m, 27.06.2012; 3 ♂♂, Center, 39° 19' K, 34° 09' D, 1114 m, 19.06.2013; 2 ♂♂, Mucur, 39° 01' K, 34° 26' D, 1051 m, 03.07.2013; 1 ♂, 1 ♀, Center, 39° 19' K, 34° 09' D, 1110 m, 03.07.2013; 1 ♀♀, Center, 39° 19' K, 34° 09' D, 1113 m, 03.07.2013.

Terellia serratulae (Linnaeus, 1758); (Fig. 23)

Material examined: 1 ♂, 2 ♀♀, Kırşehir, Çoğun, 39° 19' K, 34° 09' D, 1121 m, 27.06.2012; 21 ♂♂, 10 ♀♀, Kesikköprü, 38° 58' K, 34° 11' D, 859 m, 08.05.2013; 23 ♂♂, 7 ♀♀, Center, 39° 19' K, 34° 09' D, 1110 m, 03.07.2013; 8 ♂♂, 3 ♀♀, Center, 39° 19' K, 34° 09' D, 1114 m, 19.06.2013; 4 ♂♂, 3 ♀♀, Boztepe, 39° 10' K, 34° 11' D, 1157 m, 08.05.2013; 8 ♂♂, 3 ♀♀, Mucur, 39° 01' K, 34° 26' D, 1051 m, 03.07.2013; 6 ♂♂, 3 ♀♀, Mucur, 39° 03' K, 34° 26' D, 1108 m, 27.05.2013; 3 ♂♂, 4 ♀♀, Akçakent, 39° 34' K, 34° 19' D, 1307 m, 19.06.2013; 11 ♂♂, 1 ♀, Center, 39° 27' K, 34° 18' D, 1274 m, 03.07.2013; 6 ♂♂, 4 ♀♀, Çiçekdağı, 39° 27' K, 34° 18' D, 1279 m, 08.05.2013; 4 ♂♂, Center, 39° 23' K, 34° 14' D, 1168 m, 19.06.2013; 3 ♂♂, 1 ♀, Center, 39° 03' K, 34° 10' D, 1011 m, 27.05.2013; 2 ♂♂, Mucur, 39° 03' K, 34° 26' D, 1108 m, 27.05.2013; 1 ♂, 2 ♀♀, Mucur, 39° 01' K, 34° 26' D, 1043 m, 19.06.2013; 6 ♂♂, 3 ♀♀, Center, 39° 01' K, 34° 10' D, 967 m, 08.05.2013; 2 ♂♂, 1 ♀, Ortaköy, 38° 48' K, 34° 07' D, 1022 m, 08.05.2013; 3 ♂♂, 1 ♀, Center, 38° 56' K, 34° 11' D, 899 m, 20.06.2013; 1 ♀, Center, 38° 50' N, 34° 08' D, 974 m, 27.05.2013; 1 ♂, 1 ♀, Kesikköprü, 38° 58' K, 34° 11' D, 859 m, 08.05.2013; 1 ♂, Center, 39° 19' K, 34° 09' D, 1113 m, 03.07.2013; 1 ♂, Çiçekdağı, 39° 27' K, 34° 18' D, 1279 m, 08.05.2013; 3 ♀♀, Center, 39° 01' K, 34° 10' D, 965 m, 20.06.2013.

Terellia tussilaginis (Fabricius, 1775); (Fig. 24)

Material examined: 1 ♀, Kırşehir, Center, 39° 19' K, 34° 09' D, 1113 m, 03.07.2013.

Terellia virens (Loew, 1846); (Fig. 25)

Material examined: 3 ♂♂, Kırşehir, Çoğun, 39° 15' K, 34° 07' D, 1050 m, 27.06.2012; 1 ♂, Çoğun, 39° 19' K, 34° 09' D, 1121 m, 27.06.2012; 8 ♂♂, 7 ♀♀, Center, 39° 03' K, 34° 10' D, 1011 m, 27.05.2013; 1 ♂, Akçakent, 39° 34' K, 34° 19' D, 1307 m, 19.06.2013; 1 ♀, Mucur, 39° 01' K, 34° 26' D, 1043 m, 19.06.2013; 2 ♂♂, 2 ♀♀, Ortaköy, 38° 48' K, 34° 07' D, 1022 m, 08.05.2013; 3 ♂♂, 2 ♀♀, Mucur, 39° 01' K, 34° 26' D, 1051 m, 03.07.2013; 5 ♂♂, 1 ♀, Center, 39° 19' K, 34° 09' D, 1110 m, 03.07.2013; 4 ♂♂, 1 ♀, Center, 39° 19' K, 34° 09' D, 1114 m, 19.06.2013; 3 ♂♂, 5 ♀♀, Center, 39° 05' K, 34° 14' D, 1161 m, 19.06.2013; 1 ♀, Center, 38° 50' K, 34° 08' D, 981 m, 20.06.2013; 2 ♂♂, 1 ♀, Boztepe, 39° 10' K, 34° 11' D, 1157 m, 08.05.2013; 2 ♂♂, Kesikköprü, 38° 58' K, 34° 11' D, 859 m, 08.05.2013; 1 ♂, Center, 38° 56' K, 34° 11' D, 899 m, 20.06.2013; 1 ♂, Center, 39° 19' K, 34° 09' D, 1110 m, 03.07.2013; 1 ♂, Center, 38° 50' N, 34° 08' D, 974 m, 27.05.2013; 1 ♂, Center, 39° 01' K, 34° 10' D, 967 m, 08.05.2013; 1 ♂, 1 ♀, Kesikköprü, 38° 58' K, 34° 11' D, 859 m, 08.05.2013; 2 ♂♂, 1 ♀, Mucur, 39° 03' K, 34° 26' D, 1108 m, 27.05.2013.

Urophora affinis (Frauenfeld, 1857); (Fig. 26)

Material examined: 1 ♂, 2 ♀♀, Kırşehir, Çoğun, 39° 19' N, 34° 09' E, 1121 m, 27.06.2012; 63 ♂♂, 26 ♀♀, Center, 39° 19' N, 34° 09' E, 1114 m, 19.06.2013; 1 ♂, Boztepe, 39° 10' K, 34° 11' D, 1157 m, 08.05.2013; Akçakent, 51 ♂♂, 38 ♀♀, 39° 34' K, 34° 19' D, 1307 m, 19.06.2013; 31 ♂♂, 19 ♀♀, Center, 39° 19' K, 34° 09' D, 1110 m, 03.07.2013; 5 ♂♂, 5 ♀♀, Mucur, 39° 01' K, 34° 26' D, 1051 m, 03.07.2013; 5 ♂♂, 2 ♀♀, Center, 39° 19' K, 34° 09' D, 1113 m, 03.07.2013; 7 ♂♂, 3 ♀♀, Mucur, 39° 01' K, 34° 26' D, 1043 m, 19.06.2013; 2 ♀♀, Akçakent, 39° 34' K, 34° 18' D, 1363 m, 19.06.2013; 1 ♂, Center, 38° 50' K, 34° 12' D, 991 m, 20.06.2013; 1 ♂, Center, 39° 23' K, 34° 14' D, 1168 m, 19.06.2013; 1 ♂, Center, 39° 27' K, 34° 18' D, 1274 m, 03.07.2013.

Urophora aprica (Fallen, 1820); (Fig. 27)

Material examined: 2 ♂♂, 1 ♀, Kırşehir, Mucur, 39° 03' K, 34° 26' D, 1108 m, 27.05.2013; 2 ♀♀, Center, 39° 03' K, 34° 10' D, 1011 m, 27.05.2013; 1 ♀, Center, 38° 50' N, 34° 08' D, 974

m, 27.05.2013; 9 ♀♀, Center, 39° 23' K, 34° 14' D, 1168 m, 19.06.2013; 4 ♂♂, 2 ♀♀, Center, 39° 27' K, 34° 18' D, 1274 m, 03.07.2013.

Urophora jaceana (Hering, 1935); (Fig. 28)

Material examined: 1 ♂, Kırşehir, Boztepe, 39° 10' K, 34° 11' D, 1157 m, 08.05.2013; 1 ♂, 7 ♀♀, Center, 39° 03' K, 34° 10' D, 1011 m, 27.05.2013; 1 ♀, Center, 38° 50' N, 34° 08' D, 974 m, 27.05.2013; 1 ♂, Akçakent, 39° 34' K, 34° 18' D, 1363 m, 19.06.2013; 1 ♀, Center, 38° 56' K, 34° 11' D, 899 m, 20.06.2013; 2 ♂♂, 1 ♀, Center, 38° 50' K, 34° 08' D, 981 m, 20.06.2013.

Urophora mauritanica Macquart, 1851; (Fig. 29)

Material examined: 2 ♂♂, 2 ♀♀, Kırşehir, Center, 39° 03' K, 34° 10' D, 1011 m, 27.05.2013; Center, 1 ♀, 39° 23' K, 34° 14' D, 1168 m, 19.06.2013; 3 ♂♂, 19 ♀♀, Akçakent, 39° 34' K, 34° 19' D, 1307 m, 19.06.2013; 1 ♀, Center, 39° 01' K, 34° 10' D, 965 m, 20.06.2013.

Urophora phalolepidis Merz - White, 1991; (Fig. 30)

Material examined: 1 ♂, Kırşehir, Ortaköy, 38° 48' K, 34° 07' D, 1022 m, 08.05.2013; 9 ♂♂, 1 ♀, Center, 39° 03' K, 34° 10' D, 1011 m, 27.05.2013; 2 ♂♂, 1 ♀, Center, 38° 50' N, 34° 08' D, 974 m, 27.05.2013; 1 ♂, Center, 39° 19' K, 34° 09' D, 1114 m, 19.06.2013; 9 ♂♂, Center, 38° 50' K, 34° 08' D, 981 m, 20.06.2013.

Urophora quadrifasciata (Meigen, 1826); (Fig. 31)

Material Examined: 1 ♂, Kırşehir, Center, 38° 50' N, 34° 08' D, 974 m, 27.05.2013.

Urophora solstitialis (Linnaeus, 1758); (Fig. 32)

Material examined: 1 ♂, 1 ♀, Kırşehir, Ortaköy, 38° 48' K, 34° 07' D, 1022 m, 08.05.2013; 4 ♂♂, Center, 39° 03' K, 34° 10' D, 1011 m, 27.05.2013; 2 ♂♂, Center, 38° 50' N, 34° 08' D, 974 m, 27.05.2013; 1 ♂, Mucur, 39° 01' K, 34° 26' D, 1043 m, 19.06.2013; 1 ♂, Center, 38° 50' K, 34° 08' D, 981 m, 20.06.2013.

Urophora stylata (Fabricius, 1775); (Fig. 33)

Material examined: 1 ♂, Kırşehir, Çoğun, 39° 15' K, 34° 07' D, 1050 m, 27.06.2012; 1 ♀, Çoğun, 39° 19' K, 34° 09' D, 1121 m, 27.06.2012; 4 ♂♂, 7 ♀♀, Center, 39° 19' K, 34° 09' D, 1114 m, 19.06.2013; 1 ♀, Center, 38° 50' K, 34° 08' D, 981 m, 20.06.2013; 1 ♀, Akçakent, 39° 34' K, 34° 19' D, 1307 m, 19.06.2013; 2 ♂♂, Mucur, 39° 01' K, 34° 26' D, 1051 m, 03.07.2013; 4 ♂♂, 5 ♀♀, Center, 39° 19' K, 34° 09' D, 1110 m, 03.07.2013.

Urophora tenuior Hendel, 1910; (Fig. 34)

Material examined: 1 ♂, Center, 39° 19' K, 34° 09' D, 1113 m, 03.07.2013.

Urophora terebrans (Loew, 1850); (Fig. 35)

Material examined: 1 ♀, Kırşehir, Center, 38° 50' N, 34° 08' D, 974 m, 27.05.2013.

Xyphosia miliaria (Schrank, 1781); (Fig. 36)

Material examined: 1 ♀, Kırşehir, Akçakent, 39° 34' K, 34° 23' D, 1257 m, 19.06.2013; 1 ♂, Mucur, 39° 01' K, 34° 26' D, 1051 m, 03.07.2013; 1 ♂, Center, 39° 19' K, 34° 09' D, 1110 m, 03.07.2013; 1 ♂, Center, 39° 19' K, 34° 09' D, 1113 m, 03.07.2013.

DISCUSSION AND CONCLUSION

This study is based on the fruit fly specimens collected from Kırşehir province during 2012-2013 spring and summer period. While 398 of 1.019 specimens collected from the study area were female, remain 621 specimens were male.

As a result of study, 36 species belongs to 12 genera from 3 subfamilies have been determined. While 882 fruit flies known in Palearctic region (Alluja & Norrbom, 2000), a total of 156 fruit flies have been determined in Turkey as a result of the faunistic studies (Koçak & Kemal, 2013). It is thought that the number of the species will increase with the maintaining of the faunistic studies like this study in our country which has a wide geography and various climatic regions. Three species of fruit flies *Orellia stictica*, *Terellia virens* and *Urophora solstitialis* were reported in previous years by the Pakyürek (2006) and Bayrak & Hayat (2012) from Kırşehir province. In this study we determined 36 species from

study region and 33 species of fruit flies have been recorded for the first time from Kırşehir.

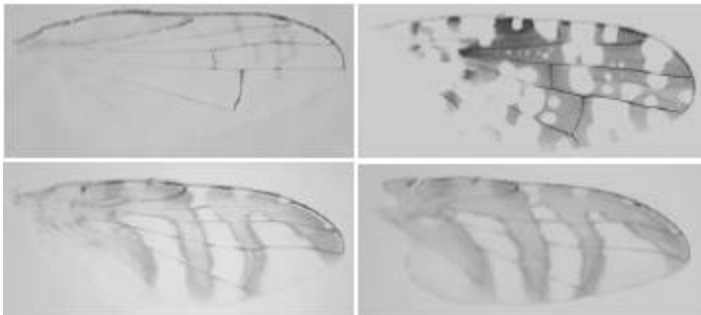
*This study was produced from master thesis of first author.

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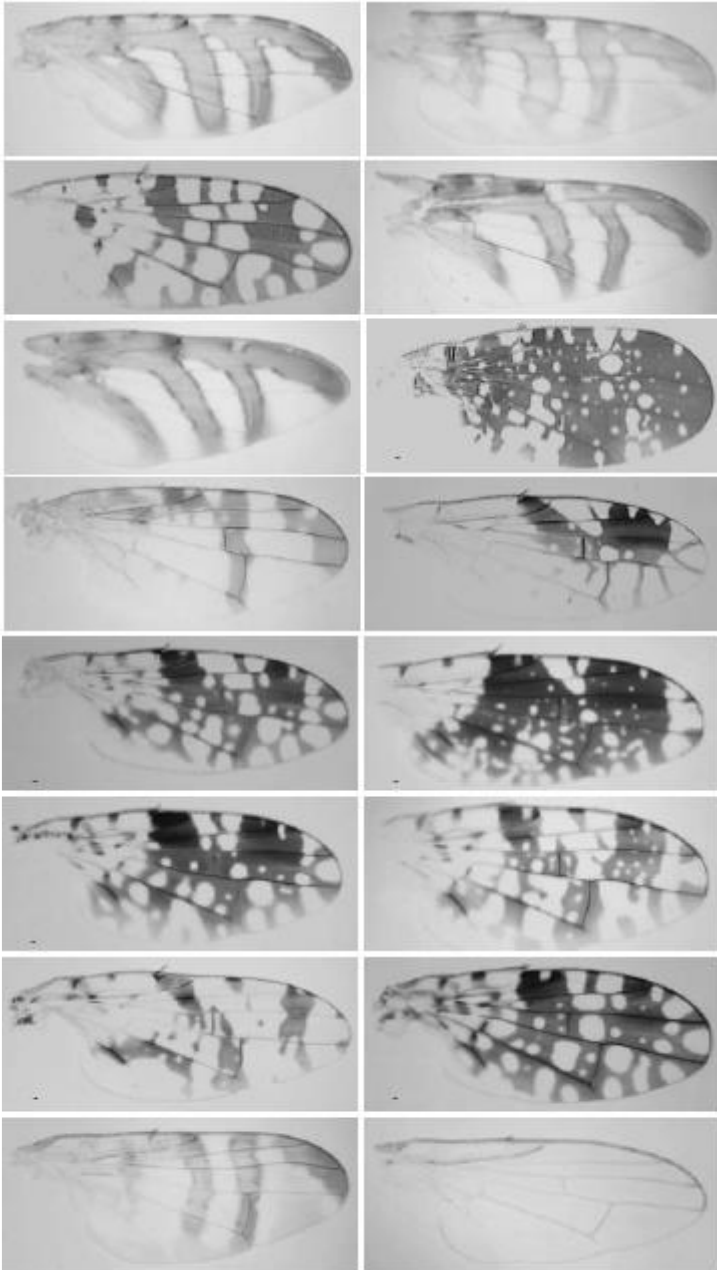
We thank to Gaziantep Scientific Research Projects Department (BAP) for all support (Project Number: FEF 12.11.). This study has been produced from first author's MSc thesis.

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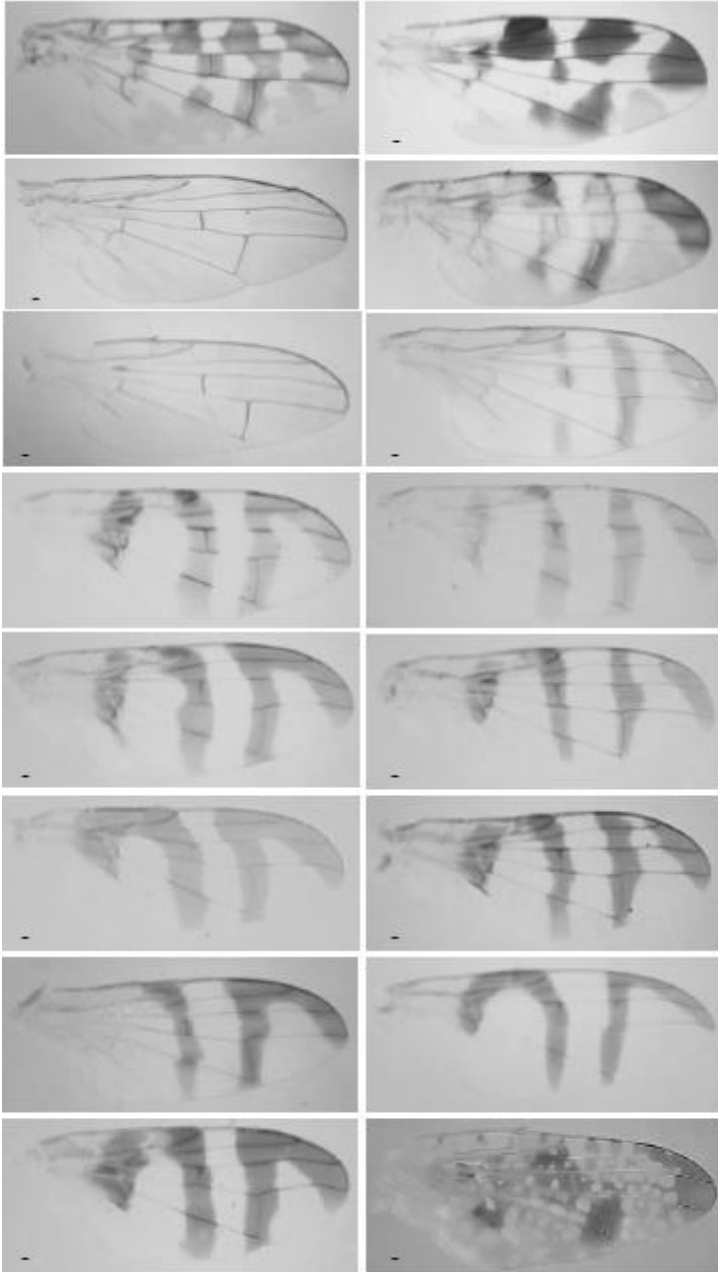
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Figures 1-4. Wings of fruit flies: 1-*Acanthophilus helianthi*, 2-*Campiglossa producta*, 3-*Chaetorellia carthami*, 4-*Cha. loricata*.



Figures 5-20. Wings of fruit flies: 5-*Cha. succinea*, 6-*Chaetostomella cylindrica*, 7-*Euaresta bullans*, 8-*Orellia falcata*, 9-*Or. stictica*, 10-*Oxyyna flavipennis*, 11-*Sphenella marginata*, 12-*Tephritis cometa*, 13-*Tephritis dioscurea*, 14-*Tep. formosa*, 15-*Tep. frauenfeldi*, 16-*Tep. hyoscyami*, 17-*Tep. postica*, 18-*Tep. praecox*, 19-*Terellia gynaecochroma*, 20-*Ter. luteola*.



Figures 21-36. Wings of fruit flies: 21-*Terellia quadratula*, 22-*Ter. ruficauda*, 23-*Ter. serratulae*, 24-*Ter. tussilaginis*, 25-*Ter. virens*, 26-*Urophora affinis*, 27-*U. aprica*, 28-*U. jaceana*, 29-*U. mauritanica*, 30-*U. phalolepidis*, 31-*U. quadrifasciata*, 32-*U. solstitialis*, 33-*U. stylata*, 34-*U. tenuior*, 35-*U. terebrans*, 36-*Xyphosia miliaria*.