

A contribution to the knowledge of the fauna of the families Myrmosidae and Mutillidae (Hymenoptera: Aculeate) in Türkiye

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Summary

Five species in three genera of the family Myrmosidae, and 41 species and subspecies in 13 genera of the family Mutillidae are recorded from various locations of Türkiye, particularly from eastern Anatolia. In addition, the flowers visited for nectar are also presented.

Introduction

The families Myrmosidae and Mutillidae alike each other (sister group) and the first one accepted as subfamily of Mutillidae by various authors (Brothers, 1975; Gauld and Bolton, 1988). However, some British scientists included Myrmosinae in the family Tiphidae (Fitton et al., 1978; Richards, 1980). Currently, Mutillidae and Myrmosidae are treated two separate families where the Myrmosidae is the more primitive group (Invrea, 1964; Suarez, 1988).

Key words: Hymenoptera, Myrmosidae, Mutillidae, Fauna, Türkiye.

Anahtar sözcükler: Hymenoptera, Myrmosidae, Mutillidae, fauna, Türkiye.

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The members of these families are known as "velvet ants" due to females are wingless and ant-like, the males are winged, and both of them are often densely clothed with velvety hairs. The larvae are ectoparasitoids of the larvae and pupae of some bees and wasps, a few are parasitic on certain beetles and flies (Borror et al., 1981; Petersen, 1988).

The Myrmosidae and Mutillidae contain about 5000 species on a worldwide basis (Gauld and Bolton, 1988). That of in Palaearctic region there are 940 species (Petersen, 1994).

The fauna of these families in Türkiye has not been precisely studied. However, some foreign researchers recorded and described several species from different provinces, especially western part of the country (Nagy, 1972; Lelej, 1985; Petersen, 1988; Suarez, 1988).

This is a contribution to the Turkish fauna of these important groups of insects based on the material collected predominantly from eastern Anatolia.

Material and Method

The present study is based upon the material has been collected mostly from the flowering plants throughout the country since 1960s. Some of the females which are generally wingless were collected on the ground by hand. Few material was also obtained from malaise-trap on the campus of Atatürk University. Most of the specimens are deposited in the museum of Plant Protection Department in Erzurum.

Results

The family Myrmosidae

The family Myrmosidae comprised two subfamilies, Kudakromiinae and Myrmosinae (Krombein, 1979). However, this family is represented only by Myrmosinae with three genera in Türkiye.

The subfamily Myrmosinae

Genus *Myrmosa* (Latreille, 1796)

Myrmosa atra Panzer, 1801

Artvin: Arhavi, 200 m, 10.IX.1992, 2♂♂. Erzurum: University field, 1850 m, 22.VII.1997, ♂; Oltu, Çamlıbel, 1700 m, 2.VII.1997, ♂.

Genus **Krombeinella** Pate, 1947

Krombeinella aramaea Suarez, 1963

Diyarbakır: Silvan, 800 m, 17.IV.1995, 2♂♂.

Krombeinella wolffi (Invrea, 1963)

Bilecik: 600 m, 15.VII.1995, 18♂♂. Erzurum: Pasinler, Pelitli, 2000 m, 14. VIII.1998, ♂; Şenkaya, Akşar, 1300 m, 14.VII.1998, ♂. Kars: Sarıkamış, Yeniköy, 1950 m, 17.VIII.1998, ♂. Samsun: Karaköy, TİGEM, 200 m, 22.VIII.1992, 2♂♂.

Genus **Paramyrmosa** Saussure, 1880

Paramyrmosa brunripes (Lepelletier, 1845)

Bursa: Hürriyet, 150 m, 19.VII.1991, ♀.

Paramyrmosa radoszkowskyi (Saussure, 1880)

Artvin: Arhavi, 200 m, 10.IX.1992, ♂. Bilecik: 600 m, 15.VII.1995, 4♂♂. Diyarbakır: Silvan, 800 m, 17.V. 1995, ♂. Erzurum: Palandöken, 2200 m, 21.VI.1994, ♂, 23.VII.1996, ♂, 23.VII.1997, ♂; University field, 1850 m, 12.VI.1994, ♂, 20.VI.1994, ♂, 24.VI.1997, ♂, 25.VI.1992, 2♂♂, 30.VI.1992, 4♂♂, 2.VII.1992, ♂, 3.VII.1997, ♂, 8.VII.1997, ♂, 12.VII.1993, ♂, 14.VII.1993, ♂, 20.VII.1993, ♂; Oltu, Çamlıbel, 1700 m, 2.VII.1997, 2♂♂; Sütkans, 1600 m, 25.VI.1996, 2♂♂; Olur, Süngübayır, 2000 m, 25.VII.1992, ♂; Pasinler, Çalıyazı, 2400 m, 10.VII.1997, ♂; Tortum, Aksuyayla, 2250 m, 14.VII.1996, ♂.

The family Mutillidae

The subfamily Mutillinae

Genus **Artiotilla** Invrea, 1950

Artiotilla biguttata (Costa, 1858)

Bilecik: 600 m, 15.VII.1995, 6 ♂♂. Iğdır: 900 m, 17.VII.1991, ♂ Kars: Digor, Karaköy, 1700 m, 22.VIII.1997, ♂.

Genus **Ctenotilla** Bischoff, 1920

Ctenotilla caeca pectinifera (André, 1893)

Adana: Mustafalar, 150 m, 15.VIII.1993, ♀. Antalya: Manavgat, 50 m, 30.VII.1996, ♂. Artvin: Ardanoç, Akarsu, 900 m, 7.VII.1994, ♂; Ferhatlı, 950 m, 7.VII.1994, ♂; Yusufeli, Zeytinlik, 450 m, 6.VII.1994, 3♂♂. Erzincan:

Bahçe Kültürleri Araştırma Enstitüsü, 1250 m, 23.VI.1994, ♂; Ballıköy, 1400 m, 5.VII.1995, ♂; Çatalarmut, 1500 m, 9.VIII.1990, ♂; Üzümlü, 1300 m, 8.VII.1993, ♂. Hakkari: Esendere, 21.VII.1988, ♂. Konya: 1000 m, 14.VII.1997, ♂; 23.VII.1971, ♂. Tokat: 900 m, 19.VIII.1992, 2♂♂.

Genus *Dentilla* Lelej, 1980

Dentilla curtiventris (André, 1899)

Artvin: Ardanuç, Ferhatlı, 650 m, 7.VII.1994, ♂. Erzincan: Üzümlü, Bayırbağ, 1300 m, 10.VIII.1992, ♂. Erzurum: University field, 1900 m, 5.VI.1980, ♂, 6.VI.1981, ♀, 25.VII.1983, ♂, 28.VII.1992, ♀, 29.VII.1992, ♂, 6.VIII.1992, ♂, 8.VIII.1979, ♂; Palandöken, 2200-2400 m, 13.VII.1994, ♂, 1.VIII.1996, ♂, 10.VIII.1993, 2♂♂, 11.VIII.1993, ♂, 16.VIII.1993, ♂; Aşkale, 1650 m, 15.VII.1995, ♂; Dutçu, 1950 m, 18.VII.1993, 2 ♂♂; İspir, Madenköprübaşı, 1100 m, 7.VII.1996, ♂; Oltu, Çamlıbel, 1750 m, 14.VII.1996, Sütkans, 1600 m, 25.VI.1996, 2 ♂♂; Tortum, Aksu, 1750 m, 12.VIII.1998, 2 ♂♂; Pehlivanlı, 1300 m, 12.VII.1992, ♂. Kars: Digor, Karaköy, 1700 m, 22.VIII.1997, ♂. Tokat: 900 m, 19.VIII.1992, ♂. Van: Akdamar, 17.VII.1988, ♂.

Dentilla erronea (André, 1903)

Van: 1700 m, 30.VI.1987, 5♂♂.

Dentilla persica (Sichel and Radoszkowsky, 1870)

Hakkari: 24.VII.1988, ♂.

Genus *Ronisia* Costa, 1858

Ronisia brutia brutia (Petagna, 1787)

Afyon: Gebeciler, 1200 m, 27.VII.1983, ♂. Bilecik: 600 m, 15.VII.1995, ♂♀. Erzurum: Ilica, Sorkunlu, 30.VII.1998, ♂; Tortum, Aksu, 1750 m, 12.VIII.1998, 2 ♂♂. İzmir: Bornova, 27.VII.1984, ♂. Tokat: 900 m, 19.VIII.1992, 2 ♂♂. Petersen (1988) recorded this species from Edirne, Yalova, Denizli, Konya, İçel, Van and Hakkari.

Ronisia brutia duplex (Radoszkowsky, 1885)

Erzincan: Kemah, Alp, 1400 m, 15.VII.1982, ♀. Erzurum: Palandöken, 2200 m, 23.VII.1997, ♂, 2.VIII.1994, ♂; University field, 1850 m, 8.VIII.1993, ♂, 15.VIII.1993, ♂, 29.IX.1967, ♀; Çat, 2200 m, 11.VIII.1994, ♂; Ilica, 1900 m, 20.VI.1987, ♂; Narman, Şehitler, 1600 m, 5.VIII.1997, ♀; Oltu, Başaklı, 1750 m, 1.IX.1986, ♀; Çamlıbel, 1750 m, 2.VII.1997, ♀ (found near the nests of *Halictus* sp. (Halictidae) and *Gymnomerus laevipes* Shuckard

(Eumenidae), 14.VII.1996, 2 ♀ ♀; Sütkans, 1700 m, 10.VI.1997, ♀; Olur, Sarbaşak, 1950 m, 24.VII.1992, ♂. Hakkari: Esendere, 21.VII.1988, 2 ♂ ♂. Kars: Digor, Karaköy, 1700 m, 22.VIII.1997, 2 ♂ ♂.

Genus **Mutilla** Linnaeus, 1758

Mutilla europaea Linnaeus, 1758

Artvin: 15.IX.1996, ♀. Bayburt: Kopdağı, 2400 m, 13.VII.1997, 4 ♂ ♂. Erzurum: Abdurrahmangazi, 2200 m, 17.VIII.1993, ♂; Palandöken, 2400 m, 8.VII.1981, ♀, 13.VIII.1992, ♂; University field, 1850 m, 8.VII.1995, ♂, 5.VIII.1997, ♂, 8.VIII.1993, ♂, 8.VIII.1995, ♂, 10.VIII.1992, ♂, 10.VIII.1993, ♂, 10.VIII.1995, ♂, 16.VIII.1996, ♂; Çat, Taşagıl, 2200 m, 11.VIII.1994, ♂; Güzelova, 2200 m, 12.VIII.1992, 7 ♂ ♂, ♀; Kargapazarı Mts., 2400 m, 20.VII.1989, ♂; Horasan, 1900 m, 20.VIII.1993, ♂; İspir, 1000 m, 17.VII.1992, ♂; Pasinler, Büyükdere, 1940 m, 10.VIII.1994, 2 ♂ ♂, 25.VIII.1995, ♂; Şenkaya, Akşar, 1300 m, 14.VII.1998, ♂; Gaziler, 1750 m, 6.VII.1980, ♀; Turnalı, 1750m, 10.VII.1997, ♂; Kars: Digor, Karaköy, 1700 m, 22.VIII.1997, 4 ♂ ♂.

M. europaea was indicated as larval parasitoid of bumble bees (Alford, 1975).

Mutilla marocana Olivier, 1811

Karaman: 1100 m, 7.VII.1966, ♀. It was previously recorded from Konya (Petersen, 1988).

Mutilla quinquemaculata Cyrillo, 1787

Adana: Balcalı, 2.VI.1997, ♀, 26.VI.1977, ♀. Antalya: Belkız, 50 m, 3.VIII.1994, ♂. Erzurum: Çat, 2100 m, 21.VI.1987, ♀.

Genus **Smicromyrme** Thomson, 1870

Smicromyrme curtiventris (André, 1901)

Konya: Sille, 1200 m, 14.VIII.1981, ♀. It was previously recorded from Ankara and Sivas (Petersen, 1988).

Smicromyrme pulawskii Suarez, 1975

Bahkesir: Ayvalık, 50 m, 10.VII.1996, ♂. Bilecik: 600 m, 15.VII.1995, 5 ♂ ♂; Erzincan: 1250 m, 18.VII.1997, 2 ♂ ♂; Tercan, 1700 m, 17.VII.1997, ♂. Erzurum: 1900 m, 8.VII.1997, 2 ♂ ♂; Dereboğazi, 2100 m, 11.VII.1994, ♂; Çat, Taşagıl, 2200 m, 11.VIII.1994, ♂; Oltu, Çamlıbel, 1700 m, 14.VII.1996, ♂; Şenkaya, Turnalı, 1750 m, 25.VII.1996, ♂; Tortum, 1600 m, 27.VII.1998,

♂; Uzundere, 1000 m, 22.VII.1995, ♂. Kars: Digor, Karaköy, 1700 m, 22.VIII.1997, ♂. Tokat: 1500 m, 19.VIII.1992, ♂.

Smicromyrma ruficollis (Fabricius, 1793)

Adana: Balcalı, 15.VII.1986, ♀. It was previously recorded from Nevşehir.

Smicromyrme schwarzi Suarez, 1975

Ankara: Haymana, 800 m, 19.VIII.1997, ♂. Bilecik: 600 m, 15.VII.1995, ♂. Erzincan: 1250 m, 11.VII.1994, ♂, 24.VII.1996, ♂, 8.VIII.1996, 2♂♂; Cevizli, 1300 m, 10.VIII.1990, ♂; Tercan, 1700 m, 17.VII.1997, ♂. Erzurum: 2.VII.1990, ♂, 26.VII.1974, ♂, 9.VIII.1970, ♂; Palandöken, 2200-2400 m, 13.VII.1993, 2♂♂, 22.VII.1994, ♂, 5.VIII.1996, ♂, 19.VIII.1993, ♂, University field, 1850 m, 10.VII.1996, ♂, 16.VII.1996, ♂, 25.VII.1992, 2♂♂, 8.VIII.1993, 3♂♂, 15.VIII.1997, ♂, 20.IX.1992, ♂; Dumlu, 1950 m, 28.VII.1994, ♂; İspir, Madenköprübaşı, 1100 m, 7.VII.1996, ♂; Oltu, Çamlıbel, 1750 m, 7.IX.1995, ♂; Olur, Olgun, 1950 m, 24.VIII.1992, ♂; Pasinler, 1900 m, 11.VIII.1992, Büyükdere, 1950 m, 10.VIII.1994, ♂, Çalyazı, 2400 m, 11.VII.1996, ♂; Şenkaya, Turnalı, 1750 m, 25.VI.1996, 2♂♂.

Smicromyrme sicana (Destefani, 1887)

Erzincan: Bahçe Kültürleri Araştırma Enstitüsü, 1250 m, 7.VIII.1990, ♂. It was previously recorded from Istanbul.

Smicromyrme similis Lelej, 1984

Bayburt: Yaylapınar, 1700 m, 20.VII.1992, 5♂♂. Bilecik: 600 m, 15.VIII.1995, 4♂♂. Erzincan: 1250 m, 11.VII.1994, ♂; Cevizli, 1350 m, 10.VIII.1990, ♂. Erzurum: Palandöken, 2100-2400 m, 13.VII.1994, ♂, 13.VII.1997, ♂, 23.VII.1997, ♂, 10.VIII.1993, 5♂♂, 19.VIII.1993, 19♂♂; University field, 1850 m, 23.VI.1996, ♂, 29.VI.1992, ♂, 2.VII.1993, 2♂♂, 6.VII.1992, 14.VII.1993, 2♂♂, 20.VII.1993, ♂, 23.VII.1992, ♂, 25.VII.1994, ♂, 8.VIII.1993, 3♂♂, 10.VIII.1992, 15♂♂, 15.VIII.1993, %, 15.VIII.1997, 5♂♂, 16.VIII.1993, ♂, 18.VIII.1994, ♂, 19.VIII.1993, 5♂♂; Dutçu, 2000 m, 18.VIII.1993, 2♂♂; Güzelova, 2200 m, 12.VIII.1992, ♂; Güzelyayla, 2250 m, 25.VIII.1992, ♂, İspir; Madenköprübaşı, 1100 m, 7.VII.1996, ♂; Oltu, Başaklı, 1750 m, 5.VI.1983, ♂; Çamlıbel, 1700 m, 14.VII.1996, 2♂♂; Sütkans, 1700 m, 25.VI.1996, 2♂♂; Olur, 1700 m, 22.VII.1992, 3♂♂; Olgun, 1950 m, 24.VIII.1992, ♂; Sungübayır, 1850 m, 20.VII.1994, ♂; Pasinler, 1900 m, 8.VII.1995, 2♂♂; Büyükdere, 1940 m, 10.VIII.1994, ♂; Tortum, 1600 m, 27.VII.1998, 2♂♂; Arılı, 1750 m, 24.VIII.1996, ♂; Meydanlar, 1700 m, 24.VIII.1993, ♂; Şenkaya, Akşar, 1300m, 14.VII.1998, 2♂♂; Turnalı, 1750

m, 25.VII.1996, 2♂♂, 28.VII.1993, ♂, 6.VIII.1990, ♂. Iğdır: 900 m, 18.VII.1997, ♂. Kars: Digor, Karaköy, 1750 m, 22.VIII.1997, ♂; Sarıkamış, Kalebaş, 2300 m, 25.VIII.1997, 3♂♂. Konya: Akşehir, 1100 m, 2.VI.1974, ♂. Rize: Fındıklı, 24.VII.1995, 4♂♂. Samsun: Gürgendağı, 1200 m, 22.VIII.1992, ♂. Tokat: 1500 m, 19.VIII.1992, 6♂♂.

Smicromyrme turanica (Morawitz, 1893)

Erzurum: 1900 m, 1.VI.1983, 2♀♀; University field, 1850 m, 20.VI.1994, ♀; Tortum, Kaledibi, 1550 m, 25.V.1997, ♀. Van: 1700m, 30.VI.1987, 6♂♂. Yozgat: Sungurlu, 16.VI.1987, ♂.

Smicromyrme viduata bareyi (Radoszkowski, 1893)

Bitlis: Adilcevaz, 1200 m, 7.VI.1970, ♂. It was previously recorded from Konya (Petersen, 1988).

Smicromyrme viduata viduata (Pallas, 1773)

Artvin: Ardanuç, Akarsu, 900 m, 7.VII.1994, 4♂♂. Balıkesir: Erdek, 26.VII.1967, ♀. Bayburt: Demirözü, 1600 m, 17.VII.1991, 2♂♂. Burdur: Bucak, Çamlık, 11.VII.1996, ♂. Erzincan: Altunkent, 1400 m, 9.VII.1993, ♂. Erzurum: Palandöken, 2200 m, 22.VII.1994, ♂; University field, 1850 m, 8.VIII.1993, ♂; Horasan, 11.VII.1995, 2♂♂; İspir, Madenköprübaşı, 1100 m, 7.VII.1996, ♂; Pasinler, Büyükdere, 1950 m, 10.VIII.1994, ♂; Oltu, Sütkans, 1600 m, 25.VI.1996, 2♂♂; Olur, 22.VII.1992, ♂; Uzundere, Şelale, 1100 m, 9.VI.1996, ♂; Şenkaya, Gaziler, 1600 m, 1.IX.1996, ♂. İçel: 50 m, 14.VII.1992, ♀. Kars: Digor, Karaköy, 1700 m, 22.VIII.1997, ♂, ♀. It was previously recorded from Edirne, Aydın, Muğla, Antalya, Ankara, Konya, Tokat and Sivas (Petersen, 1988).

Smicromyrme scutellaris (Latreille, 1792)

Adana: Balcalı, 23.X.1992, ♂. Ankara: Şereflikoçhisar, 750 m, 8.VII.1998, ♂. Erzincan: 1250 m, 18.VII.1997, ♂. Erzurum: University field, 1850, 15.VIII.1997, ♂; Dereboğazi, 2070 m, 11.VIII.1994, 2♂♂.

Genus ***Tropidotilla*** Bischoff, 1920

Tropidotilla litoralis (Petagna, 1786)

Artvin: Ardanuç, Akarsu, 900 m, 7.VII.1994, ♂; Yusufeli, Zeytinlik, 450 m, 6.VII.1994, ♂. Bilecik: 600 m, 15.VII.1995, 2♀♀. Çanakkale: Truva, 6.VII.1965, ♀. Çorum: Boğazkale, 12.VII.1967, ♂. Erzincan: Bahçe Kültürleri Araştırma Enstitüsü, 1250 m, 14.VI.1994, ♂, 23.VI.1994, 3♂♂, 30.VII.1991, ♂, 3.VIII.1994, ♀; Altunkent, 9.VII.1993, 2♂♂; Tercan, 1700 m, 9.VIII.1994, ♀. Erzurum: Aşkale, 1900 m, 7.VIII.1997, ♀, 9.VIII.1994, ♂; Himis, 1700 m,

25.VII.1997, ♂; Horasan, 1600 m, 11.VII.1995, ♂, 10.VIII.1996, ♂; Okçular, 22.VI.1996, ♂; İspir, Madenköprübaşı, 1200 m, 3.VII.1997, ♀, 7.VII.1996, 3♂♂; Oltu, Başaklı, 1700 m, 2.VI.1997, ♀, Çamlıbel, 1750 m, 2.VII.1997, 6♂♂, Sütkans, 1500 m, 25.VI.1996, 6♂♂, ♀; Dutlu, 1200 m, 26.VI.1997, ♀; Pazaryolu, 1400 m, 7.VI.1996, ♂, 23.VII.1991, ♂; Şenkaya, Turnalı, 1750 m, 6.VIII.1990, 2♂♂. Gümüşhane: 800 m, 15.VI.1992, ♀. Hakkari: 1800 m, 31.VII.1997, ♀. Kars: Sarıkamış, Karakurt, 1625 m, 25.VI.1996, ♀; 15.VII.1998, ♂. Kayseri: Güneşli, 1200 m, 18.VIII.1997, ♂.

Tropidotilla sareptana (André, 1901)

Erzincan: Üzümlü, 1300 m, 16.VI.1994, ♂; Bayırbağı, 1400 m, 3.VIII.1991, ♂. Erzurum: Şenkaya, Turnalı, 1750 m, 29.VII.1994, ♂. Iğdır: 900 m, 19.VII.1997, ♂.

The Subfamily Myrmillinae

Genus ***Edrionotus*** Radoszkowsky, 1885 (= ***Dentilla*** Lelej, 1980 and ***Pseudomutilla*** Costa, 1885).

Edrionotus litoralis Petagna, 1787

Bilecik: 600 m, 15.VII.1995, 2♀♀. Erzincan: Tercan, 1700 m, 9.VII.1994, ♀.

Genus ***Myrmilla*** Wesmael, 1851

Myrmilla calva (Villers, 1789)

Ankara: Emir Göl, 900 m, 16.VI.1987, ♀. Artvin: Yusufeli, Zeytinlik, 450 m, 6.VII.1994, ♂. Erzincan: Altıntepe, 1350 m, 19.VI.1987, ♀.

Myrmilla caucasica (Kolenati, 1840)

Bilecik: 600 m, 15.VII.1992, 3♀♀. Erzincan: 1200 m, 30.VII.1992, ♀. Erzurum: Çat yolu, 2100 m, 21.VI.1987, ♀; Oltu, Başaklı, 1750 m, 15.IX.1985, ♀; Tortum, 1650 m, 17.VII.1992, 2♀♀. Gümüşhane: 800 m, 15.VI.1992, ♀. Konya: 1000 m, 18.VII.1997, ♀. Muş: 1500 m, 9.IX.1972, ♀.

Myrmilla erythrocephala Latreille, 1792

Bilecik: 600 m, 15.VII.1995, ♂.

Myrmilla glabrata Fabricius, 1775

Eskişehir: Sivrihisar, 1100 m, 23.VI.1986, ♀. It was previously recorded from Balıkesir and Konya (Petersen, 1988).

Myrmilla lezginica (Radoszkowsky, 1885)

Erzurum: University field, 1850 m, 28.VIII.1992, ♀.

Myrmilla vutshetitshi Skorikov, 1935

Ankara: Kızılcahamam, 1200 m, 13.VIII.1985, ♀. It was previously recorded from Zonguldak (Petersen, 1988).

Genus ***Platymyrmilla*** Wesmael, 1851

Platymyrmilla 5-fasciata Olivier, 1811

Aydın: Kuşadası, 16.VII.1965, ♀. İzmir: Efes, 18.VII.1967, ♀; 19.VII.1967, ♀.

The Subfamily Pseudophotopsidinae

Genus ***Pseudophotopsis*** André, 1896

Pseudophotopsis caspica (Radoszkowsky, 1885)

Antalya: Korkuteli, 800 m, 7.VII.1994, ♀. İçel: Anamur, 100 m, 20.VII.1992, ♀.

Pseudophotopsis schachrudii Skorikov, 1935

Adana: 50 m, 26.VI.1977, ♀. Aydın: Çine, 600 m, 4.VII.1990, ♀. Çanakkale: 100 m, 10.VII.1995, ♀. Elazığ: 1300 m, 1.IX.1973, ♀. Erzurum: Pasinler, 1900 m, 10.VI.1993, ♀.

The Subfamily Dasylabrinae

Genus ***Dasylabris*** Radoszkowsky, 1885

Dasylabris desertorum (Radoszkowsky, 1865)

Hakkari: Esendere, 21.VII.1988, ♂.

Dasylabris manderstiernii cypria (Sichel and Radoszkowsky, 1870)

Artvin: Yusufeli, İşhan, 700 m, 11.VII.1997, ♀; Kınalıçam, 800 m, 20.V.1997, ♀. Erzurum: Dumlu, 1950 m, 7.VIII.1997, 2♂♂; Güzelova, 2200 m, 12.VIII.1992, ♂; Palandöken, 2400 m, 22.VII.1994, ♂, 10.VIII.1993, ♂; University field, 1850 m, 12.VII.1970, 2♂♂, 14.VII.1991, ♂, 23.VII.1996, ♂, 29.VII.1992, ♂, 15.VIII.1993, ♂, 15.VIII.1997, 4♂♂; İspir, Madenköprübaşı, 1000 m, 3.VII.1997, 2♀♀. Kars: Digor, Karakoç, 1700 m, 22.VIII.1997, 2♂♂. Konya: Bozkır, 1000 m, 10.IX.1995, ♂. Van: Vangölü kıyısı, 30.VI.1987, ♀.

Dasylabris manderstiernii manderstiernii (Radoszkowsky, 1865)

İçel: Göksu Deltası, 50 m, 6.VIII.1992, ♂. It was previously recorded from Adana, Gaziantep, Konya (Petersen, 1988).

Dasylabris maura (Linnaeus, 1758)

Artvin: Yusufeli, Altıparmak, 1700 m, 12.VI.1997, ♀. Bingöl: 15.VI.1974, ♀. Erzincan: Üzümlü, 1300 m, 16.VI.1994, ♀. Erzurum: 1900 m, 12.VI.1970, ♀, 23.VI.1974, 2 ♀ ♀; Kargapazarı Mts., 2400 m, 11.VIII.1990, ♀; University field, 1850 m, 5.VI.1996, ♀, 20.VII.1993, ♂, 24.VIII.1992, ♀; Tortum, 1650 m, 17.VII.1992, ♀. Tekirdağ: Saray, 2.VI.1982, ♀. It was previously recorded from Istanbul and Ankara (Petersen, 1988).

Dasylabris scutilla Skorikov, 1935

Erzincan: Piskidağ, 1300 m, 8.VII.1993, ♂. Erzurum: Köşk, 1900 m, 14.VII.1992, ♂; Oltu, Coşkunlar, 1100 m, 12.VI.1997, ♂, Sütkans, 1500 m, 23.VI.1996, 4 ♂ ♂; Pazaryolu, 1100 m, 3.VII.1997, 2 ♂ ♂. Kars: Kağızman, 1500 m, 12.VII.1988, ♂. Tokat: 900 m, 19.VIII.1997, 2 ♂ ♂. It was previously recorded from Ankara and Konya (Petersen, 1988).

Dasylabris regalis Fabricius, 1793

Antalya: Belkız, 100 m, 3.VII.1994, ♂.

Genus ***Stenomutilla*** André, 1896

Stenomutilla argentata (Villers, 1789)

Erzurum: Oltu, Çamlıbel, 1750 m, 2.VII.1997, ♀; Pasinler, Çalıyazı, 2200 m, 10.VII.1997, ♂.

Stenomutilla shelkovnikovi Skorikov, 1935

Adana: Pozanti, 1500 m, 12.V.1986, ♂. Artvin: Yusufeli, Altıparmak, 1400 m, 12.VI.1997, ♀. Erzurum: Pazaryolu, 1400 m, 27.VIII.1992, ♀. Konya: Akşehir, 1000 m, 21.VI.1934, ♀.

Specimens are collected from the flowers of the plant species listed below.

<i>Achillea millefolium</i>	<i>Cirsium arvense</i>	<i>Galium palustre</i>
<i>Ajuga reptans</i>	<i>C. palustre</i>	<i>Hypericum acutum</i>
<i>Ammi majus</i>	<i>C. creticus</i>	<i>Onopordum acanthium</i>
<i>A. visnaga</i>	<i>Cistus salvifolius</i>	<i>O. tauricum</i>
<i>Arctium lappa</i>	<i>Corydanthus capitatus</i>	<i>Sinapis arvensis</i>
<i>Asphodelus aestivus</i>	<i>Echinops orientalis</i>	<i>Silybum marianum</i>
<i>Carduus acanthoides</i>	<i>Eryngium campestre</i>	<i>Thymus vulgaris</i>
<i>Centaurea iberica</i>	<i>Epilobium angustifolium</i>	<i>Vitex agnus-castus</i>
<i>C. solstitialis</i>	<i>Euphorbia alcornis</i>	
<i>C. arvillei</i>	<i>E. altissima</i>	
<i>Cichorium intybus</i>	<i>E. falcata</i>	

Conclusion

Five species of Myrmosidae and 41 species and subspecies of Mutillidae are reported from Türkiye in the present study. Due to the large surface of the land, the variety of topography and climate of Türkiye more than 100 species and subspecies belonging to these families are expected. It should be emphasize that it is necessary to focus more attention on these insects because of being the ectoparasitoids of the larvae and pupae of Aculeata which is economically important and large group of insect. Therefore, additional works need to be done on these groups of insects intensively.

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Özet

Türkiye'nin Myrmosidae ve Mutillidae (Hymenoptera: Aculeate) faunasının tespitine katkılar

Myrmosidae familyasında üç cinse ait 5 tür, Mutillidae familyasında ise 13 cinse ait 41 tür ve alttür tespit edilmiştir. Ayrıca, balözü almak üzere ziyaret edilen kimi bitki türleri belirlenmiştir.

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