

## Contribution to the knowledge of Vespidae (Hymenoptera: Aculeata) fauna of Turkey

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### Summary

In this study, the material of the family Vespidae was collected from different localities of Turkey in 1957-2004 and it has been determined that totally 24 species and subspecies belonging to Vespidae occurring in the collection of LEMT (Lodos Entomological Museum, Turkey). Some new localities were found for some species and subspecies previously known in Turkey. Among them, *Vespula germanica* (Fabricius, 1799) and *Vespa orientalis* Linnaeus, 1771 were the abundant and widespread species. Separately, *Polistes gallicus* (Linnaeus, 1767) and *P. dominulus* (Christ, 1791) were the other common species.

**Key words:** Hymenoptera, Vespidae, fauna, Turkey

**Anahtar sözcükler:** Hymenoptera, Vespidae, fauna, Türkiye

### Introduction

The Vespidae is a rather big family of Aculeate wasps belonging to the superfamily Vespoidea. They are distributed over almost the whole world. Some faunistic studies on the Vespidae wasps of Turkey have been conducted by Yıldırım & Özbek (1992, 1993, 1996a, b, 1999), Madl (1997), Yıldırım & Kojima (1999), Gusenleitner (2000 a, b, 2001 a, b, 2004), Yıldırım & Gusenleitner (2001, 2004) and Tüzün (2001). A total of 294 species and subspecies belonging to 52 genera were recorded up to now from Turkey.

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In the present study, Vespids have been collected from different parts of Turkey and preserved in the collection of LEMT (Lodos Entomological Museum, Turkey) of Department of Plant Protection, Faculty of Agriculture, Aegean University, Bornova, Izmir, Turkey have been evaluated. The aim of this paper is to present the complete records of preserved material to researchers and relevant people.

## Material and Methods

Material have been collected by sweeping of vegetation from different parts of Turkey mainly by field studies of the projects (TUBITAK-TOAG/168, 336, 502) during the years of 1962-1986. In addition to these, material collected and donated to the museum have also been included.

The subfamilies and genera were given in phylogenetic order and species were listed alphabetically within each subfamily. Material have been determined by E. Yildirim and J. Gusenleitner.

## Results

In this study, 24 species and subspecies of 14 genera belonging to the subfamilies Eumeninae, Polistinae and Vespinae were reported.

### Eumeninae

***Allodynerus*** Blüthgen, 1938

***Allodynerus delphinalis*** (Giraud, 1866)

**Material examined: İzmir:** Bergama, 24.V.1994, 1 ♀; Bornova, 10.X.1983, 1 ♀. Totally 2 specimens.

**Distribution in Turkey:** Adana, Ankara, Artvin, Bilecik, Erzurum (Yildirim & Özbek, 1996 a; Yıldırım & Kojima, 1999).

**Distribution in the world:** Europe, Palaearctic Asia, Turkey.

***Ancistrocerus*** Wesmael, 1836

***Ancistrocerus claripennis ponticus*** Giordani Soika, 1970

**Material examined: İzmir:** Bornova, 20.IX.1983, 1 ♀. Totally 1 specimen.

**Distribution in Turkey:** Artvin, Erzurum, Rize (Yıldırım & Özbek, 1996 a; Yıldırım & Kojima, 1999; Yıldırım & Gusenleitner, 2001).

**Distribution in the world:** Turkey.

***Cephalochilus*** Blüthgen, 1939

***Cephalochilus draco*** Giordani Soika, 1970

**Material examined: İzmir:** Bornova, 01.VI.1983, 1 ♂. Totally 1 specimen.

**Distribution in Turkey:** Aydın, Bursa, İzmir, Konya, Mardin, Şanlıurfa, Şırnak, Van (Yıldırım & Özbek, 1996 a; Madl, 1997; Yıldırım & Kojima, 1999).

**Distribution in the world:** Turkey, Syria.

*Delta* de Saussure, 1855

*Delta unguiculatum* (Villers, 1789)

**Material examined: Çanakkale:** Yenice, 05.VIII.1984, 2 ♀♀. **Gaziantep:** Central province, 17.VIII.2004, 1 ♀. **İzmir:** Bornova, 26.V.1962, 2 ♀♀. **Muğla:** Central province, 20.III.1984, 1 ♀. Totally 6 specimens.

**Distribution in Turkey:** Adana, Ankara, Antalya, Artvin, Aydın, Bilecik, Erzurum, Gaziantep, Hakkâri, Hatay, Isparta, İzmir, Konya, Manisa (Yıldırım & Özbek, 1996 a; Yıldırım & Kojima, 1999).

**Distribution in the world:** Europe, Mediterranean area, Northern Africa, Turkey, Asia.

*Eumenes* Latreille, 1802

*Eumenes coarctatus* Linnaeus, 1758

**Material examined: İzmir:** Bornova, 17.VIII.1978, 1 ♀. Totally 1 specimen.

**Distribution in Turkey:** Antalya, Artvin, Bilecik, Erzincan, Erzurum, Iğdır, Kars, Konya, Mersin, Samsun (Yıldırım & Özbek, 1996 a; Yıldırım & Kojima, 1999; Yıldırım & Gusenleitner, 2001).

**Distribution in the world:** Europe, Cyprus, Turkey, Israel, Kazakhstan.

*Eumenes dubius* de Saussure, 1852

**Material examined: İzmir:** Bornova, 28.V.2002, 1 ♀; 01.VI.2003, 1 ♂. Totally 2 specimens.

**Distribution in Turkey:** Adana, Amasya, Artvin, Balıkesir, Erzincan, Erzurum, Gümüşhane, Karabük, Konya, Muş, Tekirdağ (Yıldırım & Özbek, 1996 a; Yıldırım & Kojima, 1999).

**Distribution in the world:** Europe, Cyprus, Russia, Turkey, Lebanon, Israel, Syria, Iran.

*Eumenes mediterraneus* Kriechbaumer, 1879

**Material examined: İzmir:** Bornova, 15.V.2003, 1 ♀; 01.VI.2003, 1 ♀. Totally 2 specimens.

**Distribution in Turkey:** Adana, Ankara, Antalya, Artvin, Erzincan, Erzurum, Hatay, Iğdır, Kahramanmaraş, Kars, Konya, Malatya, Mersin, Tokat, Yalova (Yıldırım & Özbek, 1996 a; Madl, 1997; Yıldırım & Kojima, 1999).

**Distribution in the world:** Mediterranean area, Turkey, Western and Central Asia.

***Eumenes pomiformis*** (Fabricius, 1781)

**Material examined: İzmir:** Bornova, 15.V.2003, 1 ♂; 31.V.2003, 1 ♂. Totally 2 specimens.

**Distribution in Turkey:** Ankara, Artvin, Aydın, Balıkesir, Bilecik, Denizli, Erzincan, Erzurum, Kars, Kütahya, Manisa, Mersin, Muğla, Nevşehir, Sivas (Yıldırım & Özbek, 1996 a; Madl, 1997; Yıldırım & Kojima, 1999).

**Distribution in the world:** Europe, Malta, Turkey, Lebanon, Crimea, Tunisia.

***Euodynerus*** Dalla Torre, 1904

***Euodynerus hellenicus*** Blüthgen, 1942

**Material examined: İzmir:** Bornova, 28.VI.1978, 1 ♂. Totally 1 specimen.

**Distribution in Turkey:** Bitlis, İzmir (Yıldırım & Kojima, 1999; Yıldırım & Gusenleitner, 2001).

**Distribution in the world:** Greece, Turkey, Southwestern Asia.

***Katamenes*** Meade-Waldo, 1910

***Katamenes sichelii tauriae*** (Giordani Soika, 1960)

**Material examined: İzmir:** Bornova, 29.IV.2002, 1 ♀. Totally 1 specimen.

**Distribution in Turkey:** Antalya, Erzurum, İzmir, Kahramanmaraş, Konya, Mersin, Muğla (Yıldırım & Özbek, 1996 a; Madl, 1997; Yıldırım & Kojima, 1999; Yıldırım & Gusenleitner, 2001).

**Distribution in the world:** Turkey, Turkmenistan.

***Leptochilus*** de Saussure, 1853

***Leptochilus regulus*** de Saussure, 1855

**Material examined: İzmir:** Bornova, 01.VI.2003, 1 ♂. Totally 1 specimen.

**Distribution in Turkey:** Adıyaman, Antalya, Artvin, Balıkesir, Çanakkale, Denizli, Erzurum, Hatay, Iğdır, Mersin, Osmaniye, Samsun (Yıldırım & Özbek, 1996 a; Madl, 1997; Yıldırım & Kojima, 1999).

**Distribution in the world:** Europe, northern Africa, Turkey.

***Pareumenes*** de Saussure, 1855

***Pareumenes laminatus*** (Kriechbaumer, 1879)

**Material examined: Mersin:** Anamur, 27.V.2002, 1 ♀. Totally 1 specimen.

**Distribution in Turkey:** Antalya, İstanbul (Yıldırım & Özbek, 1996 a; Yıldırım & Kojima, 1999).

**Distribution in the world:** Europe, Turkey.

**Rhynchium** Spinola, 1806

**Rhynchium oculatum hebraeum** Giordani Soika, 1952

**Material examined:** **Aydın:** İncirliova, 20.VI.1976, 1 ♀. **İzmir:** Balçova, 06.VI.1976, 1 ♀; Bornova, 08.IV.1984, 1 ♂; 20.VII.1977, 1 ♀; 12.IX.1964, 2 ♀♀; 12.IX.1983, 1 ♂; Urla, 20.VIII.2003, 1 ♀. **Manisa:** Turgutlu, 07.X.2002, 1 ♀; Soma, 12.VI.2004, 1 ♀. Totally 10 specimens.

**Distribution in Turkey:** Adana, Ankara, Antalya, Aydın, Eskişehir, Hatay, İzmir, Konya, Mersin, Trabzon (Yıldırım & Özbek, 1996 a; Yıldırım & Kojima, 1999).

**Distribution in the world:** Turkey, Jordan.

**Rhynchium oculatum oculatum** (Fabricius, 1781)

**Material examined:** **Bursa:** İznik, 20.VII.1972, 1 ♀. Totally 1 specimen

**Distribution in Turkey:** Aydın, Balıkesir, Eskişehir, Hatay, İzmir, Manisa, Mersin, Muğla, Samsun (Yıldırım & Özbek, 1996 a; Yıldırım & Kojima, 1999).

**Distribution in the world:** Europe, Turkey, Egypt, Oman, Iran.

## Polistinae

**Polistes** Latreille, 1802

**Polistes associus** Kohl, 1889

**Material examined:** **İzmir:** Bornova, 19.IV.1962, 1 ♀; 06.V.1984, 1 ♂; 10.V.1984, 1 ♀; 28.VI.1978, 1 ♀; 13.VIII.1976, 1 ♀; 09.X.1983, 1 ♀; Central province, VII.1962, 2 ♂♂, 2 ♀♀; Gümüldür, 15.IV.1984, 1 ♀. **Muğla:** 13.VIII.1976, 1 ♀. **Manisa:** Sangöl, 27.VIII.1983, 1 ♂, 1 ♀. **İstanbul:** Erenköy, 10.VIII.2003, 1 ♀. Totally 15 specimens.

**Distribution in Turkey:** Amasya, Antalya, Artvin, Aydın, Balıkesir, Erzincan, Erzurum, Eskişehir, Gümüşhane, Hatay, Isparta, Kahramanmaraş, Kırklareli, Konya, Manisa, Mersin, Muğla, Ordu, Rize, Samsun, Tokat (Yıldırım & Özbek, 1993; Yıldırım & Kojima, 1999).

**Distribution in the world:** Southern Europe, Turkey, Israel, Azerbaijan, India, China.

**Polistes dominulus** (Christ, 1791)

**Material examined:** **Antalya:** Finike, 28.VII.1985, 1 ♀. **Aydın:** Central province, 05.X.1983, 1 ♀; 06.X.1983, 1 ♀; Söke, 18.VIII.2003, 2 ♀♀. **Çanakkale:**

Gelibolu, 10.VIII.1984, 1 ♀. **Denizli:** Central province, 12.IX.2002, 1 ♀. **İzmir:** Bornova, 15.III.1984, 2 ♀♀; 03.IV.2003, 1 ♀; 05.IV.2004, 1 ♂; 09.IV.1984, 1 ♀; 20.IV.2004, 1 ♀; 30.IV.2004, 1 ♀; 01.V.1983, 1 ♀; 16.V.1977, 1 ♀; 20.V.1991, 1 ♀; 28.V.2003, 1 ♀; 31.V.2003, 1 ♀; 01.VI.2003, 2 ♀♀; 06.VI.1962, 1 ♀; 10.VI.1983, 1 ♀; 09.VII.1983, 1 ♂; 15.VII.1984, 1 ♀; 06.VIII.1978, 1 ♀; 09.X.1983, 2 ♀♀; 19.X.1983, 1 ♀; Bozdağ, 08.III.1984, 2 ♀♀; Central province, 20.IV.2004, 2 ♀♀; 01.VII.1962, 2 ♀♀; Gümüldür, 25.VII.1983, 1 ♂; İnciraltı, 18.IV.2003, 1 ♀; Kemalpaşa, 12.V.1997, 1 ♀; 10.IX.2003, 1 ♂; Menderes, 10.VII.2003, 2 ♀♀; Menemen, 18.V.1991, 1 ♀; Urla, 20.VIII.2003, 2 ♀♀. **Manisa:** Salihli, 23.VI.2003, 1 ♀; Sangöl, 27.VIII.1983, 2 ♂♂; 1 ♀. **Muğla:** Dalaman, 25.V.2002, 2 ♀♀; Ula, 18.V.1991, 1 ♀. Totally 51 specimens.

**Distribution in Turkey:** Mediterranean, Aegean, Black Sea, Eastern, Southeastern and Central Anatolia (Yıldırım & Özbek, 1993; Yıldırım & Kojima, 1999).

**Distribution in the world:** Palaearctic Region, introduced into America and Australia.

***Polistes gallicus*** (Linnaeus, 1767)

**Material examined:** **Diyarbakır:** Karacadağ, 28.IV.1981, 1900 m, 1 ♀. **İzmir:** Balçova, 15.II.1972, 1 ♀; Bornova, 04.III.1983, 1 ♀; 28.III.1978, 1 ♂; 06.IV.1977, 1 ♀; 28.IV.1984, 1 ♀; 08.V.1962, 1 ♀; 10.V.1984, 1 ♀; 12.V.1978, 1 ♀; 1 ♀; 12.V.1983, 1 ♀; 12.V.1998, 1 ♀; 15.V.1978, 1 ♀; 19.V.1975, 1 ♀; 20.V.1964, 1 ♀; 24.V.1977, 1 ♀; 25.V.2003, 2 ♀♀; 27.V.2003, 1 ♀; 30.V.1976, 4 ♀♀; 05.VI.1983, 1 ♀; 10.VI.1983, 1 ♀, 1 ♂; 12.VI.1975, 1 ♀; 15.VI.1976, 1 ♀; 16.VI.1980, 1 ♀; 18.VI.1976, 1 ♀; 20.VI.1983, 1 ♀; 21.VI.1976, 1 ♀; 25.VI.1962, 1 ♀; 25.VII.1977, 1 ♀; 28.VI.1978, 1 ♀; 06.VIII.1976, 1 ♀; 12.VIII.1978, 1 ♀; 27.X.1983, 1 ♀; Central province, VII.1962, 2 ♀♀, 1 ♀; Gaziemir, 15.V.1978, 1 ♀; Kemalpaşa, 10.IX.2003, 2 ♀♀; Menemen, 18.V.1991, 1 ♀; 15.VI.1976, 1 ♀. **Malatya:** Central province, 15.VIII.1977, 3 ♀♀. **Manisa:** Central province, 22.V.1994, 1 ♀. **Samsun:** Central province, 18.VII.1979, 1 ♀. Totally 51 specimens.

**Distribution in Turkey:** Mediterranean, Aegean, Black Sea, Eastern, Southeastern and Central Anatolia (Yıldırım & Özbek, 1993; Yıldırım & Kojima, 1999).

**Distribution in the world:** Palaearctic Region.

***Polistes nimpha*** (Christ, 1791)

**Material examined:** **Ankara:** Central province, 17.VII.1975, 1 ♀. **İzmir:** Bornova, 15.I.1977, 1 ♀; 15.V.1978, 2 ♀♀; 21.V.1991, 1 ♀; 25.V.1977, 1 ♀;

03.VI.1976, 1 ♀; 05.VI.1976, 2 ♀♀; 08.VI.1976, 2 ♀♀; 06.VIII.1976, 1 ♀; 09.X.1983, 1 ♀; 20.X.1963, 1 ♀; Central province, 01.VII.1962, 3 ♀♀; 18.VI.1976, 1 ♀; Menemen, 15.VI.1976, 1 ♀. **Manisa:** Central province, 06.V.1976, 1 ♀; Sargöl, 27.VIII.1983, 1 ♂. **Yalova:** Central province, 25.V.2003, 1 ♀. Totally 22 specimens.

**Distribution in Turkey:** Mediterranean, Aegean, Black Sea, Eastern, Southeastern Anatolia (Yıldırım & Özbek, 1993; Yıldırım & Kojima, 1999).

**Distribution in the world:** Palaearctic Region.

***Polistes sulcifer*** Zimmermann, 1930

**Material examined: Bursa:** Uludağ, 31.V.1971, 1 ♀. Totally 1 specimen.

**Distribution in Turkey:** Ankara, Bayburt, Erzincan, Erzurum, Kars, Nevşehir, Rize, Tokat (Yıldırım & Özbek, 1993; Madl, 1997; Yıldırım & Kojima, 1999; Yıldırım & Gusenleitner, 2001).

**Distribution in the world:** Central and Southern Europe, Madeiras, Northern Africa, Turkey, Egypt, Israel, Iran.

### Vespinae

***Dolichovespula*** Rohwer, 1916

***Dolichovespula sylvestris*** (Scopoli, 1763)

**Material examined: Isparta:** Eğirdir, 09.V.1990, 1 ♀. Totally 1 specimen.

**Distribution in Turkey:** Central and Southern Europe, Madeiras, Northern Africa, Turkey, Egypt, Israel, Iran (Yıldırım & Özbek, 1992; Yıldırım & Kojima, 1999).

**Distribution in the world:** Palaearctic Region.

***Vespa*** Linnaeus, 1758

***Vespa crabro*** Linnaeus, 1758

**Material examined: Manisa:** Salihli-Bozdağ, 21.IX.2003, 1 ♀. Totally 1 specimen.

**Distribution in Turkey:** Ankara, Artvin, Balıkesir, Bilecik, Bursa, Erzurum, İstanbul, İzmir, Karabük, Kars, Kastamonu, Konya, Mersin, Samsun, Tekirdağ, Trabzon (Yıldırım & Özbek, 1992; Yıldırım & Kojima, 1999).

**Distribution in the world:** Palaearctic Region, introduced into Nearctic Region.

***Vespa orientalis*** Linnaeus, 1771

**Material examined: Antalya:** Central province, 10.VII.1985, 1 ♀; Finike, 23.VII.1985, 1 ♀. **Aydın:** Didim, 02.VIII.2002, 1 ♀; İncirliova, 15.VII.1978, 1 ♀;

Nazilli, 27.III.1985, 1 ♀; Söke, 18.VIII.2003, 4 ♀♀. **Balıkesir:** Akçay, 24.V.2002, 2 ♀♀; Havran, 19.V.2002, 1 ♀. **Bilecik:** Bozhöyük, 27.V.1971, 1 ♀ 1 ♀. **Denizli:** Çal, 16.VIII.1976, 2 ♀♀; Çivril, 12.VIII.2003, 2 ♀♀. **Diyarbakır:** Saltepe, 21.VI.1977, 1 ♀. **Gaziantep:** Nizip, 15.VII.1984, 1 ♀. **İzmir:** Balçova, 04.V.1976, 1 ♀; Bornova, 25.III.2004, 1 ♀; 12.IV.1975, 1 ♀; 15.IV.2004, 1 ♀; 16.IV.1975, 1 ♀; 03.V.1977, 1 ♀; 08.V.1984, 1 ♀; 12.V.1977, 1 ♀; 15.V.2003, 1 ♀; 18.V.1975, 1 ♀; 22.V.2003, 1 ♀; 25.V.1959, 8 ♀♀; 26.V.1977, 2 ♀♀; 27.V.1971, 1 ♀; 31.V.2003, 1 ♀; 1961, 3 ♀♀, 01.VI.2002, 4 ♀♀, 1 ♀; 04.VI.1976, 1 ♀; 05.VIII.1963, 1 ♀; 08.VIII.1963, 1 ♀; 18.VIII.1963, 1 ♀; 20.VIII.1978, 1 ♀; 10.IX.1962, 1 ♀; 12.IX.1963, 1 ♀; 12.IX.2003, 1 ♀; 25.IX.2003, 3 ♀♀; 15.X.2003, 3 ♀♀; 09.XI.1957, 1 ♀; 15.XI.1963, 10 ♀♀; Central province, 22.III.1978, 1 ♀; 14.IV.1962, 1 ♀; 08.VI.1961, 1 ♀; 20.VI.1977, 1 ♀; 25.VIII.2003, 1 ♀; 10.X.2003, 3 ♀♀; Dikili, 15.VII.2003, 4 ♀♀; Doğanlar, 01.VI.1973, 1 ♀; Gültepe, 18.IV.1977, 1 ♀; Gümüldür, 1977, 1 ♀; Menderes, 15.VIII.2003, 2 ♀♀; Menemen, 10.VI.1975, 1 ♀; Torbalı, 10.V.2004, 1 ♀; 29.V.1978, 1 ♀; Urla, 20.VIII.2003, 2 ♀♀. **Kahramanmaraş:** Derik, 05.V.1976, 1 ♀. **Manisa:** Akhisar, 28.V.1976, 1 ♀; Alaşehir, 21.IV.2002, 1 ♀. **Mersin:** Anamur, 26.V.2002, 1 ♀; Totally 102 specimens.

**Distribution in Turkey:** Mediterranean, Aegean, Black Sea, Eastern, Southeastern and Central Anatolia (Yıldırım & Özbek, 1992; Yıldırım & Kojima, 1999).

**Distribution in the world:** Oriental and Palaearctic Region.

**Vespula** Thomson, 1869

**Vespula germanica** (Fabricius, 1799)

**Material examined:** **Ankara:** Nallıhan, 28.VIII.1982, 6 ♀♀. **Antalya:** Manavgat, 22.IV.1984, 1 ♀. **Aydın:** Central province, 06.X.1983, 1 ♀, 1 ♀; Söke, 18.VIII.2003, 1 ♀. **Balıkesir:** Akçay, 10.IX.2003, 1 ♀; Central province, 21.IV.1991, 1 ♀; 01.IV.1991, 1 ♀; Edremit, 08.VIII.2003, 2 ♀♀. **Bursa:** İznik, 15.V.1973, 5 ♀♀; Uludağ, 31.V.1971, 1 ♀. **Çanakkale:** Lapseki, 22.V.1994, 1 ♀; Yenice, 05.VIII.1984, 1 ♀. **Denizli:** Pamukkale, 18.IV.1984, 1 ♀; Tavas, 10.VIII.1983, 1 ♀; 15.VIII.1983, 1 ♂; 20.VIII.1983, 1 ♀. **Isparta:** Senirkent, 23.V.2003, 1 ♀. **İstanbul:** Erenköy, 11.VIII.1983, 1 ♀. **İzmir:** Bayraklı, V.1982, 1 ♀; Bornova, 09.I.1983, 1 ♀; 29.III.1980, 1 ♀; 09.IV.1984, 1 ♀; 17.IV.1962, 1 ♀; 20.IV.2004, 2 ♀♀; 24.IV.1961, 1 ♀; 27.IV.1984, 1 ♀; 28.IV.1977, 1 ♀; 01.V.1962, 2 ♀♀; 1.V.1991, 1 ♀; 02.V.1977, 1 ♀; 02.V.1984, 1 ♀; 03.V.1977, 1 ♀; 04.V.1992, 1 ♀; 06.V.1984, 1 ♀; 07.V.1962, 1 ♀; 10.V.1980, 1 ♀; 10.V.1984, 1 ♀; 10.V.2001, 1 ♀; 14.V.1964,



2 ♀♀; 17.V.1978, 2 ♀♀; 17.V.2002, 1 ♀; 18.V.1957, 1 ♀; 22.V.1976, 1 ♀; 22.V.1977, 1 ♀; 24.V.1964, 2 ♀♀; 25.V.1977, 1 ♀; 26.V.1962, 1 ♀; 30.V.1983, 1 ♀; 03.VI.1986, 1 ♀; 04.VI.1980, 1 ♂; 05.VI.1970, 1 ♀; 16.VI.1980, 2 ♀♀, 2 ♀♀; 16.VI.1986, 1 ♀; 02.VIII.1963, 2 ♀♀; 03.VIII.1963, 2 ♀♀, 1 ♀; 19.VIII.1983, 1 ♀; 17.IX.1984, 1 ♀; 22.IX.1963, 1 ♀; 25.IX.2003, 3 ♀♀; 11.X.1983, 1 ♀, 1 ♂; 24.X.1984, 1 ♀; 25.X.1983, 1 ♀, 1 ♂; 03.XI.1975, 1 ♀, 1 ♀; 28.XI.1984, 1 ♀; Buca, 09.V.1991, 1 ♀; Central province, 03.IV.1962, 1 ♀; 06.IV.1961, 2 ♀♀; 08.IV.1961, 1 ♀; 30.IV.1962, 2 ♀♀; 06.V.1984, 1 ♀; 15.V.1973, 1 ♀; VII.1962, 1 ♀; Dikili, 17.V.2004, 1 ♀; 26.VI.2003, 1 ♀; Karaburun, 06.VIII.1976, 1 ♀; Karşıyaka, 24.IV.1976, 1 ♀; 28.IV.1991, 1 ♀; Kemalpaşa, V.2003, 1 ♀; Kiraz, 07.VIII.1983, 1 ♀; Menderes, 10.VII.2003, 1 ♀; Menemen, 27.X.1982, 2 ♀♀; 18.V.1991, 1 ♀; 22.IX.1983, 2 ♀♀; Seferihisar, 30.IV.1992, 1 ♀; 03.V.1991, 1 ♀; Şemikler, 23.III.1991, 1 ♀; Tire, 25.IV.1984, 1 ♀; 08.V.1984, 1 ♀; Torbalı, 03.VI.1980, 1 ♀; Urla, 24.IV.1984, 1 ♀. **Manisa:** Central province, 08.V.2004, 1 ♀; Salihli, 23.VI.2003, 2 ♀♀; Sarıgöl, 27.VIII.1983, 2 ♀♀. **Muğla:** Dalaman, 25.V.2002, 2 ♀♀; Datça, 17.V.1984, 1 ♀; Ula, 20.IV.1991, 1 ♀. Totally 130 specimens.

**Distribution in Turkey:** Mediterranean, Aegean, Black Sea, Eastern, Southeastern and Central Anatolia (Yıldırım & Özbek, 1992; Madl, 1997; Yıldırım & Kojima, 1999).

**Distribution in the world:** Palaearctic Region, introduced to Island, Australia, New Zeland, Ascension Island, South Africa, Americas.

***Vespula vulgaris*** (Linnaeus, 1758)

**Material examined:** **Bursa:** Uludağ, 31.V.1971, 1820 m, 1 ♂. **Çanakkale:** Yenice, 05.VIII.1984, 2 ♀♀. **Manisa:** Salihli, 23.VI.2003, 1 ♀. Totally 4 specimens.

**Distribution in Turkey:** Adıyaman, Amasya, Ankara, Artvin, Bayburt, Bitlis, Erzincan, Erzurum, Giresun, Gümüşhane, Isparta, İzmir, Kars, Kayseri, Konya, Kütahya, Malatya, Mersin, Muğla, Trabzon (Yıldırım & Özbek, 1992; Yıldırım & Kojima, 1999; Yıldırım & Gusenleitner, 2001).

**Distribution in the world:** Holarctic and Oriental Regions.

## Özet

### Türkiye Vespidae (Hymenoptera: Aculeata) faunasına katkılar

Bu çalışmada, Türkiye'nin farklı yörelerinden 1957-2004 yılları arasında toplanan ve LEMT (Lodos Entomoloji Müzesi) koleksiyonunda korunan Vespidae (Hymenoptera) familyasına ait örnekler değerlendirilmiş ve 24 tür ve alttür tespit edilmiştir. Bu çalışmayla daha önce Türkiyede varlığı bilinen bu tür ve alttürlerden bazıları için yeni lokaliteler belirlenmiştir. Bu türlerden, ***Vespula germanica*** (Fabricius, 1799) ve ***Vespa orientalis***

Linnaeus, 1771'in en yaygın olan türler olduğu gözlenmiştir. Ayrıca, bu türleri **Polistes gallicus** (Linnaeus, 1767) ve **Polistes dominulus** (Christ, 1791) izlemektedir.

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