

A Contribution to the Knowledge of the Tenthredinidae (Symphyta, Hymenoptera) Fauna of Turkey Part I: The Subfamily Tenthredininae*

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Abstract: The subfamily Tenthredininae in the family Tenthredinidae was treated in this part of the study regarding the sawfly (Symphyta, Hymenoptera) fauna of Turkey. The materials were collected from various localities around the country, though examples from eastern Turkey are predominant. After examining more than 2500 specimens, 57 species in 8 genera were recorded. Eleven species were new for Turkish fauna; of these 3 species were recorded for the first time as Asian fauna. Furthermore, 3 species were endemic for Turkey. The distribution and new areas as well as the host plants of some species around Turkey and the world were given. For each species its chorotype was reported.

Key Words: Hymenoptera, Tenthredinidae, Tenthredininae, Fauna, Turkey

Türkiye'nin Tenthredinidae (Symphyta, Hymenoptera) Faunasına Katkılar Bölüm: I Tenthredininae Altfamilyası

Özet: Türkiye'nin testereleleri (Symphyta, Hymenoptera) faunasının tespitine yönelik çalışmaların bu bölümünde; Tenthredininae (Tenthredinidae) altfamilyası ele alınmış; incelenen 2500'den fazla örnek sonucu, sekiz cinse bağlı toplam 57 tür saptanmıştır. Türkiye faunası için yeni oldukları saptanan 11 türden üçünün Asya faunası için de yeni kayıt oldukları belirlenmiştir. Üç türün Türkiye için endemik oldukları saptanmıştır. Tespit edilen türlerin hemen tamamı için yeni yayılma alanları belirlenmiş, birçoğunun konukçuları bulunmuştur. Türkiye ve dünyadaki dağılımları chorotype'leri ile birlikte verilmiştir.

Anahtar Sözcükler: Hymenoptera, Tenthredinidae, Tenthredininae, Fauna, Türkiye

Introduction

The topographic and climatic structures of Turkey give it a rich and diverse fauna and flora. Turkey's location at the junction of the Euro-Siberian, Mediterranean and Turanian zoogeographic regions, and the fact that it is a crossroad between the continents of Europe, Asia and Africa, only adds to this richness.

The family Tenthredinidae (Symphyta, Hymenoptera) are called "Typical Sawflies"; it is a large family, including more than seven-eighths of all members of the suborder Symphyta (Chalastogastra) (Comstock, 1964). The adults are often brightly colored, and are usually found on

flowers and foliage; they are small to medium size, being 2.5-15.0 mm in length. The larvae are euriciform, mostly free-living, and most of them are external feeders on foliage, though some of them are extremely destructive pests. A few species are gall makers, and a few are leaf miners (Benson, 1952).

Tenthredinidae is best represented in the north temperate region; species richness tends to decrease from north to south. There are more than 6000 species in 360 genera in temperate regions of the Northern Hemisphere (Liston, 1995; Goulet and Huber, 1993; Lacourt, 1999; Taeger and Blank, 1998). More than 900 species occur in Europe (Liston, 1995).

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There is considerable disagreement over the composition of the various subordinate groups. Fitton et al. (1978) adopted the system proposed by Benson (1952, 1958). Gauld and Bolton (1988) followed the classification of Smith (1979) and recognized 7 subfamilies. More recently, Lacourt (1999) divided the family Tenthredinidae into 14 subfamilies in his catalog.

Although various contributions have been conducted on their taxonomy, biology and distribution as well as the damage caused to agricultural and ornamental plants by sawflies in the Palearctic region (Enslin, 1918; Zhelokochev, 1928; Benson, 1950, 1951, 1952, 1958, 1967, 1968; Kontuniemi, 1965; Zombori, 1972, 1973, 1974a, 1974b, 1977, 1978, 1979, 1981, 1982a, 1982b, 1984, 1985; Moczar and Zombori, 1973; Chevin, 1975, 1984; Mucbe, 1975; Vikberg, 1975; Smith, 1976, 1981, 1982, 1986; Shaw, 1978; Vassilev, 1978; Altenhofer, 1980; Cingovski, 1980, 1982; Schedl, 1981, 1991; Scobiola-Palade, 1981; Liston, 1981, 1983a, 1983b, 1983c; Meitzner and Taeger, 1982; Viitasaari and Vikberg, 1985; Magis, 2002), the Turkish fauna is comparatively poorly studied despite its zoogeographic interest. The first comprehensive study on the sawfly fauna of Turkey was conducted by Guichard and Harvey (1967). Benson (1966, 1968) made a faunistic and systematical study on the Symphyta of Turkey, and described new taxa and constructed keys to some genera and species occurring in Turkey. Later, Wolf (1968) and Chevin and Chenon (1982) recorded some sawfly species from Turkey. Since Chevin and Chenon (1982) no additional faunal study has been conducted, although some studies have appeared dealing with different sawfly pests on various cultivated, forest, and ornamental plants (Alkan, 1948; Özeren, 1952, 1970; Öge, 1958; Birkardeşler, 1964, 1971; Kıröğlü and Baysal, 1971; Baş, 1973; Özbek, 1986; Erden, 1988; Güçlü and Özbek, 1999). The objectives of this study are to contribute to the knowledge of the typical sawfly fauna of Turkey. In this first article, the subfamily Tenthredininae is described.

Materials and Methods

The present paper is based on more than 2500 specimens collected during 1996-2002 in various localities of Turkey by the authors. In addition, material accumulated since the 1970s in the Entomology Museum

Erzurum, Turkey (EMET), was evaluated and included in this work. Although the specimens have been collected in different parts of the country, the majority of the sawfly samples were collected from eastern Turkey. The habitats were mainly alpine meadows, mountain tundra, roadsides, and uncultivated areas between cultivated lands, orchards and open areas in forests. Besides the adults collected by insect net, immature stages of sawflies were also collected and reared under laboratory conditions to obtain adults. The materials mentioned in this study were deposited in EMET, Turkey. For determination of the material, Benson (1952) and Medvedev (1994) were used, and for taxa synonyms Lacourt (1999) was followed. Undetermined specimens were identified and others reviewed by Dr. David R. Smith and Dr. Lajos Zombori.

Genera and species were treated in alphabetical order in the subfamilies. All records were arranged in the following way: "province (alphabetically ordered): town, local place, geographic name and altitude if available, date of collecting, number of individuals as male and female" (except the widespread species occurring in Erzurum province). The name of the province from which a particular species was recorded for the first time was given in bold type. Species new for Turkish fauna were specified.

According to their distribution patterns, the species were classified into major chorotypes, in accordance with guidelines proposed by Vigna Taglianti et al. (1999). This chorotype classification is based only on distribution patterns, without paleogeographical or ecological assumptions.

Results

In the subfamily Tenthredininae 57 species in 8 genera were recorded.

Cuneala Zirngiebl, 1956

Synonym: *Parastasis* Kirby, 1881; *Labidia* Provancher, 1886; *Rethrax* Cameron, 1899; *Fethali* Cameron, 1902; *Clydostomus* Konow, 1908; *Tenthredella* Rohwer, 1910; *Zamacrophya* Rohwer, 1912.

Cuneala amasiensis (Kriechbaumer, 1869)

Material Examined: **Denizli**: Pamukkale, 5.V.1994, 1♀. İzmir: Efes, 5.V.1998, 2♀♀.

Distributed in Turkey: Amasya, Ankara, Aydın, Bursa and Çorum (Benson, 1968).

General Distribution and Chorotype: Turkey (Benson, 1968; Lacourt, 1999). It is endemic for Turkey.

Host Plant: Unknown

Cuneala confinis (Konow, 1886)

Synonym: *Allantus koehleri* sensu Puls, 1870, nec Klug, 1817; *A. atratus* André, 1883; *A. confinis* Konow, 1886; *A. parviceps* Konow, 1898.

Material Examined: **Artvin**: Borçka, Karagöl, 1050 m, 8.VII.1994, 2♂♂, 1♀; Genye Dağı, 1600-1800 m, 16.VIII.1990, 27♀♀. **Erzurum**: Aşkale, Kopdağı, 2000 m, 16.VI.2000, 1♂, 1♀. **Rize**: Çamlıhemşin, Ayder, 1550 m, 30.VII.2000, 19♀♀; İkizdere, Çamlık, 1600 m, 29.VII.2000, 1♂, 3♀♀, Ovit, 2500 m, 22.VII.2002, 4♀♀, 29.VII.2000, 3♀♀. **Trabzon**: Tonya, Erikbeli, 11.VII.1994, 1♀; Sümelamanastırı, 2.VII.2002, 2♂♂.

Distributed in Turkey: Bolu, Çankırı, Gümüşhane, Kastamonu, Kayseri, Rize and Trabzon (Benson, 1968).

General Distribution and Chorotype: Turkey, Transcaucasia, Iran (Benson, 1968; Lacourt, 1999); Turano-Mediterranean.

Host Plant: *Geranium psilostemum* (Lacourt, 1999).

Cuneala koehleri Klug, 1817

Material Examined: **Artvin**: Borçka, Karagöl, 1050 m, 8.VIII.1994, 7♀♀; Genye Dağı, 1600 m, 16.VIII.1990, 2♀♀. **Erzurum**: Şenkaya, Ormanlı, 1800 m, 20.V.1994, 1♀. **Rize**: Çamlıhemşin, 500-1200 m, 30.VII.2000, 2♀♀; İkizdere, Çamlık, 1600 m, 29.VII.2000, 2♀♀, Ovit, 1600-2400 m, 29.VII.2000, 3♀♀.

Distributed in Turkey: New record for Turkish fauna.

General Distribution and Chorotype: Europe, Yugoslavia, Russia (Liston, 1995; Lacourt, 1999); Sibero-European.

Remarks: Present data show that its easternmost record is eastern Turkey.

Host Plant: *Granium silvaticum*, *Sanguineum* spp., *Robertianum* spp., *Cardamine* spp. (Liston, 1995; Taeger and Blank, 1998; Lacourt, 1999).

Elinora Benson, 1946

Synonym: *Cuneala* Zirngiebl, 1956

Elinora asiatica Enslin, 1910

Material Examined: **Bayburt**: Çalidere, 1650 m, 16.VI.2000, 1♀. **Erzurum**: University field, 1850 m, 26.V.1994, 1♀, 31.V.2001, 1♂, 4♀♀, 1-11.VI.1971, 1♂, 9♀♀, 3.VI.2000, 5♀♀, 12.VI.1994, 1♀; Dumlulu, 1850 m, 25.VI.2002, 1♀; Pasinler, 1700 m, 10.VI.1983, 1♀, 11.VI.1981, 1♂, 12.VI.1996, 1♂, 3♀♀, 2.VII.1983, 2♀♀; Köprüköy, Örentaş, 1900 m, 12.VI.2001, 1♀; Narman, Savaşçılar, 2300 m, 13.VI.1999, 1♀; Oltu, Başaklı, 1850 m, 20.V.1972, 1♂; Şenkaya, Ormanlı, 1800 m, 25.V.1994, 1♂, 1♀, Turnalı, 1750 m, 25.V.1994, 2♀♀; Uzundere, Şelale, 1000 m, 9.VI.1996, 1♀. **İğdır**: 850 m, 25.V.1971, 1♀. **Isparta**: S.Karağaç, 1.V.1994, 1♀. **Kars**: Sarıkamış, Karakurt, TCK Çeşmesi, 1600 m, 2.VI.1999, 1♂, 1500 m, 4.VI.2000, 1♂, 1♀. **Muğla**: 27.VII.1983, 1♂.

Distributed in Turkey: Benson (1968) and Lacourt (1999) indicated the presence of this species in Turkey, but no locality was noted.

General Distribution and Chorotype: Present knowledge shows that this species is endemic for Turkey.

Host Plant: Adults were collected from pastures.

Elinora baetica Spinola, 1843

Synonym: *Allantus fulviventris* Mocsary, 1880; *A. dusmeti* Konow, 1894; *A. antiqae* var. *atroscutellatus* Zirngiebl, 1937.

Material Examined: **Erzurum**: University field, 1850 m, 7.V.1970, 1♀, 25.V.1983, 1♀, 1.VI.2000, 1♂, 2♀♀, 8.VI.1994, 2♀♀, 11.VI.1971, 1♀, 30.VI.1992, 1♀; Dutçu, 1950 m, 20.VI.1994, 1♀, Nenehatun, 2100 m, 27.VI.1999, 1♀; Aşkale, Küçükgeçit, 1750 m, 15.VI.2002, 1♀; Köprüköy, Örentaş, 1900 m, 21.VI.2001, 1♂, 3♀♀. **Kars**: Sarıkamış, Karakurt, 1550 m, 2.VI.1999, 1♂, 4.VI.2000, 5♂♂, 1♀.

Distributed in Turkey: New record for Turkish fauna and Asia.

General Distribution and Chorotype: Spain and Portugal (Liston, 1995; Lacourt, 1999); Turano-European.

Host Plant: Larvae were collected on *Sinapis arvensis*. Lacourt (1999) gave the same plant as host.

Remarks: It is a new record for Asia as well as Turkey.

Elinora ornata André, 1881

Synonym: *Allantus discolor* Konow, 1890; *A. ornatus* André, 1881; *A. mocsaryi* Enslin, 1910; *Tenthredo baja* Enslin, 1912; *T. camilla* Enslin, 1912.

Material Examined: **Kars:** Sarıkamış, Karakurt, 1550 m, 23.V.2001, 3♀, 27.V.2000, 1♂, 1♀, 2.VI.1999, 1♂, 4:VI.2000, 5♂♂, 10♀♀, 16.VI.2001, 1♀.

Distributed in Turkey: New record for Turkish fauna.

General Distribution and Chorotype: Transcaucasia (Benson, 1968; Lacourt, 1999); Turano-Anatolian.

Host Plant: Unknown.

Remarks: Its westernmost distribution area is west of Kars province.

Macrophya Dahlbom, 1835

Synonym: *Zalagium* Rohwer, 1912; *Beldonea* Enderlein, 1919, nec Cameron, 1899; *Paramacrophya* Forsius, 1918.

Macrophya albicincta (Schrank, 1776)

Synonym: *M. leucopoda* Palma, 1861; *M. melasoma* Rudow, 1871; *Tenthredo albipes* Geoffroy, 1785; *T. fera* Fallen, 1808, nec Scopoli, 1786; *T. (Allantus) lugubris* Audinet-Serville, 1823; *T. (A.) luctuosa* Audinet-Serville, 1823 nec Schrank, 1802.

Material Examined: **Artvin:** Borçka, Karagöl, 1050 m, 8.VII.1994, 1♂.

Distributed in Turkey: Bolu, Giresun, Bursa, Rize, Samsun, Trabzon and Zonguldak (Benson, 1968; Chevin and Chenon, 1982).

General Distribution and Chorotype: Europe, Turkey, North Iran, Russia, Caucasus, Transcaucasia, Siberia, Baltic Coasts, Algeria (Benson, 1968; Cingovski, 1982; Liston, 1995; Lacourt, 1999; Medvedev, 1994); Centralasiatic-Mediterranean.

Host Plant: *Sambucus ebulus*, *S. nigra*, *S. racemosa*, *Valeriana officinalis*, *Viburnum opalus* (Liston, 1995; Taeger and Blank, 1998; Lacourt, 1999).

Macrophya annulata Geoffroy, 1785

Synonym: *Tenthredo ligata* Müller, 1776; *T. similis* Spinola, 1808; *T. (Allantus) neglecta* Klug, 1817; *T. (A.) abietis* Audinet-Serville, 1823, nec Linne, 1758.

Material Examined: **Gümüşhane:** Vaukgeçidi, 1850 m, 21.VI.2001, 3♂♂, 1♀. **Rize:** Çamlıhemşin, Ayder, 1200-1550 m, 30.VII.2000, 2♂♂; İkizdere, Çamlık, 1600-2400 m, 29.VII.2000, 3♂♂.

Distributed in Turkey: Ankara and Samsun (Benson, 1968).

General Distribution and Chorotype: Europe, Turkey, Iran, Russia, Siberia, Crimea, Caucasus (Benson, 1968; Liston, 1995; Lacourt, 1999); West Palearctic.

Host Plant: *Potentilla reptans*, *Euphorbia*, *Origanum vulgare*, *Rosa* spp., *Rubus* spp., *Sambucus* spp. (Liston, 1995; Taeger and Blank, 1998; Lacourt, 1999).

Macrophya blanda Fabricius, 1775

Synonym: *Tenthredo solitaria* Schrank, 1781, nec Scopoli, 1763; *T. ligustrina* Geoffroy, 1785; *T. cylindrica* Fabricius, 1804; *T. (Allantus) lacrymosa* Audinet-Serville, 1823; *T. cognata* Fallen, 1829; *T. nyctea* Fischer de Waldheim, 1843.

Material Examined: **Adıyaman:** Nemrut Mountain, 1950 m, 29.V.1999, 1♀. **Artvin:** Ardanuç, Akarsu, 900 m, 7.VII.1994, 1♀, Ferhatlı, 450 m, 13.V.2000, 1♀; İşhan, 500 m, 16.VI.2001, 1♂; Şavşat, Karagöl, 1650 m, 8.VII.1998, 1♀; Yusufeli, 500 m, 7.VII.1992, 1♀, Ormanlı, 300 m, 12.V.2000, 1♀, Sarıgöl, 700 m, 5.VII.1994, 3♂♂, 5♀♀, Altıparmak, 1100 m, 5.VII.1994, 1♀. **Bayburt:** Kopdağı, 2100 m, 16.VI.2000, 1♀. **Erzincan:** Avcılar, 1300 m, 26.V.2001, 1♀; Dumanlı, 1300 m, 25.V.2001, 1♀. **Erzurum:** It is common and abundant in Erzurum province. The materials were collected from the end of May to the end of July from University field, Dutçu, Köşk, Çat, Hınıs, İlica (Atlıkonak), İspir (Madenköprübaşı), Köprüköy (Örentaş), Narman (Kireçlidağı), Oltu (Başaklı, Çamlıbel, Sütkans, Sarısaz, Tutmaç), Olur, Pasinler (Çalılıyazı, Pelitli), Pazaryolu (Karataş, Toprakkale), Şenkaya (Turnalı), Tortum (Aksukapı, Çataldere, Doruklu) and Uzundere (Dikyar) at altitudes of 1300-2400 m, 18♂♂, 61♀♀. **Gümüşhane:** Torul, Zigana, 1900 m, 14.VI.1990, 1♀. **Kars:** Sarıkamış, Karakurt, Aras Vadisi, 1500 m, 4.VI.2000, 1♀, 18.VII.2002, 1♀. **Hatay:** Dört Yol, Topakbaşı Yaylası, 1200 m, 25.V.2002, 1♀. **Rize:** Çamlıhemşin, Ayder, 1200-1550 m, 30.VII.2000, 1♀; İkizdere, Ovit Dağı, 2400 m, 29.VII.2000, 1♀. **Trabzon:** Hamsiköy, 1600 m, 24.VI.1998, 1♀.

Distributed in Turkey: Amasya, Ankara, Artvin, Erzurum, Giresun, Konya, Mersin, Samsun, Trabzon, and Uşak (Benson, 1968).

General Distribution and Chorotype: Europe, Turkey, Russia, Moldova, Transcaucasia, Caucasus, Central Asia, Siberia, Crimea, Iran (Benson, 1968; Medvedev, 1994; Liston, 1995; Lacourt, 1999); Sibero-European.

Host Plant: Adults were collected on flowers of *Fragaria* sp. and *Rubus* sp. Liston (1995) indicated that adults of some sawfly species show a strong association with the flowers of the larval host.

***Macrophya crassula* (Klug, 1817)**

Synonym: *M. klugii* Snellen van Vollenhoven, 1869; *M. cora* Kirby, 1886; *Tenthredo (Allantus) maculosa* Audinet-Serville, 1823.

Material Examined: Artvin: Şavşat, Karagöl, 1650 m, 8.VII.1998, 1♂, 3♀♀, Yusufeli, Altıparmak, 1100 m, 5.VII.1994, 2♂♂.

Distributed in Turkey: Artvin, Bursa, Mersin, Samsun, Sinop and Trabzon (Benson, 1968).

General Distribution and Chorotype: Europe, Turkey, Russia, Transcaucasia (Benson, 1968; Cingovski, 1982; Medvedev, 1994; Lacourt, 1999).

Host Plant: *Sambucus ebulus* (Liston, 1995; Taeger and Blank, 1998).

***Macrophya cyrus* Benson, 1954**

Material Examined: Bayburt: 25 km S., 1750 m, 21.VI.2001, 1♀; Kop Dağı, 2100 m, 16.VI.2000, 2♀♀, Maden, 1650 m, 16.VI.2000, 3♂♂, 7♀♀. Bingöl: Çirişli Geçidi, 2000 m, 11.VII.2002, 2♀♀, Çobantaş, 1400 m, 2.VI.2001, 5♂♂, 5♀♀. Bitlis: 28.V.1989, 1♀. Elazığ: Keban, 900 m, 16.V.2002, 1♂, 1♀. Erzincan: Avcılar, 1300 m, 26.V.2001, 1♂, 1♂, Dumanlı, 1200 m, 25.V.2001, 2♂♂, 3♀♀, Bahçeli, 1350 m, 26.V.2001, 4♂♂, 10♀♀, Gülkaynak, 1200 m, 25.V.2001, 1♂, 1♀, Sansa Boğazı, 1350 m, 25.V.2001, 1♀, Üzümlü, 1200 m, 25.V.2001, 2♂♂, 5♀♀. Erzurum: It is common and abundant in Erzurum province. The materials were collected from the end of May to the end of July from Akdağ, Dutçu, Güngörmez, Karagöbek, Köşk, Nenehatun, Umudum, Yeşildere, Aşkale, Çat (Çimiş), Hınıs, Ilica (Atlıkonak, Gülyurt Geçidi), İspir (Madenköprübaşı), Köprüköy (Örentaş), Narman (Kireçli), Oltu (Başaklı, Sarısaz, Sütkans, Tutmaç), Pasinler (Çalyazı, Pelitli), Pazaryolu (Karataş), Şenkaya (Soğanlı Dağı), Tortum (Çataldere, Pehlivanlı, Şenyurt) and Uzundere (Yedigöller) at altitudes of 1100-2400 m, 19♂♂, 94♀♀. Gümüşhane: Vauk Geçidi, 1850 m, 21.VI.2001, 2♀♀. Kars: Sarıkamış, İsisu, 13.VII.1991, 3♂♂, 2♀♀, Karaorgan, 2000 m, 24.VI.1999, 2♂♂, Karakurt, 1500 m, 11.VI.1998, 1♀, 4.VI.2000, 1♂. Konya: Güneysınır, Gurağaç, 1000 m, 2.VI.2002, 1♀.

Distributed in Turkey: Afyon, Amasya, Ankara, Niğde, Gümüşhane, Erzurum and Konya (Benson, 1968; Chevin and Chenon, 1982).

General Distribution and Chorotype: Turkey, Armenia, Iran (Benson, 1968; Lacourt, 1999); Irano-Anatolian.

Host Plant: Unknown.

Remarks: Present data show that its westernmost distribution point is Afyon.

***Macrophya diversipes* (Schränk, 1782)**

Synonym: *M. flavipes* Tischbein, 1852; *M. haematopus* var. *maculativentris* Costa, 1866; *M. eximia* Mocsary, 1877; *M. caucasica* André, 1881; *M. rubripes* André, 1881; *M. saundersi* Kirby, 1886; *M. sanguinipes* Mocsary, 1891; *M. dalmatina* Gasparini, 1891; *Tenthredo haematopus* Villers, 1789; *T. ochreatea* Panzer, 1804, *T. orallipes* Eversmann, 1847; *Tenthredo halensis* Aichinger, 1870.

Material Examined: Artvin: Şavşat, Çayağzı, 500 m, 27.V.1997, 1♂; Yusufeli, Altıparmak, 12.VI.1997, 1♀, Demirkent, 450 m, 6.VII.1994, 1♀. Bayburt: Çalidere, 1850 m, 16.VI.2000, 6♂♂, 3♀♀; Maden, 1650 m, 16.VI.2000, 10♂♂, 9♀♀, 1700 m, 21.VI.2001, 1♂; Kopdağı, 2100-2300 m, 16.VI.2000, 13♂♂, 14♀♀, 21.VI.2001, 4♀♀. Bingöl: Çirişligeçidi, 2000 m, 11.VII.2002, 2♂♂. Erzincan: Bahçeli, 1300 m, 26.V.2001, 2♀♀; Cevizli, 1300 m, 4.VI.1990, 1♀; Dumanlı, 1200 m, 25.V.2001, 1♀; Gülkaymak, 1200 m, 25.V.2001, 1♂, 1♀; Sansa Boğazı, 1350 m, 25.V.2001, 2♂♂, 5♀♀; Üzümlü, 1200 m, 25.V.2001, 2♀♀. Erzurum: It is common and abundant in Erzurum province. The materials were collected from the end of May to the middle of August from Arıbahçe, Dutçu, Güngörmez, Karagöbek, Kargapazarı, Köşk, Nenehatun, Palandöken, University field, Yeşildere, Aşkale (Mezra), Çat (Çimiş), Hınıs, Horasan (Karaçuha), Ilica (Atlıkonak, Eğerti, Gülyurt Bakımevi, Rizekent), İspir (Çayırözü, Fısırik Kalesi, Madenköprübaşı), Köprüköy (Örentaş), Narman (Kireçli), Oltu (Başaklı, Çamlıbel, Sarısaz, Sütkans, Tutmaç), Olur (Salaçur, Süngübayır), Pasinler (Çalyazı, Pelitli), Pazaryolu (Karataş, Toprakkale), Şenkaya (Soğanlı Dağı, Timurkişla, Turnalı), Tortum (Aksuyayla, Aktaş, Çataldere, Pehlivanlı, Şenyurt, Yukarısivri), and Uzundere (Dikyar, Şelale) at altitudes of 1000-2400 m, 129♂♂, 188♀♀. Gümüşhane: Torul, Zigana, 1350 m, 24.VI.1998, 1♀; Vauk Geçidi, 1850 m, 21.VI.2001, 2♂♂, 2♀♀. Iğdır: 850 m, 25.VI.1971, 1♀. Kars: Sarıkamış,

Karakurt, 1500 m, 27.V.2000, 1♂, 4.VI.2000, 2♀♀, Şeytangeçmez, 1500 m, 2.VI.1999, 4♀♀, 11.VI.1996, 1♀. **Rize:** Çamlıhemşin, Ayder, 1550 m, 30.VII.2000, 1♀; İkizdere, Ovit, 2400 m, 29.VII.2000, 2♀♀.

Distributed in Turkey: Amasya, Ankara, Artvin, Çorum, Erzurum, Gümüşhane, Muğla and Mersin (Benson, 1968).

General Distribution and Chorotype: Europe, Turkey, Russia, Caucasus, Kazakhstan, Urals, Iran (Benson, 1968; Medvedev, 1994; Lacourt, 1999); Asiatic-European.

Host Plant: Larvae were observed feeding on *Fragaria* sp. and adults were collected from the flowers of *Fragaria* sp. and *Rubus* sp.

***Macrophya duodecimpunctata* Linne, 1758**

Synonym: *M. novemguttata* Costa, 1859; *M. luridicarpa* Costa, 1894; *Tenthredo signata* Scopoli, 1763; *T. fera* Scopoli, 1786; *T. melanoleuca* Gmelin, 1789; *T. albamacula* Audinet-Serville, 1823; *T. idriensis* Lepeletier, 1823; *T. dolens* Eversmann, 1847; *T. curvipes* Gimmerthal, 1847; *Pachyprotasis dolens* André, 1881.

Material Examined: **Bayburt:** Maden, 1650 m, 16.VI.2000, 1♀. **Erzurum:** İlica, Atlıkonak, 2000-2400 m, 29.VI.1999, 6♀♀, 29.VI.2001, 1♂, 1♀; Hınıs, 1800 m, 14.VI.2002, 1♀; Horasan, Aras Vadisi, 1600 m, 23.V.2001, 2♀♀; Oltu, Tutmaç-Başaklı, 2000 m, 1.VII.2000, 1♀.

Distributed in Turkey: Samsun (Benson, 1968).

General Distribution and Chorotype: Europe, Turkey, Russia, Caucasus, Siberia, Japan, North Africa (Benson, 1968; Medvedev, 1994; Liston, 1995; Lacourt, 1999); Palearctic.

Host Plant: *Graminae*, *Carex* sp., *Cyperaceae* (Liston, 1995; Taeger and Blank, 1998).

***Macrophya erythrocnema* A.Costa, 1859**

Synonym: *Tenthredo (Macrophya) femoralis* Kowall, 1864, nec Stephens, 1835

Material Examined: **Bayburt:** Kopdağı, 2100-2300 m, 16.VI.2000, 1♂, 2♀♀. **Erzurum:** Köprüköy, Örentaş, 1900-2100 m, 12.VI.2001, 1♀; Oltu, Tutmaç-Başaklı, 2000 m, 1.VII.2000, 2♂♂, 2♀♀; Şenkaya, Turnalı, 1750 m, 25.VII.1996, 1♀; Tortum, Çataldere, 1950-2500 m, 12.VII.2001, 1♀. **Rize:** İkizdere, Çamlık, 1650 m, 29.VII.2000, 1♀, OvitDağı, 2300 m, 29.VII.2000, 1♀;

Çamlıhemşin, Ayder, 1200-1550 m, 30.VII.2000, 1♀. **Trabzon:** Hamsiköy, 1600 m, 24.VI.1998, 1♀.

Distributed in Turkey: Artvin and Rize (Benson, 1968).

General Distribution and Chorotype: Europe, Turkey, Transcaucasia, Israel (Benson, 1968; Medvedev, 1994; Lacourt, 1999); Asiatic-European.

Host Plant: Unknown.

***Macrophya militaris* Klug, 1817**

Synonym: *M. lepeletieri* Costa, 1859; *Tenthredo analis* Spinola, 1808, nec Fabricius, 1793; *T. (Allantus) schaefferi* Audinet-Serville, 1823, nec Klug, 1817.

Material Examined: **Artvin:** Ormanlı, 300 m, 12.V.2000, 1♀. **Erzurum:** Oltu, Sarısaz, 1450 m, 21.VI.2000, 3♀♀.

Distributed in Turkey: New record for Turkish fauna.

General Distribution and Chorotype: Russia, Caucasus, Balkans, Central and Southern Europe (Medvedev, 1994; Liston, 1995; Lacourt, 1999); Central Asiatic-European.

Host Plant: *Rubus idaeus*, *Origanum vulgare*, (Medvedev, 1994; Liston, 1995; Taeger and Blank, 1998; Lacourt, 1999).

***Macrophya montana* Scopoli, 1753**

Material Examined: **Bayburt:** Kopdağı, 2300 m, 16.VI.2000, 2♂♂, Maden, 1650 m, 16.VI.2000, 2♀♀. **Erzurum:** İspir, Madenköprübaşı, 1400 m, 18.VI.1994, 2♀♀; Şenkaya, Turnalı, 1750 m, 6.VII.1990, 1♂; Tortum, Aşağımeydanlar, 4.VII.1991, 1♂, Pehlivanlı, 1400 m, 12.VII.1992, 2♂♂, 1♀, Uzunkavak, 1800 m, 12.VII.2001, 1♀.

Distributed in Turkey: Afyon, Amasya, Isparta, Rize, Samsun and Sivas (Benson, 1968; Chevin and Chenon, 1982).

General Distribution and Chorotype: Europe, Turkey, Russia, Transcaucasia, Crimea, Turkistan, Urals, Iran, North Africa (Benson, 1968; Chevin and Chenon, 1982; Medvedev, 1994; Liston, 1995; Lacourt, 1999); Palearctic.

Host Plant: *Rubus caesius* (Liston, 1995; Taeger and Blank, 1998).

***Macrophya postica* Brullé, 1832**

Synonym: *M. ratzeburgii* Tischbein, 1852; *M. histrionica* Snellen, 1878.

Material Examined: **Adana:** Ceyhan, 22.V.1992, 2♀; Yumurtalık, 22.V.1992, 4♀. **Artvin:** Kalburlu, 300 m, 13.V.2000, 1♂, 1♀; Ardanuç, Akarsu, 900 m, 7.VII.1994, 1♂, 1♀, Cehennem Deresi, 600 m, 13.V.2000, 2♂♂, Ferhatlı, 550 m, 13.V.2000, 7♂♂, 7♀♀, 7.VII.1994, 1♂, Zeytinlik, 22.V.2002, 500 m, 1♂; Borçka, Karagöl, 1050 m, 8.VII.1994, 1♂; İşhan, 600 m, 16.VI.2001, 1♂; Yusufeli, Altıparmak, 1100 m, 12.VI.1997, 1♀, 5.VII.1994, 1♀, Cıvnar, 15.VII.1992, 1♀, Demirkent, 450 m, 6.VII.1994, 1♀, Sarıgöl, 700 m, 5.VII.1994, 8♀♀, Şavşat, Bahçeli, 500 m, 22.V.1997, 1♂, Oruçlu, 21.V.1997, 1♂; **Bayburt:** Maden, 1650 m, 16.VI.2000, 1♂; Bingöl: 1150 m, 30.V.2002, 3♀♀, 7♂♂. **Diyarbakır:** 700 m, 1.VI.2002, 1♀. **Erzincan:** Üzümlü, 1300 m, 16.VI.1994, 1♀. **Erzurum:** Abdurrahmangazi, 2200 m, 14.V.2000, 2♀♀; Horasan, 1700 m, 4.VI.2000, 1♀; Ilica, Atlıkonak, 2000 m, 29.VI.1999, 1♀; İspir, Madenköprübaşı, 1300 m, 16.VI.1994, 1♂, 1♀; Oltu, 1400 m, 11.VII.1991, 2♂♂, 1♀, Kaleboğazı, 1450 m, 28.VII.1990, 2♂♂, Sarısaz, 1450 m, 21.VI.2000, 3♀♀, Sütkans, 1500 m, 25.VI.1996, 1♀, Taşlıköy, 12.VI.1991, 2♂♂; Olur, Coşkunlar, 12.VII.1991, 8♂♂; Şenkaya, İçmesu, 1800 m, 24.VI.1999, 1♀, Timurkişla, 24.VI.1999, 1♀, Turnalı, 1750 m, 12.VI.1992, 1♀; Tortum, Aksukapı, 25.VI.2002, 1400 m, 2♂♂, Çakıllı, 1.VII.1991, 1♂, Pehlivanlı, 1400 m, 12.VII.1992, 1♀; Uzundere, 4.VI.1989, 2♀♀, Dikyar, 1100 m, 31.VII.1993, 1♂, Çamlıyamaç, 1200 m, 21.VI.1998, 3♂♂, 2♀♀, Şelale, 1000 m, 9.VI.1996, 1♀. **Gümüşhane:** 15.VI.1992, 1♂, 1♀. **İzmir:** Efes, 5.V.1998, 2♀♀. **Kars:** Sarıkamış, Karakurt, Aras Vadisi, 1500 m, 27.V.2000, 1♂, 11.VI.1998, 3♀♀, 23.VI.2000, 4♂♂, 5♀♀, 18.VII.2002, 1♂, Şeytangeçmez, 1500 m, 2.VI.1999, 1♂, TCK Çeşmesi, 1700 m, 4.VI.2000, 1♂, 3♀♀. **Ordu:** 28.VI.1991, 5♀♀. **Osmaniye:** Zorkun Yaylası, 1500 m, 24.VI.1990, 1♀; Kadirli, Karatepe, 500 m, 14.V.2002, 2♀♀. **Rize:** Çamlıhemşin, Ayder, 1550 m, 30.VII.2000, 1♀.

Distributed in Turkey: Afyon, Amasya, Ankara, Antalya, Artvin, Aydın, Balıkesir, Bolu, Gümüşhane, Erzurum, Mersin, Muğla, Samsun and Sinop (Benson, 1968; Özeren, 1970; Chevin and Chenon, 1982).

General Distribution and Chorotype: Russia, Crimea, Caucasus, Turkey, Balkans, Hungary, Italy (Medvedev, 1994; Liston, 1995; Lacourt, 1999); Asiatic-European.

Host Plant: Adults were collected from flowers of *Fragaria* sp. and *Rubus* sp.

Macrophya rufipes Linne, 1758

Synonym: *Tenthredo pavid*a Fabricius, 1775; *T. dumetorum* Geoffroy, 1785; *T. strigosa* Fabricius, 1798; *T. (Allantus) citreipes* Audinet-Serville, 1823.

Material Examined: **Artvin:** Ardanuç, Ferhatlı, 450 m, 13.V.2000, 1♂, İşhan, 600 m, 16.VI.2001, 1♂, 2♀♀. **Bayburt:** Çalidere, 1850 m, 16.VI.2000, 2♀♀, Kopdağı, 2100 m, 16.VI.2000, 1♀. **Bingöl:** Çobantaşı, 1400 m, 2.VI.2001, 1♂. **Erzurum:** Oltu, 1400 m, 25.VI.1971, 1♂, Tutmaç-Başaklı, 2000 m, 1.VII.2000, 1♂, 1♀; Tortum, Çataldere, 1950-2500 m, 12.VII.2001, 1♀, Şenyurt, 1500 m, 27.VI.1996, 1♀, Yukarımeydanlar, 3.VII.1991, 1♀. **Gümüşhane:** Vaukgeçidi, 1850 m, 21.VI.2001, 1♂. **Kars:** Sarıkamış, Karakurt, TCK Çeşmesi, 1500 m, 4.VI.2000, 2♀♀.

Distributed in Turkey: Balıkesir (Chevin and Chenon, 1982).

General Distribution and Chorotype: Europe, Turkey, Russia, Urals, Crimea, Caucasus, Central Asia (Medvedev, 1994; Liston, 1995; Lacourt, 1999); Asiatic-European.

Host Plant: *Agrimonia eupatoria*, *Vitis vinifera* (Liston, 1995; Taeger and Blank, 1998).

Macrophya superba Tischbein, 1852

Synonym: *M. flavipennis* Kriechbaumer, 1891; *Tenthredo erythropus* Brullé, 1832.

Material Examined: **Artvin:** Ardanuç, Ferhatlı, 450 m, 13.V.2000, 1♀. **Bayburt:** 25 km SE, 21.VI.2001, 1700 m, 1♀, Çalidere, 1850 m, 16.VI.2000, 4♂♂, 4♀♀; Kopdağı, 2100-2300 m, 16.VI.2000, 2♂♂, 2♀♀, 21.VI.2001, 1♀, Maden, 1650 m, 16.VI.2000, 13♂♂, 5♀♀, 1700 m, 21.VI.2001, 2♀♀. **Erzincan:** 1350 m, Avclar, 6.VI.1999, 1♀, Bahçeli, 1200 m, 26.V.2001, 1♂. **Erzurum:** It is common and abundant in Erzurum province. The materials were collected from the middle of May to the end of July in a University field, Yeşildere, Çat (Çimiş), Ilica (Atlıkonak), İspir (Madenköprübaşı), Oltu (Başaklı, Çamlıbel, Sarısaz, Subatik, Sütkans, Tutmaç), Pasinler, Pazaryolu (Karataş), Şenkaya (İçmesu, Turnalı), Tortum (Aksuyayla, Çakıllı, Çataldere, Doruklu, and Kaledibi, Pehlivanlı) at altitudes of 1300-2300 m, 38♂♂, 49♀♀. **Gümüşhane:** Torul, Zigana, 1600 m, 14.VI.1990, 1♂; Vauk Geçidi, 1850 m, 24.VI.2001, 6♂♂, 6♀♀. **Kars:** Sarıkamış, Karaorgan, 2000 m, 24.VI.1999, 1♀.

Distributed in Turkey: Afyon, Amasya, Ankara, Artvin, Balıkesir, Çankırı, Erzurum, Gümüşhane, İzmit, Manisa and Niğde (Benson, 1968; Chevin and Chenon, 1982).

General Distribution and Chorotype: Italy, Balkans, Turkey, Caucasus (Benson, 1968; Liston, 1995; Lacourt, 1999); Turano-European.

Host Plant: Adults were collected from *Fragaria* sp., *Rubus* sp. and *Euphorbia* spp.

***Macrophya teutonia* Panzer, 1799**

Synonym: *M. marginata* Mocsary, 1881; *Tenthredo aureatensis* Schrank, 1802.

Material Examined: **Erzincan:** Avcılar, 1300 m, 26.V.2001, 1♀. **Erzurum:** University field, 1850 m, 3.VI.2000, 1♀, Palandöken, 2400 m, 12.VI.1994, 1♀, 1.VII.1996, 1♀; Çat, Çirişli Geçidi, 2000-2100 m, 12.VI.2001, 1♀; Oltu, Tutmaç-Başaklı, 2000 m, 1.VII.2000, 2♀♀. **Kars:** Sarıkamış, Karakurt, TCK Çeşmesi, 1500 m, 12.VI.2002, 1♀.

Distributed in Turkey: New record for Turkish fauna.

General Distribution and Chorotype: Europe, Russia, Transcaucasia (Liston, 1995; Lacourt, 1999); Sibero-European.

Host Plant: Several adults were collected on the flowers of *Euphorbia* sp.; *Euphorbia cyparissias* (Liston, 1995; Taeger and Blank, 1998).

***Pachyprotasis* Hartig, 1837**

Synonym: *Lithracia* Cameron, 1902

***Pachyprotasis rapae* Linne, 1767**

Synonym: *Tenthredo scripta* Gmelin, 1790; *T. luctuosa* Schrank, 1802; *T. floricola* Gravenhorst, 1807; *T. nigrofasciata* Eschscholtz, 1822; *Macrophya (Pachyprotasis) omega* Norton, 1867; *Rhogogaster sayi* Rohwer, 1908.

Material Examined: **Artvin:** Şavşat, 1650 m, 8.VII.1998, 1♀. **Erzurum:** Şenkaya, Turnalı, 1750 m, 1.VII.1990, 1♀. **Rize:** Çamlıhemşin, Ayder, 1200-1550 m, 30.VII.2000, 2♀♀. **Trabzon:** Hamsiköy, 1700 m, 20.VI.1999, 1♀.

Distributed in Turkey: Giresun and Trabzon (Benson, 1968).

General Distribution and Chorotype: Europe, Turkey, Russia, Transcaucasia, Pacific Coastal Region, Siberia, Mongolia, India, China, Japan, North America, (Benson, 1968; Liston, 1995; Lacourt, 1999); Holarctic.

Host Plant: *Solanum tuberosum*, *Pedicularis palustris*, *Angelica sylvestris*, *Veronica beccabunga*, *Betonica*

officinalis, *Scrophularia* sp., *Solidago* sp., *Verbascum* sp., *Corylus avellana*, *Origanum* sp., *Fraxinus excelsior*, *Tussilago farfara*, *Symphoricarpos albus*, *Atropa* sp., *Salix caprea*, *Sarothamnus* sp., *Senecio* spp., *Polygonum* sp., *Aspidium* sp., *Epilobium* spp., *Hypericum* spp., *Galeopsis* spp., *Mentha* sp., *Polystichum* spp., *Plantago* spp., *Quercus* spp., *Stachys* spp. (Liston, 1995; Taeger and Blank, 1998).

***Rhogogaster* Konow, 1884**

Synonym: *Rhogogastera* Konow, 1885

***Rhogogaster chlorosoma* Benson, 1943**

Synonym: *R. scalaris* Klug, 1817.

Material Examined: **Artvin:** Şavşat, Karagöl, 1650 m, 8.VII.1998, 1♀. **Bayburt:** Çaldere, 1850 m, 16.VI.2000, 3♀♀, Kopdağı 2100 m, 16.VI.2000, 2♂♂. **Bingöl:** Çirişli Geçidi, 2000 m, 11.VII.2002, 1♀. **Erzurum:** Arıbahçe, 2400 m, 20.VII.2001, 1♀, Dutçu, Komyolu, 2200 m, 18.VII.1999, 1♀; Ilica, Atlıkonak, 2000 m, 29.VI.1999, 1♂; İspir, Madenköprübaşı, 1400 m, 7.VII.1996, 1♀; Köprüköy, Örentaş, 1900 m, 12.VI.2001, 1♂; Oltu, Çamlıbel, 1750 m, 2.VII.1997, 1♀, 14.VII.1996, 1♀, 22.VII.2001, 1♀, Tutmaç-Başaklı, 2000 m, 1.VII.2000, 1♀; Pasinler, Çalıyazı, 2400 m, 10.VII.1997, 1♀, Pelitli, 2000 m, 14.VII.1998, 1♀; Tortum, 1500 m, 4.VII.1994, 1♂♀, Kireçli Dağı 2200 m, 2.VII.2000, 1♀, Uzunkavak, 1800 m, 12.VII.2001, 2♀♀. **Gümüşhane:** Vauk Geçidi, 1850 m, 21.VI.2001, 2♀♀. **Rize:** Çamlıhemşin, Ayder, 1550 m, 30.VII.2000, 3♀♀.

Distributed in Turkey: Ankara, Erzurum, Giresun, İstanbul, Konya and Tokat (Benson, 1968).

General Distribution and Chorotype: Turkey, Caucasus, Mongolia, Siberia (Benson, 1968; Medvedev, 1994; Lacourt, 1999); Sibero-European.

Host Plant: Larvae feed on *Salix* spp., adults were collected on the same plants. It can be considered a miner pest of *Salix* spp. Taeger and Blank (1998) and Lacourt (1999) listed the following plant species as hosts: *Pteridium aquilinum*, *Alnus glutinosa*, *Circaea*, *Prunus* spp., *Ranunculus* spp., *Rosa* spp., *Salix alba*, *S. purpurea*, *Stellaria* spp., *Filipendula ulmaria*, *Populus tremula*, *Padus* spp., *Betula* spp., *Corylus avellana* and *Sorbus* spp.

3.6. *Sciapteryx* Stephens, 1835

Synonym: *Eniscia* Thomson, 1870; *Sciapterina* Ushinskij, 1940.

Sciapteryx circassica Dovnar-Zapolski, 1930

Material Examined: **Erzurum:** Şenkaya, Ormanlı, 1800 m, 20.V.1994, 4♀♀.

Distributed in Turkey: Gümüşhane and Trabzon (Benson, 1968).

General Distribution and Chorotype: Russia, Turkey, Transcaucasia (Benson, 1968; Liston, 1995; Zhelochovtsev and Zinovjev, 1996; Lacourt, 1999); Sibero-European.

Host Plant: Unknown.

Sciapteryx laeta Konow, 1891

Synonym: *S. laeta antennata* Muche, 1973

Material Examined: **Erzurum:** Pazaryolu, Karataş, 2000 m, 5.VII.2000, 3♂♂, 4♀♀.

Distributed in Turkey: Gümüşhane (Benson, 1968).

General Distribution and Chorotype: Turkey, Transcaucasia, Georgia (Benson, 1968; Zhelochovtsev and Zinovjev, 1996; Lacourt, 1999); Turanian.

Host Plant: *Ranunculus* spp. (Lacourt, 1999).

Remarks: Present data show that its westernmost record is Erzurum and Gümüşhane.

3.7. *Tenthredo* Linne, 1758

Synonym: *Parastatis* Kirby, 1881; *Labidia* Provancher, 1886; *Rethrax* Cameron, 1899; *Fethalia* Cameron, 1902; *Clydostomus* Konow, 1908; *Tenthredina* Rohwer, 1910; *Zamacrophya* Rohwer, 1912.

Tenthredo acerrima Benson, 1952

Synonym: *T. nitidior* (Konow, 1888); *T. marginella* Panzer, 1804, nec Fabricius, 1793; *T. aegra* Enslin, 1912; *T. sulphuripes* (Kriechbaumer, 1869); *Allantus arcuatus* var. *atricereus* Zirngiebl, 1937.

Material Examined: **Ardahan:** Posof, Yurtbekler, 1600 m, 27.VII.1991, 1♀. **Artvin:** Şavşat, Karagöl, 1650 m, 8.VII.1998, 2♂♂. **Erzurum:** Pazaryolu, Karataş, 2200 m, 5.VII.2000, 1♂. **Rize:** Çamlıhemşin, Ayder, 1200-1550 m, 30.VII.2000, 1♂, 1♀, İkizdere, Çamlık, 1600 m, 29.VII.2000, 4♂♂, 1♀, Ovit Dağı 1600-2400 m, 29.VII.2000, 8♂♂, 7♀♀.

Distributed in Turkey: Artvin, Gümüşhane and Trabzon, (Benson, 1968).

General Distribution and Chorotype: Europe, Russia, Turkey, Caucasus, Transcaucasia (Benson, 1968;

Cingovski, 1982; Liston, 1995; Lacourt, 1999); Sibero-European.

Host Plant: *Lotus corniculatus* (Liston, 1995, Lacourt, 1999, Taeger and Blank, 1998).

Tenthredo albiventris Mocsary, 1880

Synonym: *T. trivittata* André, 1881; *T. lederi* Konow, 1890; *T. (Allantus) albiventris hostia* Enslin, 1912; *T. pallidula* Benson, 1930; *T. kerketa* Dovnar-Zapolskij, 1930.

Material Examined: **Gümüşhane:** Vauk Geçidi, 1850 m, 21.VI.2001, 2♂♂, 1♀, 24.VI.2001, 16♂♂, 23♀♀.

Distributed in Turkey: Lacourt (1999) indicated that it occurred in Turkey, but no locality was noted.

General Distribution and Chorotype: Turkey, Transcaucasia (Lacourt, 1999); Turanian.

Host Plant: Adults were collected from flowers of *Conium* sp.

Tenthredo albopicta Puls, 1870

Synonym: *T. nigroclypeata* Mocsary, 1909

Material Examined: **Artvin:** Borçka, Karagöl, 1650 m, 8.VII.1994, 1♀. **Trabzon:** Sümelamanastırı, 2.VII.1996, 1♀.

Distributed in Turkey: Trabzon (Benson, 1968).

General Distribution and Chorotype: Turkey, Transcaucasia (Benson, 1968; Lacourt, 1999); Turanian.

Host Plant: Unknown.

Remarks: Present knowledge shows that Trabzon is the westernmost point of the distribution area of *T. albopicta* around the world.

Tenthredo arcuata Forster, 1771

Synonym: *T. labiata* Geoffroy, 1785; *T. virgata* Geoffroy, 1785; *T. viminalis* Schrank, 1796; *T. marginella* Panzer, 1804, nec Fabricius, 1793, p.p.; *Allantus melanotus* Rudow, 1872; *A. dispar* Rudow, 1872, nec Klug, 1817; *A. clpealis* Konow, 1888.

Material Examined: **Artvin:** Genye Dağı 1800 m, 16.VIII.1990, 2♀♀. **Erzurum:** Şenkaya, Turnalı, 1750 m, 25.VII.1996, 2♂♂, 6♀♀, 6.VIII.1990, 6♀♀; Tortum, Dorukluyaylası, 4.VII.1991, 2♀♀; Uzundere, Dikyar, 1200 m, 2.VII.1994, 3♀♀. **Rize:** Çamlıhemşin, Ayder, 1550 m, 30.VII.2000, 1♂, 2♀♀; İkizdere, Ovit dağı, 1600-2500 m, 22.VII.2002, 3♂♂, 6♀♀, 29.VII.2000, 9♂♂, 18♀♀.

Distributed in Turkey: Medvedev (1994) indicated that it was present in Turkey but no locality was noted.

General Distribution and Chorotype: Europe, Turkey, Russia, Transcaucasia, Caucasus, Pacific Coastal Region, Central Asia, Siberia, Mongolia, Japan (Medvedev, 1994; Liston, 1995; Lacourt, 1999); Asiatic-European.

Host Plant: Adults were collected from the flowers of *Trifolium pratense*. *T. repens* was given as host plant (Liston, 1995; Taeger and Blank, 1998; Lacourt, 1999).

***Tenthredo caligator* Eversmann, 1847**

Synonym: *T. nigritarsis* Puls, 1870; *T. morawitzi* Jakovlev, 1888.

Material Examined: **Erzurum:** 2400 m, 11.VII.1996, 1♀; Ilıca, Rizekent, 2200 m, 30.VII.1998, 1♀; İspir, Çayırözü, 4.VII.1997, 1♀; Oltu, Sütkans, 1500 m, 25.VI.1996, 2♀♀, Tutmaç-Başaklı, 2000 m, 1.VII.2000, 5♂♂, 4♀♀; Pasinler, Çalıyazı, 2400 m, 10.VII.1997, 3♂♂, 4♀♀, 11.VII.1997, 2♀♀, Pelitli, 2000 m, 14.VII.1998, 2♀♀; Pazaryolu, Toprakkale, 2200 m, 30.VII.1998, 1♀; Şenkaya, Turnalı, 1750 m, 1.VII.1990, 1♂, 6.VII.1990, 2♀♀, 25.VII.1990, 1♂, 1♀, 25.VI.1991, 1♂, 10.VII.1999, 1♀; Tortum, Aşağımeydanlar, 4.VII.1991, 1♂, Kireçli Dağı 2200 m, 25.VI.1996, 3♂♂, 1♀, 2.VII.2000, 1♂. **Rize:** İkizdere, Çamlık, 1600 m, 29.VII.2000, 2♂♂, 4♀♀, Ovit Dağı 1600-2400 m, 29.VII.2000, 6♂♂, 4♀♀; Trabzon: Hamsiköy, 1600 m, 24.VI.1998, 2♂♂, 3♀♀.

Distributed in Turkey: Trabzon (Benson, 1968).

General Distribution and Chorotype: Turkey, Transcaucasia (Benson, 1968; Lacourt, 1999); Turanian.

Host Plant: Adults were collected on flowers adjacent to forest areas.

***Tenthredo caucasica* Eversmann, 1847**

Synonym: *Allantus moestus* Mocsary, 1883

Material Examined: **Erzurum:** İspir, Madenköprübaşı, 1400 m, 18.VI.1994, 1♂; Oltu, Sütkans, 1500 m, 18.VI.1996, 1♂; Pazaryolu, Karataş, 2000-2200 m, 5.VII.2000, 1♀; Şenkaya, Turnalı, 1750 m, 6.VII.1990, 1♂, 25.V.1994, 1♀, 25.VII.1996, 1♂, 6.VIII.1990, 1♂, 1♀; Tortum, Çataldere, 1900-2500 m, 12.VII.2001, 3♀♀, Doruklu, 4.VII.1991, 1♀, Uzunkavak, 1800 m, 12.VII.2001, 1♂, 4♀♀. **Rize:** İkizdere, Çamlık, 1600 m, 29.VII.2000, 2♂♂, 11♀♀, Ovit Dağı 1600-2400 m, 29.VII.2000, 7♀♀; Çamlıhemşin, Ayder, 1200-1550 m, 30.VII.2000, 1♀. **Trabzon:** 10.IX.1992, 1♂.

Distributed in Turkey: Erzurum, Gümüşhane, Isparta and Trabzon (Benson, 1968; Chevin and Chenon, 1982).

General Distribution and Chorotype: Europe, Turkey, Transcaucasia (Benson, 1968; Cingovski, 1980; Medvedev, 1994; Lacourt, 1999); Turano-European.

Host Plant: Adults were collected from the flowers of *Euphorbia* spp.

***Tenthredo colon* Klug, 1817**

Synonym: *T. obscura* Panzer, 1805, nec Gmelin, 1790; *T. rudowi* André, 1881; *T. nigricollis* Kirby, 1882; *T. jocosa* Provancher, 1882; *T. punctulata* Konow, 1887; *T. livida* Linne sensu Ross, 1951; *Tenthredella colon* var. *nigriventris* Enslin, 1912.

Material Examined: **Artvin:** Yusufeli, Sarıgöl, 700 m, 5.VII.1994, 1♂.

Distributed in Turkey: Kütahya and Trabzon (Benson, 1968).

General Distribution and Chorotype: Europe, Turkey, Russia, Transcaucasia, Caucasus, North Asia, Central Asia, Mongolia, Siberia, Korea, Japan, North America, (Benson, 1968; Medvedev, 1994; Liston, 1995; Lacourt, 1999); Holarctic.

Host Plant: *Epilobium* sp., *Fuchsia* spp., *Circaeae lutetiana*, *Pteridium aquilinum*, *Aconitum* spp., *Dasiphora* sp., *Geranium* spp., *Potentilla* spp., *Ranunculus borealis*, *Sanguisorba* spp., *Salix* spp. (Liston, 1995; Taeger and Blank, 1998; Lacourt, 1999).

***Tenthredo costata* Klug, 1817**

Synonym: *T. sareptana* Eversmann, 1847; *Allantus subcostatus* Jakovlev, 1888; *A. graecus* Konow, 1888; *A. parnasius* Konow, 1888; *A. violaceipennis* Costa, 1890.

Material Examined: **Artvin:** Ardanuç, Akarsu, 600 m, 7.VII.1994, 1♂, 1♀, Cehennemderesi, 500 m, 13.V.2000, 1♂. **Bayburt:** Maden, 1650 m, 16.VI.2000, 5♂♂, 2♀♀, Kopdağı, 2100-2300 m, 16.VI.2000, 3♂♂, 2♀♀, 21.VI.2001, 1♂. **Bingöl:** Çirişli Geçidi, 2000 m, 11.VII.2002, 1♀; Çobantaşı, 1400 m, 2.VI.2001, 1♀. **Bitlis:** Adilcevaz, Yıldız, 15.VII.1999, 1♂, 1♀. **Elazığ:** Keban, 900 m, 16.V.2002, 3♂♂, 2♀♀. **Erzincan:** 1350 m, 5.VI.1992, 1♀, Dumanlı, 1200 m, 25.V.2001, 1♀; Avcılar, 1300 m, 26.V.2001, 5♂♂, 5♀♀; Üzümlü, 1300 m, 16.VI.1994, 1♀, 25.V.2001, 2♂♂, 5♀♀; Kemah, 1200 m, 25.V.2001, 1♀; Bahçeli, 1350 m, 26.V.2001, 3♀♀; Sansa Boğazı, 1350 m, 25.V.2001, 3♂♂, 6♀♀. **Erzurum:**

It is common and abundant in Erzurum province. The materials were collected from the middle of May to the middle of August in Abdurrahman Gazi, Dumlu, Köşk, Nenehatun, Palandöken, University field, Yeşildere, Aşkale (Kopdağı, Horasan, Ilica (Sorkunlu), İspir (Madenköprübaşı), Olur (Salaçur, Süngübayır), Oltu (Başaklı, Çamlıbel, Sarı saz, Subatık, Süt kans, Tutmaç), Pasinler (Pelitli), Pazaryolu, Şenkaya (İçmesu, Turnalı), Tortum (Aşağımeydanlar, Çataldere, Doruklu, Pehlivanlı, Tortumkale), and Uzundere (Çamlıyamaç, Diky ar, Şelale) at altitudes of 1300-2500 m, 91♂♂, 98♀♀. **Gümüşhane:** Vauk Geçidi, 1850 m, 24.VI.2001, 3♂♂, 7♀♀. **Konya:** Güneysınır, Gür ağaç, 1050 m, 2.VI.2002, 3♂♂, 6♀♀. **Kars:** Sarıkamış, İsisu, 3.VII.1991, 1♂, 1♀, 7.VII.1991, 1♂, Karakurt, 1550 m, 2.VI.1999, 1♂, 3♀♀, 1700 m, 4.VI.2000, 1♂, 1♀, 23.VI.2000, 1♀.

Distributed in Turkey: Amasya, Ankara, Artvin, Erzurum, Giresun, Niğde and Sivas (Benson, 1968).

General Distribution and Chorotype: Turkey, Russia, Caucasus, Transcaucasia, Iran, Austria, Hungary, Italy, Balkans (Benson, 1968; Cingovski, 1980; Medvedev, 1994; Liston, 1995; Lacourt, 1999); Turano-European.

Host Plant: Adults were collected from flowers of *Euphorbia* spp. Lacourt (1999) gave *Chondrilla junce* and *C. ramosissima* as larval host plants.

***Tenthredo discophora* Konow, 1896**

Synonym: *T. discophora* var. *pullata* Konow, 1898; *T. bigemmis* Konow, 1903.

Material Examined: Gümüşhane: Torul, Zigana Dağı 1900 m, 14.VI.1990, 2♀♀.

Distributed in Turkey: Bolu, Gümüşhane, Rize and Trabzon (Benson, 1968).

General Distribution and Chorotype: Turkey, Transcaucasia (Benson, 1968; Lacourt, 1999); Turanian.

Host Plant: Unknown.

***Tenthredo excellens* Konow, 1886**

Synonym: *T. annulata* Klug, 1817, nec Geoffroy, 1785; *T. persa* var. *cája* Enslin, 1912; *Allantus persa* Konow, 1888; *A. persa* var. *mandibularis* Enslin, 1910.

Material Examined: **Bayburt:** Maden, 1650 m, 16.VI.2000, 4♂♂, 3♀♀. **Erzincan:** 1250 m, 25.VI.1992, 1♀, 14.VI.1994, 1♀, 23.VI.1994, 1♀; **Avclar,** 1300 m, 26.V.2001, 2♀♀, **Bahçeli,** 1350 m, 26.V.2001, 1♀, **Sansa Boğazı,** 1350 m, 25.V.2001, 1♀, **Cevizli,** 1300 m,

4.VI.1990, 1♂♀. Erzurum: It is common and abundant in Erzurum province. The materials were collected from the middle of May to the beginning of August in Güngörmez, Köşk, Palandöken, University field, Aşkale (Kopdağı), Horasan (Karaçuha), Ilica (Atlıkonak), İspir (Madenköprübaşı, Gölyurt geçidi), Köprüküy (Örentaş), Olur (Süngübayır), Oltu (Başaklı, Çamlıbel, Sarı saz, Subatık, Süt kans, Tutmaç), Pasinler, Şenkaya (Turnalı), Tortum (Aksuyayla, Çakıllı, Doruklu, Pehlivanlı, Uzunkavak), and Uzundere (Diky ar, Şelale) at altitudes of 1000-2500 m, 28♂♂, 74♀♀. **Kars:** Digor, Kocaköy, 22.VIII.1997, 1♂, Sarıkamış, Karakurt, Aras Vadisi, 1600 m, 23.V.2001, 1♀, 25.VIII.1997, 1♂. **Sivas:** University field, 1350 m, 7.VI.1999, 1♂, 1♀.

Distributed in Turkey: Amasya, Ankara, Balıkesir, Erzurum, Kayseri, Mersin and Sivas (Benson, 1968; Chevin and Chenon, 1982).

General Distribution and Chorotype: Europe, Turkey, Russia, Transcaucasia, Caucasus, Central Asia, Iran (Benson, 1968; Medvedev, 1994; Liston, 1995; Lacourt, 1999); Asiatic-European.

Host Plant: Unknown.

***Tenthredo flavipennis* (Brullé, 1832)**

Synonym: *Allantus frivaldszkyi* Mocsary, 1879; *A. lautus* Konow, 1891.

Material Examined: **Adıyaman:** Nemrut Mountain, 1950 m, 29.V.1999, 1♀. **Bayburt:** Maden, 1650 m, 16.VI.2000, 1♀; **Kopdağı** 2100-2300 m, 16.VI.2000, 2♀♀, **Çaldere,** 1850 m, 16.VI.2000, 1♀. **Erzincan:** Avclar, 1300 m, 26.V.2001, 1♂; **Cevizli,** 1300 m, 4.VI.1990, 1♂, 1♂, **Sansa Boğazı,** 1350 m, 25.V.2001, 1♂. **Erzurum:** Köşk, 1850 m, 20.VI.1996, 2♂♂, 1♀, **Yeşildere,** 1850 m, 25.VI.2002, 1♂; **Ilica, Atlıkonak,** 2000-2400 m, 8.VI.2001, 3♂♂, 8♀♀, 29.VI.1999, 1♂, 1♀; **Köprüküy, Örentaş,** 1900-2100 m, 12.VI.2001, 2♂♂, 2♀♀; **Tortum, Aktaş,** 1700 m, 25.V.1994, 1♀. **Kars:** Karakurt, Aras Vadisi, TCK Çeşmesi, 1650 m, 23.V.2001, 1♀.

Distributed in Turkey: Erzurum and Gümüşhane (Benson, 1968).

General Distribution and Chorotype: Balkans, Turkey, Transcaucasia (Benson, 1968; Liston, 1995; Lacourt, 1999); Central Asiatic-European.

Host Plant: Some adults collected from *Euphorbia* spp. It was observed that 1 female was feeding on the body fluid of a cantarid beetle.

***Tenthredo frauenfeldii* Giraud, 1857**

Synonym: *Allantus helveticus* Konow, 1898; *A. merceti* Konow; *A. montanus* Enslin (Benson, 1968); *Paratenthredo dilleri* Taeger, 1991.

Material Examined: **Artvin:** Şavşat, Bahçeli, 500 m, 22.V.1997, 1♀, Karagöl, 1650 m, 22.V.1997, 1♀. **Erzurum:** Oltu, Tutmaç-Başaklı, 2000 m, 2.VII.2000, 1♀. Gümüşhane: Vaukgeçidi, 1850 m, 21.VI.2001, 3♂♂, 3♀♀, 24.VI.2001, 7♂♂, 5♀♀. **Rize:** İkizdere, Çamlık, 1600 m, 29.VII.2000, 1♀.

Distributed in Turkey: Gümüşhane and Samsun (Benson, 1968).

General Distribution and Chorotype: Turkey, Iran; Switzerland, France, Italy, Yugoslavia (Liston, 1995); Central-Asiatic-European.

Host Plant: Some adults were collected from *Conium* spp. Lacourt (1999) gave *Paeonia officinalis* as a larval host of *T. frauenfeldii*.

***Tenthredo hyrcana* Benson, 1968**

Material Examined: **Artvin:** Borçka, Karagöl, 1050 m, 8.VII.1994, 1♂. **Erzincan:** Sansa, 1350 m, 25.V.2000, 1♀. **Erzurum:** İspir, 1500 m, 17.VII.1992, 1♂; Şenkaya, Turnalı, 1750 m, 25.V.1994, 1♂; Tortum, Kireçlidağı, 2200 m, 2.VII.2000, 1♂.

Distributed in Turkey: Amasya, Ankara and Erzurum (Benson, 1968).

General Distribution and Chorotype: Armenia, Turkey (Benson, 1968); Turanian.

Host Plant: Unknown.

***Tenthredo liturata* (Mocsary, 1886)**

Synonym: *T. reitteri* var. *egregia* Enslin, 1914; *Allantus reitteri* Konow, 1886.

Material Examined: **Artvin:** Borçka, Karagöl, 1650 m, 8.VII.1994, 2♂♂. **Erzurum:** Şenkaya, Ormanlı, 1800 m, 20.V.1994, 1♂, Turnalı, 1750 m, 25.VI.1991, 1♂. **Rize:** İkizdere, Ovit Dağı 2400 m, 29.VII.2000, 1♂.

Distributed in Turkey: Çankırı, Gümüşhane, Kütahya and Trabzon (Benson, 1968).

General Distribution and Chorotype: Turkey, Transcaucasia (Benson, 1968; Lacourt, 1999); Turanian.

Host Plant: Unknown.

***Tenthredo livida* Linne, 1758**

Synonym: *T. dubia* Ström, 1768; *T. lurida* Müller, 1775; *T. pellucida* Müller, 1776; *T. bipunctata* Müller, 1776; *T. annularis* Schrank, 1776; *T. albicornis* Geoffroy, 1785; *T. maura* Fabricius, 1793; *T. carpini* Panzer, 1799; *Allantus aterrimus* Stephens, 1835.

Material Examined: **Bayburt:** Kopdağı, 2100 m, 16.VI.2000, 1♀. **Erzurum:** Köşk, 1850 m, 1.VI.1995, 2♀♀; Tortum, Kireçlidağı, 2200 m, 2.VII.2000, 1♀, Uzunkavak, 1800 m, 12.VII.2001, 1♀. **Rize:** İkizdere, Çamlık, 1600 m, 29.VII.2000, 5♂♂, 6♀♀, Ovitdağı 1600-2500 m, 22.VII.2002, 1♀, 29.VII.2000, 1♂, 13♀♀.

Distributed in Turkey: Zonguldak (Benson, 1968).

General Distribution and Chorotype: Europe, Turkey, Transcaucasia, Siberia, Japan (Benson, 1968; Liston, 1995; Lacourt, 1999); Asiatic-European.

Host Plant: *Epilobium* spp., *Rosa* spp., *Sorbus aucuparia*, *Salix* spp., *Corylus avellana*, *Corpinus betulus*, *Plantago* spp., *Fraxinus excelsior*, *Viburnum album*, *Lonicera* spp., *Symphoricarpus alba*, *Arctium* spp., *Lamium album*, *Melissa officinalis*, *Pteridium aquilinum*, *Athyrium filix-femina* (Taeger and Blank, 1998; Lacourt, 1999).

***Tenthredo luteipennis* Eversmann, 1847**

Synonym: *T. fallax* Mocsary, 1880 nec Smith, 1878, nec Audinet-Serville, 1823; *T. mocsaryi* André, 1882; *T. menetriesi* Kirby, 1882; *Tenthredella luteipennis* var. *obscuraria* Enslin, 1913.

Material Examined: **Erzurum:** Oltu, Tutmaç-Başaklı, 2000 m, 1.VII.2000, 1♂; Şenkaya, Turnalı, 1750 m, 25.VII.1996, 2♀♀, 6.VIII.1990, 1♀; Tortum, Uzunkavak, 1800 m, 12.VII.2001, 1♂, 1♀. **Rize:** İkizdere, Çamlık, 1600 m, 29.VII.2000, 2♀♀, Ovit Dağı 1600-2400 m, 29.VII.2000, 1♀.

Distributed in Turkey: Trabzon (Benson, 1968).

General Distribution and Chorotype: Turkey, Caucasus, Pamirs (Benson, 1968; Lacourt, 1999); Turanian.

Host Plant: Unknown.

***Tenthredo maculata* Geoffroy, 1785**

Synonym: *T. unifasciata* Geoffroy, 1785; *T. zonta* Christ, 1791; *T. equestris* Panzer, 1809; *T. (Allantus) latizona* Audinet-Serville, 1823; *T. Andréi* Mocsary, 1883; *Tenthredella maculata* var. *atricollaris* Enslin, 1912.

Material Examined: **Erzurum:** Oltu, Sütkans, 1500 m, 25.VI.1996, 1♀. **Gümüşhane:** Torul, Zigana Dağı 1900 m, 14.VI.1990, 1♀. **Trabzon:** Hamsiköy, 1600 m, 24.VI.1998, 1♂, 4♀♀.

Distributed in Turkey: New record for Turkish fauna. It is also new for the Asian continent.

General Distribution and Chorotype: Europe (Liston, 1995; Lacourt, 1999); Turano-European.

Host Plant: *Brachypodium* spp., *Dactylis* spp. (Liston, 1995).

***Tenthredo mesomelas* Linne, 1758**

Synonym: *T. viridis* Klug, 1817, nec Linne, 1758; *T. bernardi* Konow, 1888; *T. mesomelaena* Konow, 1905; *T. m. montana* Pasteels, 1946; *Tenthredella mesomelas* var. *mesopleuralis* Enslin, 1912; *T. m. var. atramentaria* Enslin, 1912.

Material Examined: **Erzurum:** Şenkaya, Turnalı, 1750 m, 5.IX.1990, 1♀; Oltu, Sütkans, 1500 m, 25.VI.1996, 1♀, Tutmaç-Başaklı, 2000 m, 1.VII.2000, 1♂; Tortum, Kireçlidağı, 2200 m, 2.VII.2000, 2♀♀, Uzunkavak, 1800 m, 12.VII.2001, 1♀. **Gümüşhane:** Torul, Zigana Dağı 1900 m, 14.VI.1990, 1♂, 1♀; Vaukgeçidi, 1850 m, 24.VI.2001, 1♂. **Rize:** İkizdere, Ovit Dağı 2500 m, 22.VII.2002, 1♂, 1♀. **Trabzon:** Sumelamanastırı, 2.VII.1996, 1♂.

Distributed in Turkey: Bolu, Gümüşhane, Trabzon and Zonguldak (Benson, 1968).

General Distribution and Chorotype: Europe, Turkey, Russia, Transcaucasia, Siberia, Pacific Coastal Region, Mongolia, China, Japan, Tunisia (Benson, 1968; Cingovski, 1980; Medvedev, 1994; Liston, 1995; Lacourt, 1999); Palearctic.

Host Plant: Larvae were collected on *Arctium* sp. and *Rumex* sp. Liston (1995) and Lacourt (1999) listed the following plant species as host plants; *Polygonum persicaria*, *Arctium lappa*, *Heracleum* spp., *Ranunculus* spp., *Epilobium* spp., *Rumex* spp., *Salix* spp., *Veronica* sp., *Tussilago* spp., *Petasites* sp., *Senecio* sp., *Solidago* sp., *Stachys* spp.

***Tenthredo notha* Klug, 1817**

Synonym: *Allantus perkinsi* Morice, 1919; *A. arcuatus* var. *niger* Zirngiebl, 1937.

Material Examined: **Erzurum:** Güngörmez, 2400 m,

5.VIII.1990, 1♀; Pasinler, Çalıyazı, 2400 m, 10.VII.1997, 1♀.

Distributed in Turkey: New record for Turkish fauna.

General Distribution and Chorotype: Europe, Russia, North Africa, Transcaucasia, Iran (Liston, 1995; Lacourt, 1999); Palearctic.

Host Plant: *Trifolium repens*, *T. pratense*, *Vicia cracca* (Liston, 1995, Lacourt, 1999).

***Tenthredo omissa* Förster, 1844**

Synonym: *T. vienensis* Schrank, sensu Panzer, 1799; *T. marginella* Fabricius sensu Thomson, 1871; *T. omissa* var. *melanoceraea* Enslin, 1912.

Material Examined: **Erzurum:** Konaklı, 2000-2400 m, 22.VII.2000, 2♂♂, 2♀♀, Palandöken, 2400 m, 1.VII.1996, 1♀; İlica, Sorkunlu, 1900 m, 10.VIII.1999, 1♀; Oltu, Tutmaç-Başaklı, 1700-2000 m, 31.VII.2001, 1♀.

Distributed in Turkey: Bolu (Wolf, 1968).

General Distribution and Chorotype: Turkey, East Europe, East Siberia, Transcaucasia (Wolf, 1968; Medvedev, 1994; Lacourt, 1999); Sibero-European.

Host Plant: *Plantago media*, *P. lanceolata* (Lacourt, 1999).

***Tenthredo propinqua* Klug, 1817**

Material Examined: **Artvin:** Borçka, Karagöl, 1600 m, 8.VII.1994, 1♀; Genye Dağı 1600 m, 16.VIII.1990, 1♀; Yusufeli, Kınalıçam, 400 m, 21.V.2002, 1♀. **Erzurum:** Aşkale, Kopdağı, 2000 m, 16.VI.2000, 2♂♂; İspir, 17.VII.1992, 1♀, Fısıkkalesi, 2300 m, 12.VII.2001, 1♀; Olur, Salaçur, 2400 m, 10.VII.2001, 1♀; Oltu, Tutmaç-Başaklı, 2000 m, 1.VII.2000, 3♀♀; Pazaryolu, 2200 m, 5.VII.2000, 1♀; Şenkaya, Turnalı, 1750 m, 1.VII. 1990, 1♂, 6.VII.1990, 1♀; Tortum, Çataldere, 1950-2500 m, 12.VII.2001, 2♂♂, 2♀♀; Uzundere, Dikyar, 1100 m, 24.V.1994, 1♀. **Rize:** İkizdere, Ovit Dağı 1600-2400 m, 29.VII.2000, 1♀.

Distributed in Turkey: Kastamonu-Çankırı border (Benson, 1968).

General Distribution and Chorotype: Europe, Turkey, Russia, Ukraine, Transcaucasia (Benson, 1968; Zhelochovtsev and Zinovjev, 1996; Lacourt, 1999); Sibero-European.

Host Plant: Unknown.

Tenthredo scrophulariae Linne, 1758

Material Examined: **Artvin:** Genye Dağı 1600 m, 16.VIII.1990, 1♀; **Bayburt:** Kopdağı 2300 m, 25.VII.2001, 1♀. **Erzincan:** Çatalarmut, 9.VIII.1990, 1♀. **Erzurum:** Arıbahçe, 2400 m, 20.VII.2001, 2♂♂, 3♀♀; Güngörmez, 2400 m, 5.VIII.1990, 7♀♀, 2500 m, 28.VII.1998, 1♀; Kargapazarı Dağları, Radar yolu, 2200 m, 11.VIII.1990, 1♀; Duççu, 2200 m, 18.VII.1999, 3♀♀; Kö_k, 1850 m, 20.VI.1996, 1♀; İspir, Madenköprübaşı, 1400 m, 7.VII.1996, 1♂; Şenkaya, 2400 m, 9.VII.1992, 2♂♂, Turnalı, 1750 m, 1.VII.1990, 2♀♀, 25.VI.1991, 1♂, 2♀♀. **Rize:** Çamlıhemşin, Ayder, 1200-1550 m 30.VII.2000, 1♀; İkizdere, Çamlık, 1600 m, 29.VII.2000, 1♂, Ovit Dağı 1600-2400 m, 29.VII.2000, 1♀.

Distributed in Turkey: Sivas and Tokat (Benson, 1968).

General Distribution and Chorotype: Europe, Turkey, Russia, Transcaucasia, Caucasus (Benson, 1968; Liston, 1995; Lacourt, 1999); Sibero-European.

Host Plant: *Scrophularia* spp., *Verbascum* spp. (Liston, 1995, Lacourt, 1999).

Tenthredo thompsoni Curtis, 1839

Synonym: *T. marginella* var. *basanalis* Enslin, 1912; *T. marginella* Fabricius sensu Chevin, 1983; *Allantus semifasciatus* Rudow, 1872.

Material Examined: **Erzincan:** Cevizli, 1300 m, 10.VIII.1990, 1♂, 1.VIII.1991, 1♂, 1♀. **Erzurum:** Konaklı, 2400 m, 22.VII.2000, 3♂♂, 2♀♀, Arıbahçe, 2400 m, 20.VII.2001, 1♂; Ilica, Sorkunlu, 1900 m, 10.VIII.1999, 1♂; İspir, 30.VII.1990, 2♂♂, Madenköprübaşı, 1400 m, 18.VI.1994, 1♂; Oltu, İnanmış, 1700 m, 26.VII.2000, 1♂, Kaleboğazı, 1400 m, 28.VII.1990, 1♂, Tutmaç, 2000 m, 3.VII.2001, 1♂; Pasinler, Çalıyazı, 2100 m, 10.VII.1997, 1♂; Şenkaya, Turnalı, 1750 m, 25.VII.1996, 1♂; Tortum, Aşağımeydanlar, 7.VIII.1996, 1♂, Pehlivanlı, 1400 m, 13.VIII.1991, 1♂, 1♀.

Distributed in Turkey: Bursa, Gümüşhane and Trabzon (Benson, 1968).

General Distribution and Chorotype: Europe, Turkey, Caucasus, Kazakhstan (Medvedev, 1994; Liston, 1995; Lacourt, 1999); Asiatic-European.

Host Plant: *Pimpinella major* (Liston, 1995).

Tenthredo vespa Retzius, 1783

Synonym: *T. multifasciata* Geoffroy, 1785; *T. sexannulata* Schrank, 1802; *T. tricincta* Fabricius, 1804, nec Christ, 1791; *T. quadricincta* Fallen, 1808; *T. vespiformis* Audinet-Serville, 1823; *Allantus multincinctus* Rudow, 1872; *A. nigrilabris* Frivaldszky, 1877.

Material Examined: **Erzurum:** Ilica, Rizekent, 2200 m, 30.VII.1998, 2♀♀; Pazaryolu, Toprakkale, 2200 m, 30.VII.1998, 1♂, 1♀; Uzundere, Dikyar, 1100 m, 2.VII.1994, 1♀. **Rize:** İkizdere, Çamlık, 1600 m, 29.VI.2000, 2♀♀.

Distributed in Turkey: Trabzon (Benson, 1968).

General Distribution and Chorotype: Europe, Turkey, Russia, Transcaucasia, Siberia, Caucasus, China, Mongolia (Benson, 1968; Medvedev, 1994; Lacourt, 1999); Asiatic-European.

Host Plant: *Lonicera caprifolium*, *Syringa vulgaris*, *Viburnum opulus*, *Fraxinus excelsior*, *Jasminum officinale*, *Rosa*, *Spiraea*, *Acer platanoides*, *Ligustrum vulgare*, *Symphoricarpos albus*, *S. alba* (Liston, 1995; Taeger and Blank, 1998; Lacourt, 1999).

Tenthredo vespiformis Schrank, 1781

Material Examined: **Erzincan:** Sansa Boğazı, 1350 m, 25.V.2001, 1♀. **Erzurum:** Göngörmez, 2400 m, 5.VIII.1990, 1♀; Horasan, Aras Vadisi, 1600 m, 23.V.2001, 1♀; Köprüköy, Örentaş, 1900-2100 m, 12.VI.2001, 1♀; Oltu, Sütkans, 1500 m, 18.VI.1996, 1♀, 25.VI.1996, 1♀; Pasinler, Çalıyazı, 2400 m, 10.VII.1997, 1♀, Pelitli, 2000 m, 14.VII.1998, 1♀; Uzundere, Dikyar, 1100 m, 24.V.1994, 1♀. **Kars:** Posof, 30.V.1973, 1♀; Sarıkamış, Karakurt, TCK Çeşmesi, 1500 m, 4.VI.2000, 4♀♀.

Distributed in Turkey: New record for Turkish fauna.

General Distribution and Chorotype: Europe, Russia, Ukraine (Medvedev, 1994; Liston, 1995; Zhelochovtsev and Zinovjev, 1996); Sibero-European.

Host Plant: Unknown.

Tenthredo zonula Klug, 1817

Synonym: *T. fasciata* Scopoli, 1763 nec Linne, 1758; *T. bifasciata* Geoffroy, 1785; *T. bicictaflava* Christ, 1791; *Allantus similis* Mocsary, 1880; *A. nazarensis* André; *A. serena* Konow; *A. calcaratus* André, 1881, *A. scutellaris* Konow, 1898.

Material Examined: **Adıyaman:** Nemrut Mountain, 1950 m, 29.V.1999, 2♀. **Artvin:** Ardanuç, Ferhatlı, 450 m, 13.V.2000, 1♂; Yusufeli, Sarıgöl, 700 m, 5.VII.1994, 1♀; Şavşat, Karagöl, 1650 m, 8.VII.1998, 1♂, 6♀. **Bayburt:** 25 km S., 1750 m, 21.VI.2001, 3♂♂, 3♀♀; Maden, 1650 m, 16.VI.2000, 5♂♂, 7♀♀, Çalidere, 1850 m, 16.VI.2000, 9♂♂, 4♀♀, Kopdağı 2100-2300 m, 28.VI.1990, 1♀, 16.VI.2000, 3♂♂, 11♀♀, 21.VI.2001, 3♂♂, 4♀♀. **Bingöl:** Çirişli Geçidi, 2000 m, 3.VI.2001, 2♂♂, 2♀♀, 11.VII.2002, 1♂, 3♀♀. **Diyarbakır:** University field, 700 m, 1.VI.2002, 3♀♀. **Erzincan:** Bahçeli, 1350 m, 26.V.2001, 2♂♂; Cevizli, 1350 m, 4.VI.1990, 1♂, 2♀♀. **Erzurum:** It is common and abundant in Erzurum province. The materials were collected from the middle of May to the end of July in Akdağ, Dumlu, Gökçeyamaç, Palandöken, Yeşildere, Aşkale (Aşağıkop, Mezra, Tepebaşı) Horasan, Ilica (Atlıkonak, Gülyurt Geçidi), İspir (Fısırik Kalesi, Madenköprübaşı), Köprüköy (Örentaş), Olur (Süngübayır), Oltu (Başaklı, Çamlıbel, Sütkans, Tutmaç), Pasinler (Çalıyazı), Pazaryolu (Karataş), Şenkaya (Ormanlı, Turnalı), Tortum (Aktaş, Kireçli Dağı Uzunkavak), and Uzundere (Dikyar) at altitudes of 1100-2400 m, 87♂♂, 184♀♀. **Gümüşhane:** 25 km SE, 1700 m, 19.VI.2001, 1♀, Vauk Geçidi, 1850 m, 21.VI.2001, 3♂♂, 2♀♀, 24.VI.2001, 1♀. **Hatay:** Bademli, 6 km W. to Hassa, 850 m, 13.V.2002, 3♂♂, 1♀. **Kars:** Sarıkamış, Karakurt, Şeytangeçmez, 1500 m, 2.VI.1999, 1♂, 2♀♀, Karakurt, 1550 m, 2.VI.1999, 1♀, Aras Vadisi, Karakurt, 1550 m, 23.V.2001, 7♂♂, 7♀♀, 4.VI.2001, 1♂, 5♀♀. **Konya:** University Campus, 9.VII.1997, 1♀. **Osmaniye:** Bahçe, 300 m, 13.V.2002, 1♀. **Şanlıurfa:** K.Köprü, 30.IV.1990, 2♂♂, 1♀.

Distributed in Turkey: Afyon, Amasya, Ankara, Antalya, Artvin, Aydın, Bursa, Çorum, Erzincan, Erzurum, Isparta, İstanbul, İzmir, Konya, Muğla and Niğde (Benson, 1968; Chevin and Chenon, 1982).

General Distribution and Chorotype: Europe, Turkey, Russia, Ukraine, Moldova, Transcaucasia, Caucasus, Central Asia, Armenia, Iran, Israel, Syria, Lebanon (Benson, 1968; Medvedev, 1994; Liston, 1995; Zhelochovtsev and Zinovjev, 1996; Lacourt, 1999); Asiatic-European.

Host Plant: *Hypericum perforatum* (Liston, 1995; Lacourt, 1999); Asiatic-European.

Tenthredopsis Costa, 1859

Synonym: *Ebolia* Costa, 1859; *Thomsonia* Konow, 1884; *Eutenthredopsis* Enslin, 1913.

Tenthredopsis albonotata (Brullé, 1832)

Synonym: *Tenthredo propinqua* Mocsary, 1880, nec Klug, 1817.

Material Examined: **Diyarbakır:** Silvan, 17.IV.1995, 5♀♀. **Elazığ:** Keban, 900 m, 16.V.2002, 1♀. **Hatay:** Antakya, Yayladağı, 25 km S., 28.IV.2002, 1♂.

Distributed in Turkey: New record for Turkish fauna.

General Distribution and Chorotype: Europe, East Mediterranean, Lebanon, Syria, Israel (Benson, 1968; Lacourt, 1999); Asiatic-European.

Host Plant: Unknown

Tenthredopsis festiva Konow, 1890

Material Examined: **Bayburt:** Çalidere, 1850 m, 16.VI.2000, 1♂. **Erzurum:** Ilica, Atlıkonak, 2000-2400 m, 11.VI.2000, 1♀, 29.VI.1999, 1♀, 29.VI.2001, 1♀; Aras Vadisi, 1700 m, 23.V.2001, 1♂. **Gümüşhane:** Vauk Geçidi, 1850 m, 21.VI.2001, 1♀, 24.VI.2001, 1♂, 1♀. **Kars:** Aras Vadisi, TCK Çeşmesi, 1500-1600 m, 23.V.2001, 2♀♀.

Distributed in Turkey: New record for Turkish fauna.

General Distribution and Chorotype: Transcaucasia (Benson, 1968; Zhelochovtsev and Zinovjev, 1996; Lacourt, 1999); Turanian.

Its westernmost point of distribution is Turkey.

Host Plant: Adults were collected from flowers of *Corium maculatum*.

Tenthredopsis harveyi Benson, 1968

Material Examined: **Erzurum:** Aşkale, Pırnakapan, 1800 m, 23.V.2000, 1♀.

Distributed in Turkey: Bolu (Benson, 1968).

General Distribution and Chorotype: Turkey (Benson, 1968; Lacourt, 1999); Endemic to Turkey.

Host Plant: Unknown.

Remarks: Benson (1968) described this species from a female (Holotype) from Bolu. This is the second specimen collected in Erzurum since the time of description. The male remains unknown. During this study after such a dense collection of the material in Erzurum province, finding only 1 specimen shows that this species is very rare.

Tenthredopsis nassata Linne, 1767

Synonym: *T. albomaculatus* Cameron, 1881; *T. dorsivittatus* Cameron, 1881; *T. lividiventris* Cameron, 1881; *Tenthredo alneti* Schrank, 1781; *T. palmata* Geoffroy, 1785; *T. perlata* Geoffroy, 1785; *T. apicaris* Geoffroy, 1785; *T. subulata* Gmelin, 1790; *T. melanorrhoea* Gmelin, 1790; *T. tiliae* Panzer, 1805; *T. korlevici* Konow, 1887; *T. arroganus* Konow, 1890; *T. fenestrata* Konow, 1890; *T. nassata* var. *rufata* Konow, 1890; *T. konowi* Strobl, 1895, nec Lethierry, 1886; *T. nigroscutellata* Konow, 1904; *T. virgineus* Muehe, 1965; *Thomsonia friesei* Konow, 1884.

Material Examined: **Artvin:** Borçka, Karagöl, 1650 m, 8.VII.1994, 1♀. **Erzurum:** Oltu, Sütkans, 1500 m, 25.VI.1996, 1♀.

Distributed in Turkey: Amasya, Ankara, Çankırı and Trabzon (Benson, 1968).

General Distribution and Chorotype: Europe, Turkey, Russia, Siberia, China, Mongolia, Japan (Benson, 1968; Cingovski, 1980; Medvedev, 1994; Liston, 1995; Lacourt, 1999); Asiatic-European.

Host Plant: *Dactylis glomerata*, *Deschampsia cespitosa*, *D. calamagrostis*, *Flexuosa* spp., *Holcus* spp., *Lolium perenne*, *Agropyron* spp., *Carex* spp., *Anthriscus silvestris*, *Artemisia* spp. (Liston, 1995; Lacourt, 1999).

Tenthredopsis nigella Konow, 1891

Material Examined: **Erzurum:** Pasinler, Çalıyazı, 2400 m, 10.VII.1997, 1♂.

Distributed in Turkey: Benson (1968) and Lacourt (1999) indicated the presence of this species in Turkey but no locality was given.

General Distribution and Chorotype: Turkey, Transcaucasia (Benson, 1968; Zhelochovtsev and Zinovjev, 1996; Lacourt, 1999); Turanian.

Host Plant: Unknown.

Tenthredopsis sordida Klug, 1817

Material Examined: **Erzurum:** Dutçu, 2000 m, 26.VI.1997, 1♂; Şenkaya, Hoş, 1600 m, 12.VI.1996, 1♂.

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Distributed in Turkey: New record for Turkish fauna.

General Distribution and Chorotype: Austria, Belgium, Switzerland, Germany, Denmark, France, Hungary, Italy, Luxembourg, Netherlands, Romania, Albania, Bulgaria (Medvedev, 1994; Liston, 1995; Lacourt, 1999); Turano-European.

Host Plant: *Arrhenatherum elatius*, *Lolium perenne*, *Carex* spp., *Calamagrostis* sp., *Dactylis glomerata* (Medvedev, 1994; Taeger and Blank, 1998; Lacourt, 1999).

Remarks: Previous data relevant to the distribution of *T. sordida* showed that it has been known only from Europe so far. Our study revealed that the distribution area of this species extends to Asia, making this the first record for Asian fauna as well.

Tenthredopsis tessellata Klug, 1817

Synonym: *T. tessellata* var. *alboplagiata* Konow, 1890; *Tenthredo ischiadica* Eversmann, 1847; *Perineura cylindrica* Rudow, 1871.

Material Examined: **Erzurum:** Oltu, Tutmaç-Başaklı, 2000 m, 1.VII.2000, 2♀♀.

Distributed in Turkey: Bursa, Erzurum and Samsun (Benson, 1968).

General Distribution and Chorotype: Europe, East Mediterranean, Turkey, Russia, Caucasus, Mongolia, Siberia, Iran (Benson, 1968; Cingovski, 1980; Medvedev, 1994; Liston, 1995; Lacourt, 1999); Asiatic-European.

Host Plant: *Deschampsia*, *Dactylis*, *Aira*, *Lolium* (Liston, 1995; Lacourt, 1999).

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