

# Contribution to the knowledge of the Megalodontesidae, Argidae, Cimbicidae, Cephidae and Tenthredinidae (Symphyta: Hymenoptera) fauna from Bingöl and Diyarbakır provinces of Turkey

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KAPLAN, E., MART, ATTILA HARIS, A. & YILDIRIM E.: *Contribution to the knowledge of the Megalodontesidae, Argidae, Cimbicidae, Cephidae and Tenthredinidae (Symphyta: Hymenoptera) fauna from Bingöl and Diyarbakır provinces of Turkey.*

**Abstract:** This study is based upon material from Megalodontesidae, Argidae, Cimbicidae, Cephidae and Tenthredinidae collected from Bingöl and Diyarbakır provinces of Turkey between 2016 and 2018. The study resulted in recording for Turkish fauna of one species from one genera of Megalodontesidae, eight species from two genera of Argidae, two species from one genera of Cimbicidae, three species from three genera of Cephidae and 23 species from six genera of Tenthredinidae. In total, 38 species belonging to 13 genera of Symphyta are listed. Among them, *Macrophya postica* Brullé, 1832, *Tenthredo bifasciata* O. F. Müller, 1766 and *Tenthredo zonula* Klug, 1817 have been found the most abundant and widespread species. Separately, *Tenthredo (Elinora) baetica* Spinola, 1843 is newly recorded from Turkey. In addition, new localities have been found for some species, which have already been reported from Turkey.

**Keywords:** Hymenoptera, Symphyta, Megalodontesidae, Argidae, Cimbicidae, Cephidae, Tenthredinidae, new record, Bingöl, Diyarbakır, Muş, Turkey,

## Introduction

Turkey occupies Asia Minor between the Mediterranean Sea and the Black Sea and stretches into continental Europe. It is a mountainous country averaging about 1.000 meters in altitude. The topographic and climatic diversity of the region are important preconditions for the development of a rich and diverse fauna. Turkey is biogeographically one of the most interesting countries in the West Palaearctic region. The fauna of Hymenoptera of Turkey contains a large number of species in comparison with other Mediterranean countries, which are well known for their high biodiversity. The great richness and diversity of these families in the Turkish fauna is the result of the various topographic and climatic structure of the country. On the other hand, Turkey is a bound-

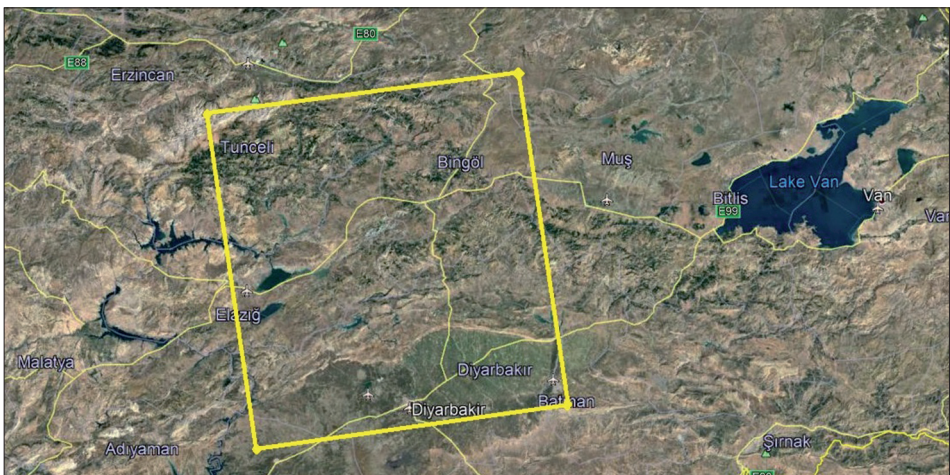
ary of East Mediterranean, Sumerian and Irano-Turanian provinces of Palearctic Region that caused the richness of the fauna (YILDIRIM 2016).

The area of Bingöl province is 8,125 km<sup>2</sup> and Diyarbakır province is 15,355 km<sup>2</sup>, both of them are mountaneous areas of South Eastern region of the country (Figs 1 and 2). The highest peak is the Bingöl Mountain with approximately 3,200 meters. The largest rivers are River Murat in Bingöl and River Tigris Diyarbakır province. The investigated area belong partly to the Eastern Anatolian Region(Bingöl) and the South-Eastern Anatolian Region (Diyarbakır). The climate is semi-arid continental, average monthty temperatures fluctuate between  $-11^{\circ}\text{C}$  and  $+33^{\circ}\text{C}$  which sometimes may reach the  $-33^{\circ}\text{C}$  and  $+44^{\circ}\text{C}$ .

This paper aims to present new collection and biological data on Megalodontesidae, Argidae, Cimbicidae, Cephidae and Tenthredinidae (Symphyta: Hymenoptera) in Turkey.



**Fig. 1:** Position of the investigated area in Turkey



**Fig. 2:** Map of the investigated area

## Material and methods

The material of the Megalodontesidae, Argidae, Cimbicidae, Cephidae and Tenthredinidae (Symphyta: Hymenoptera) were collected from Bingöl and Diyarbakır provinces of Turkey between 2016 and 2018 (Figs. 3-6).

Material was collected by a variety of methods, mostly by sweeping grasses on meadows and pastures lands containing a variety of flowering plants. Provinces of the collected specimens are given in alphabetical order in the following list. The material is deposited partly in the Rippl-Rónai Museum, Kaposvár and partly in the Entomology Museum, Erzurum, Turkey (EMET) and in the Bingöl University, Faculty of Agriculture, Department of Plant Protection.

For the identification of the specimens we consulted the comprehensive works of ZHELOCHOVTSEV 1988 and BENSON 1968 completed with other papers as ENSLIN 1910a, b; TAAGER 1992 and GUSSAKOVSKIJ 1935, 1947.

For the distribution and occurrence of species in Turkey BENSON 1968, ÇALMAŞUR & ÖZBEK 2004a,b, 2006; ÇALMAŞUR 2006; CHEVIN & CHENON 1982, ROLLER & HARIS, 2008 and ROLLER 1999 were consulted.

## Results

In this study, two species from one genera of Megalodontesidae, eight species from two genera of Argidae, two species from one genera of Cimbicidae, three species from three genera of Cephidae and 23 species from six genera of Tenthredinidae are recorded from Turkey.

### Megalodontesidae

#### *Megalodontes cephalotes* (Fabricius, 1781)

*Material examined:* Diyarbakır: Çermik, N 38° 07' 52.06", E 39° 28' 38.78", 767 m, 13.IV.2018, 1 female, Bahçe, N 38° 66' 56.35", E 39° 23' 29.84", 838 m, 14.IV.2018, 1 female, Karataş, N 38° 04' 20.52", E 39° 24' 17.08", 677 m, 13.IV.2018, 1 female, Kartaltaşı, N 38° 03' 50.68", E 39° 23' 43.86", 712 m, 13. IV.2018, 1 female, Karakaya, N 38° 03' 24.42", E 39° 18' 54.30", 618 m, 13.IV.2018, 1 female, Sinek, N 38° 08' 46.01", E 39° 26' 26.84", 827 m, 14.IV.2018, 1 female, N 38° 68' 57.08", E 39° 27' 03.05", 835 m, 14.IV.2018, 1 female, Hani, Gürbüz, N 38° 23' 11.32", E 40° 22' 24.49", 1037 m, 11.V.2017, 1 female. Frequent. Known hostplant: *Peucedanum cervaria*.

#### *Megalodontes phaenicus* (Lepelletier, 1823)

*Material examined:* Bingöl: Karhova, Kazanlı, N 38° 23' 10.37", E 40° 54' 34.28", 1794 m, 06.VI.2018 m, 1 male; Yayladere, Yaylabağ, N 39° 11' 11.13", E 40° 06' 17.29", 1379 m, 13.VI.2018, 1 male. Frequent. Hostplant unknown.

### Argidae

#### *Arge beckeri* Tournier, 1889

*Material examined:* Diyarbakır: Bismil, Başaklı, N 37° 49' 48.02", E 40° 27' 51.59", 562 m, 30.III.2018, 1 male; Çüngüş, Güneydere, N 38° 13' 43.21", E 39° 17' 39.27", 1119 m, 19.IV.2018, 1 male; Hazro, Bağyurdu, N 38° 14' 13.92", E 40° 49' 59.88", 995 m, 27.IV.2018, 1 male; Lice, Çavundur, N 38° 19' 47.72", E 40° 39' 59.81", 1183 m, 25.IV.2018, 1 male, Dolunay, N 38° 19' 18.60", E 40° 40' 30.57", 1007 m, 25.IV.2018, 1 male, N 38° 19' 12.65", E 40° 40' 42.33", 1018 m, 25.IV.2018, 1 male, Ortaç, N 38° 20' 21.91", E 40° 38' 59.19", 1040 m, 25.IV.2018, 1 male. Frequent. Hostplant: *Euphorbia* spp.

*Arge cyanocrocea* (Förster, 1771)

*Material examined:* Bingöl: Sarıççek, N 38° 53' 16.55", E 40° 34' 07.32", 1028 m, 04.V.2018, 1 male, Yeşilköy, N 38° 50' 11.55", E 40° 29' 52.18", 1254 m, 06.V.2018, 1 male. Frequent. Known hostplant: *Rubus idaeus*.

*Arge frivaldszkyi* (Tischbein, 1852)

*Material examined:* Diyarbakır: Kocaköy, Ambar, N 38° 16' 07.99", E 40° 28' 29.61", 733 m, 24.IV.2018, 1 female; Lice, Beni, N 38° 20' 07.29", E 40° 38' 57.00", 1124 m, 25.IV.2018, 1 female, Kutlu, N 38° 21' 37.62", E 40° 46' 28.39", 825 m, 28.IV.2018, 1 female, Oyuklu, N 38° 19' 44.71", E 40° 45' 31.90", 939 m, 28.IV.2018, 1 female, Yalaza, N 38° 20' 16.33", E 40° 40' 35.45", 921 m, 25.IV.2018, 1 female. Frequent. Hostplant unknown.

*Arge melanochra* (Gmelin, 1790)

*Material examined:* Bingöl: Garip, N 38° 47' 10.02", E 40° 32' 58.95", 993 m, 20.V.2018, 1 female, Köklü, N 38° 55' 38.44", E 40° 38' 40.46", 1088 m, 19.V.2018, 1 female; Genç, Çayağzı, N 38° 47' 16.15", E 40° 53' 11.72", 1037 m, 19.V.2018, 1 female, Doğanevler, N 38° 46' 14.84", E 40° 51' 33.19", 1419 m, 10.V.2018, 1 female, Koçsırtı, N 38° 47' 07.12", E 40° 49' 06.97", 1277 m, 10.V.2018, 1 female, Soğukpınar, N 38° 42' 59.41", E 40° 27' 11.55", 1032 m, 15.V.2018, 1 female, Yenisu, N 38° 45' 17.43", E 40° 52' 44.61", 1605 m, 10.V.2018, 1 female; Diyarbakır: Kardeşler, N 38° 55' 34.84", E 40° 38' 20.73", 1082 m, 17.V.2018, 1 female, Lice, Savat Bucağı, N 38° 20' 44.50", E 40° 37' 46.50", 1110 m, 25.IV.2018, 1 female. Common species. Hostplant: *Crataegus oxyantha*.

*Arge ochropus* (Gmelin, 1790)

*Material examined:* Diyarbakır: Lice, Tepe, N 38° 23' 34.56", E 40° 43' 18.26", 835 m, 28.IV.2018, 1 male; Genç, Doğanay, N 38° 42' 26.73", E 40° 32' 33.88", 1179 m, 14.V.2018, 1 male. Pest of *Rosa* spp. Locally frequent.

*Arge rustica* (Linné, 1758)

*Material examined:* Bingöl: Genç, Çanakal, N 38° 45' 55.39", E 40° 43' 58.57", 1530 m, 26.V.2017, 1 male. Sporadic. Hostplant: *Quercus* spp.

*Arge scita* (Mocsáry, 1880)

*Material examined:* Diyarbakır: Çermik, Bahçe, N 38° 07' 14.17", E 40° 23' 50.60", 898 m, 27.IV.2017, 1 female; Lice, Dallica, N 38° 24' 02.59", E 40° 48' 43.40", 826 m, 28. 04. 2018, 1 male, Tepe, N 38° 22' 23.07", E 40° 44' 32.11", 801 m, 28.IV.2018, 1 male; Silvan, Eskiocak, N 38° 07' 11.23", E 41° 06' 41.56", 850 m, 29.IV.2018, 1 female. Frequent. *Prunus amygdalus*.

*Sterictiphora furcata* (Villers, 1789)

*Material examined:* Bingöl: Solhan, Dilektepe, N 38° 37' 04.70", E 40° 59' 47.74", 1288 m, 24.V.2018, 1 male. Frequent. Known hostplant: *Rubus idaeus*.

**Cimbicidae***Corynis orientalis* (Konow, 1898)

*Material examined:* Diyarbakır: Çüngüş, Eskiocak, N 38° 13' 55.18", E 39° 15' 05.18", 864 m, 20.IV.2018, 1 female. Sporadic. Hostplant unknown.

*Corynis crassicornis* (Rossi, 1790)

*Material examined:* Bingöl: Kurudere, N 38° 54' 39.88", E 40° 28' 31.69", 1143 m, 07.V.2016, 1 female. Sporadic. Hosts are *Sedum* spp. (*S. album*, *S. acre* and *S. sexangulare*).

**Cephidae***Calameuta (Calameuta) idolon* (Rossi, 1794)

*Material examined:* Diyarbakır: Lice, Bağlan, N 38° 20' 03.91", E 40° 43' 41.69", 835 m, 28.IV.2018, 1 female. Frequent. Hostplant unknown.





**Fig. 3: Landscape in Solhan county**



**Fig. 4: Collecting site in Sancak**

*Syrista parreyssii* (Spinola, 1843)

*Material examined:* Bingöl: Adaklı, Donattepe, N 39° 12' 18.88", E 40° 28' 01.49", 1321 m, 29.V.2017, 1 female. Frequent. Larva on *Rosa* spp.

*Cephus pygmeus* (Linné, 1767)

*Material examined:* Bingöl: Karlhova, N 39° 17' 28.27", E 40° 59' 22.94", 1883 m, 12.VII.2016, 1 female. Generally common. Pest of cereals and grasses.



Fig. 5: Collecting site in Adaklı



Fig. 6: Lice county in Diyarbakır province

## Tenthredinidae

### *Dolerinae*

*Dolerus (Dicrodolerus) vestigialis* (Klug, 1818)

*Material examined:* Bingöl: Yedisu, Elmalı, N 39° 22' 04.62", E 40° 39' 12.28", 1885 m, 06.VI.2018, 1 female. Sporadic. Hostplants: *Equisetum palustre*, *E. sylvaticum*, *E. arvense* and *E. pratense*.

### *Allantinae*

*Athalia rufoscutellata* Mocsáry, 1879

*Material examined:* Bingöl: Çeltiksuyu, N 38° 51' 15.29", E 40° 33' 30.58", 1015 m, 04.V.2018, 1 male;



Karlıova, Yenidal, N 39° 15' 23.88", E 41° 14' 39.77", 1589 m, 04.VI.2018, 1 female. Frequent. Hostplant unknown.

### ***Blennocampinae***

#### *Eutomostethus gagathinus* (Klug, 1816)

*Material examined:* Diyarbakır: Çermik: Sinek, N 38° 09' 26.61", E 39° 26' 40.60", 858 m, 27.IV.2017, 1 female. Sporadic. Hostplant unknown.

### ***Tenthredininae***

#### *Macrophya (Macrophya) annulata* (Geoffroy, 1785)

*Material examined:* Bingöl: Köklü, N 38° 55' 52.81", E 40° 38' 31.61", 1086 m, 17.V.2018, 1 female; Sancak, Nacaklı, N 38° 10' 05.38", E 40° 21' 33.32", 1537 m, 26.V.2018, 1 female. Frequent. Larva on *Potentilla reptans*, *Origanum vulgare*, *Euphorbia*, *Rosa*, *Rubus* and *Sambucus* spp.

#### *Macrophya (Macrophya) diversipes* (Schrank, 1782)

*Material examined:* Bingöl: Çayboyu, N 38° 53' 57.77", E 40° 30' 52.08", 1083 m, 05.V.2018, 1 female, Çeltiksuyu, N 38° 51' 15.29", E 40° 33' 30.58", 1015 m, 04.V.2018, 1 female, Çukurca, N 38° 10' 35.30", E 40° 31' 17.62", 1215 m, 05.V.2018, 1 female; Adaklı, Erbaşlar, N 39° 10' 44.79", E 40° 31' 58.78", 1525 m, 29.V.2016, 1 female; Genç, Yalya Bucacı, N 38° 38' 26.33", E 40° 31' 58.59", 1388 m, 14.V.2018, 1 male; Karlıova, Dörttyol, N 39° 22' 33.58", E 40° 30' 49.96", 1813 m, 06.VI.2018, 1 female, Suçatı, N 39° 23' 07.16", E 40° 54' 53.52", 1800 m, 06.VI.2018, 1 female; Kiğı: Yeşilyurt, N 39° 16' 58.79", E 40° 21' 24.37", 1322 m, 12.VI.2018, 1 male; Solhan: Merkez, N 38° 57' 06.75", E 41° 02' 04.00", 1321 m, 24.V.2018, 1 female, Dilektepe, N 38° 56' 58.39", E 41° 00' 05.06", 1288 m, 02.VI.2018, 1 male, Esmetaş, N 38° 55' 24.61", E 41° 07' 52.53", 1703 m, 31.V.2018, 1 female, Sudüğünü, N 39° 03' 10.23", E 40° 25' 38.99", 1618 m, 26.V.2018, 1 male, Yiğitharmanı, N 38° 57' 59.87", E 40° 56' 50.61", 1380 m, 24.V.2018, 1 female; Yedisu, Kabaoluk, N 39° 25' 52.06", E 40° 29' 48.17", 1409 m, 06.VI. 2018 m, 1 female. Frequent. Hostplant unknown.

#### *Macrophya mocsaryi* W.F. Kirby, 1882

*Material examined:* Bingöl: Yayladere, Sarıtosun, N 39° 12' 24.89", E 40° 05' 10.12", 1421 m, 13.V.2018, 1 female. Rare. Hostplant unknown.

#### *Macrophya (Macrophya) oedipus* Benson, 1968

*Material examined:* Bingöl: Kardeşler, N 38° 54' 53.33", E 40° 38' 20.73", 1082 m, 17.V.2018, 1 female. Sporadic. Hostplant unknown. Known only from Turkey: Amasya.

#### *Macrophya (Macrophya) blanda* (Fabricius, 1775)

*Material examined:* Bingöl: Kardeşler, N 38° 54' 53.33", E 40° 37' 24.74", 1068m, 17.V.2018, 1 female; Karlıova, Kaynarınar, N 39° 22' 29.88", E 40° 44' 21.98", 1885 m, 28.V.2017, 1 female; Yedisu, Gelinpertek, N 39° 27' 05.31", E 40° 23' 55.83", 1548 m, 28.V.2018, 1 female. Frequent. Hostplant unknown.

#### *Macrophya postica* Brullé, 1832

*Material examined:* Bingöl: Büyükerkören, N 38° 50' 35.45", E 40° 34' 13.30", 1017 m, 20.V.2018, 1 female, Çayağzı, N 38° 47' 44.47", E 40° 33' 15.35", 998 m, 20.V.2018, 1 female, N 38° 48' 12.13", E 40° 33' 21.30", 1003 m, 20.V.2018, 1 female, Çeltiksuyu, Between N 38° 51' 15.71", E 40° 33' 56.68" and N 38° 56' 16.89", E 40° 33' 45.63", 1015 m, 04.V.2018, 2 females, 4 males, Çiçekyayla, N 38° 49' 21.94", E 40° 28' 11.63", 1442 m, 27.V.2017, 1 female, Dicle, N 37° 52' 06.13", E 40° 35' 45.41", 608 m, 30.III.2018, 1 female, Düzyayla, N 38° 48' 05.38", E 40° 28' 57.28", 1373 m, 05.V.2018, 1 female, Elmalı, N 39° 01' 00.57", E 40° 43' 12.15", 1286 m, 05.V.2018, 1 female, Ekinyolu, Between N 38° 54' 30.05", E 40° 35' 01.69" and N 38° 53' 16.55", E 40° 34' 07.32", 1028-1047 m, 19.V.2018, 1 female; Çüngüş: Kayapınar, N 38° 18' 09.50", E 39° 12' 34.57", 904 m, 20.IV.2018, 1 female, N 38° 54' 13.80", E 40° 35' 10.08", 1040m, 17.V.2018, 1 female, 1 male, Gümüslü, N 38° 45' 66.81", E 40° 28' 49.70", 1087 m, 06.V.2018, 1 female, Garip, N 38° 46' 50.09", E 40° 33' 17.79", 992 m, 20.V.2018, 1 female, Güzelköy, N 38° 00' 59.45", E 40° 15' 14.69", 594 m, 29.III.2018, 1 female, Kaleönü, N 38° 54' 08.82", E 40° 32' 33.71", 1040 m, 05.V.2018, 1 female, N 38° 53' 53.74", E 40° 33' 25.10", 1031 0. 05.V.2018, 1 female, Kardeşler, N 38° 54' 53.33", E 40° 37' 24.74" 1068 m, 17.V.2018, 1

female, N 38° 54' 53.33", E 40° 37' 27.47" and N 38° 55' 34.84", E 40° 38' 20.73", 1068-1082 m, 19.V.2018, 1 female, Kartal, N 39° 01' 35.75", E 40° 23' 32.24", 1676 m, 26.V.2018, 1 female, Kılçadır, N 38° 46' 21.51", E 40° 28' 51.09", 1160 m, 06.V.2018, 1 male, Küçükterkören, N 38° 51' 18.33", E 40° 29' 58.29", 1186 m, 06.V.2018, 1 female; Genç, N 38° 44' 07.30", E 40° 30' 35.06", 986 m, 15.V.2018, 1 female, Ardıçdibi, N 38° 46' 32.40", E 40° 36' 40.02", 1054 m, 09.V.2018, 1 female, Binekli, N 38° 45' 47.45", E 40° 53' 23.88", 1436 m, 10.V.2018, 1 female, Çayağzı, N 38° 46' 30.25", E 40° 33' 16.05", 980 m, 09.V.2018, 1 male, Dikköy, N 38° 48' 42.36", E 40° 39' 50.00", 1012 m, 09.V.2018, 1 male, Doğaneyler, N 38° 46' 30.65", E 40° 51' 20.32", 1419 m, 10.V.2018, 1 male, Meşedalı, N 38° 47' 07.96", E 40° 37' 37.11", 1001 m, 09.V.2018, 1 female, Pınaraltı, N 38° 44' 49.56", E 40° 53' 58.55", 1037 m, 10.V.2018, 1 female, N 38° 44' 55.35", E 40° 53' 49.59", 1569 m, 10.V.2018, 1 female, Şehitköy, N 38° 42' 04.23", E 40° 30' 41.61", 1147 m, 15.IV.2018, 1 female, Sürekli, N 38° 46' 05.76", E 40° 35' 39.06", 1010 m, 09.V.2018, 2 females, Yağızca, Between N 38° 49' 18.61", E 40° 46' 47.03", and N 38° 48' 31.78", E 40° 45' 32.52", 1121-1330 m, 10.V.2018, 1 male, N 38° 48' 41.26", E 40° 45' 15.59", 1152 m, 10.V.2018, 1 female, Yayla Bucağı, N 38° 38' 18.36", E 40° 31' 39.92", 1342 m, 14.V.2018, 1 male; Karlıova, Buncukgöze, N 39° 14' 12.70", E 40° 58' 39.08", 1760 m, 03.VI.2018, 1 male, Köprücük, N 39° 16' 31.26", E 41° 12' 21.18", 1747 m, 04.VI.2018, 1 male, Yeniköy, N 39° 11' 50.05", E 40° 56' 07.35", 1748 m, 03.VI.2018, 1 female; Solhan, N 38° 56' 23.25", E 41° 08' 18.56", 1727 m, 02.VI.2018, 1 male, Arakonak, N 38° 57' 19.42", E 41° 07' 02.48", 1589 m, 24.V.2018, 1 male, N 38° 57' 32.25", E 41° 00' 51.26", 1338 m, 24.05.2018, 1 female, Arakonak, N 38° 57' 38.93", E 41° 07' 02.91", 1589 m, 24.V.2018, 1 female, Dilektepe, N 38° 57' 17.43", E 40° 59' 15.07", 1291 m, 24.V.2018, 1 male, Şimşirpınar, N 38° 56' 26.96", E 41° 04' 38.92", 1555 m, 02.VI.2018, 1 male, Yiğitharmanı, N 38° 58' 01.76", E 40° 56' 47.06", 1347 m, 24.V.2018, 1 male; Diyarbakır: Bismil, Köseli, N 37° 50' 51.99", E 40° 38' 49.64", 558.30.III.2018, 1 female; Çermik, Aşağıseyhler, N 38° 10' 28.47", E 41° 07' 02.48", 693 m, 14.IV.2018, 1 male, Karakoluk, N 38° 07' 06.62", E 39° 24' 19.67", 779 m, 14.IV.2018, 1 female, Korudağ, N 38° 05' 31.20", E 39° 17' 34.30", 897 m, 13.IV.2018, 1 male, Seyhandede, N 38° 02' 03.86", E 39° 17' 23.50", 615 m, 15.IV.2018, 1 female, Sinek, N 38° 68' 57.08", E 39° 27' 03.05", 695 m, 14.IV.2018, 1 female; Çınar, Dikmencik, N 37° 45' 23.50", E 40° 21' 00.81", 669 m, 30.III.2018, 1 female; Eğil, Selmanköy, N 38° 11' 45.04", E 40° 08' 46.13", 809 m, 12.05.2017, 1 female; Ergani, Ahmetli Bucağı, N 38° 10' 56.21", E 39° 52' 13.44", 793 m, 22.IV.2018, 1 female, Sağırlı, N 38° 21' 58.75", E 39° 48' 23.44", 1018 m, 22.IV.2018, 1 female, Yolköprü, N 38° 15' 03.79", E 39° 42' 03.03", 864 m, 21.IV.2018, 1 female. Common. Hostplant unknown.

### *Macrophya (Macrophya) superba* Tischbein, 1852

*Material examined:* Bingöl: Karlıova, Kıracıtepe, N 39° 12' 33.66", E 40° 57' 24.32", 1734 m, 03.VI.2018, 1 male, Ulupınar, N 39° 22' 44.70", E 40° 56' 47.05", 1808 m, 06.VI.2018, 1 female; Yedisu, Şenköy, N 39° 25' 13.69", E 40° 31' 52.37", 1496 m, 06.VI.2018, 1 male. Frequent. Hostplant unknown.

### *Tenthredo (Cephaledo) bifasciata* ssp. *bifasciata* O. F. Müller, 1766

*Material examined:* Bingöl: Çukurca, N 38° 55' 13.31", E 40° 31' 17.62", 1315 m, 05.V.2018, 1 female, Ekinyolu, N 38° 53' 53.54", E 40° 34' 31.81", 1033 m, 17.V.2018, 1 male, Elmalı, N 39° 01' 00.57", E 40° 43' 12.15", 1286 m, 05.V.2018, 1 male, Kaleonü, N 38° 53' 53.74", E 40° 33' 25.10", 1031 m, 05.V.2018, 1 female, Kardeşler, N 38° 55' 34.84", E 40° 38' 20.73", 1082 m, 17.V.2018, 1 male, N 38° 56' 05.09", E 40° 39' 00.49", 1107 m, 17.V.2018, 1 female, Yenibaşlar, N 38° 59' 50.35", E 40° 41' 37.75", 1177m, 17.V.2018, 1 female, N 38° 59' 50.35", E 40° 41' 37.75", 1177 m, 17.V.2018, 1 female; Karlıova, Teknedüzü, N 39° 16' 09.65", E 41° 13' 20.05", 1691 m, 04.VI.2018, 1 male, Sancak, N 39° 03' 55.46", E 40° 22' 46.53", 1569 m, 26.V.2018, 1 male, Solhan, N 38° 58' 00.77", E 41° 05' 19.99", 1487 m, 24.V.2018, 1 female, Dilektepe, N 38° 57' 04.85", E 41° 00' 27.10", 1291 m, 24.V.2018, 1 male; Yedisu, Yeşilgöl, N 39° 24' 19.32", E 40° 34' 57.43", 1586 m, 06.VI.2018, 1 male; Diyarbakır: Çermik, Karataş, N 38° 04' 20.52", E 39° 24' 17.08", 677m, 13.IV.2018, 1 female; Dicle: Bozbaba, N 38° 20' 14.51", E 40° 06' 21.15", 829 m, 20.IV.2018, 1 female, Biçer, N 38° 21' 59.34", E 40° 01' 33.98", 957 m, 20.IV.2018, 1 female; Eğil, Ulubaş, N 38° 18' 57.92", E 40° 02' 15.77", 839 m, 19.IV.2018, 1 female; Hani, Anıl, N 38° 24' 01.60", E 40° 20' 37.48", 896 m, 21.IV.2018, 1 female, Bademli, N 38° 19' 42.62", E 40° 17' 17.01", 754 m, 21.IV.2018, 2 males, Başköy, N 38° 22' 44.54", E 40° 14' 05.89", 822 m, 21.IV.2018, 1 male, Belen, N 38° 25' 09.41", E 40° 22' 05.00", 962 m, 21.IV.2018, 1 male, Döğer, N 38° 21' 59.83", E 40° 13' 08.19", 750 m, 21.IV.2018, 1 female; Lice, Angül, N 38° 23' 13.08", E 40° 32' 56.04", 877 m, 15.IV.2018, 1 female. Frequent. Hostplant unknown, probably Aegopodium.



*Tenthredo (Cephaledo) costata* Klug, 1817

*Material examined:* Bingöl: Çayboyu, N 38° 53' 57.77", E 40° 30' 52.08", 1083 m, 05.V.2018, 1 female, Çeltiksuyu, N 38° 51' 15.29", E 40° 33' 30.58", 1015 m, 04.V.2018, 1 male, Ekinyolu, N 38° 53' 53.54", E 40° 34' 31.81", 1033 m, 17.V.2018, 1 male, Kaleönü, N 38° 53' 53.74", E 40° 33' 25.10", 1031 m, 05.V.2018, 1 female, Sarıççek, N 38° 53' 16.55", E 40° 34' 07.32", 1028 m, 04.V.2018, 1 male, female; N 38° 52' 54.56", E 40° 34' 02.26", 1025 m, 04.V.2018, 1 male, N 38° 54' 06.79", E 40° 36' 37.86", 1059 m, 17.V.2018, 1 female; Genç, Kumgeçit, N 38° 47' 45.84", E 40° 37' 57.35", 1003 m, 09.V.2018, 1 male, Savuran, N 38° 43' 13.69", E 40° 22' 05.62", 970 m, 15.V.2018, 1 female; Karlıova, N 39° 17' 28.27", E 40° 59' 22.94", 1883 m, 12.VII.2016, 1 female, Suçatı, N 39° 22' 57.32", E 40° 55' 25.16", 1806 m, 06.VI.2018, 1 38° 53' 16.55", E 40° 34' 07.32", 1028 m, 04.V.2018, 1 male; Sancak, Hasbağlar, N 39° 05' 37.56", E 40° 22' 38.07", 1585 m, 26.V.2018, 1 male, N 39° 11' 00.95", E 40° 21' 56.60", 1558 m, 26.V.2018, 1 female. Frequent. Hostplant unknown.

*Tenthredo (Cephaledo) excellens* (Konow, 1886)

*Material examined:* Bingöl: Kaleönü, N 38° 54' 08.82", E 40° 32' 33.71", 1040 m, 05.V.2018, 2 females, Sañççek, N 38° 52' 54.56", E 40° 34' 02.26", 1025 m, 04.V.2018, 1 female, N 38° 54' 06.79", E 40° 36' 37.86", 1059 m, 17.V.2018, 1 female, N 38° 53' 30.30", E 40° 35' 48.36", 1042 m, 19.V.2018, 1 female; Adaklı, Karaçubuk, N 39° 11' 52.69", E 40° 28' 20.28", 1408 m, 11.VI.2018, 1 female, Kozlu, N 39° 18' 18.40", E 41° 09' 28.08", 1494 m, 29.V.2017, 1 female; Karlıova, Alabalık, N 39° 18' 18.40", E 41° 09' 28.08", 1785 m, 04.VI.2018, 1 female, Kargapazarı, N 39° 18' 47.67", E 41° 06' 52.87", 1860 m, 04.VI.2018, 1 female; Yedisu, Dinarbey, N 39° 22' 03.92", E 40° 39' 21.11", 1831 m, 06.VI.2018, 1 female, Eskibalta, N 39° 26' 24.19", E 40° 28' 16.59", 1415 m, 06.VI.2018, 1 female. Frequent. Hostplant unknown.

*Tenthredo (Elinopsis) vittata* (Kriechbaumer, 1869)

*Material examined:* Diyarbakır: Çermik, N 38° 07' 52.06", E 39° 28' 38.78", 767 m, 13.IV.2018, 1 female, Asmalı, N 38° 10' 35.47", E 39° 30' 11.98", 794 m, 14.IV.2018, 1 female, Başarıbucağı, N 38° 09' 16.86", E 39° 34' 28.52", 699 m, 15.IV.2018, 1 female, Kartaltaşı, N 38° 03' 56.22", E 39° 23' 16.96", 593 m, 13.IV.2018, 1 female, Pınarlı, N 38° 06' 10.31", E 39° 17' 59.07", 1077 m, 14.IV.2018, 1 female; Kulp, Çukurca, N 38° 23' 39.40", E 40° 56' 54.22", 982 m, 29.IV.2018, 1 female; Silvan, Gündüz, N 38° 16' 29.97", E 40° 65' 10.39", 911 m, 29.IV.2018, 1 male, Samanyurdu, N 38° 05' 26.46", E 40° 12' 51.69", 611 m, 29.IV.2018, 1 female, Susuz, N 38° 10' 22.80", E 40° 55' 50.61", 919 m, 29.IV.2018, 1 female. Frequent. Hostplant unknown.

*Tenthredo (Elinora) baetica* Spinola, 1843

*Material examined:* Diyarbakır: Hazro, Mutluca, N 38° 15' 41.58", E 40° 53' 14.98", 971 m, 27.IV.2018, 1 female. This species is newly recorded from Turkey. So far, it was known only from Spain and Portugal. Hostplant unknown.

*Tenthredo (Elinora) dahlii* Klug, 1817

*Material examined:* Diyarbakır: Çermik, Asmalı, N 38° 11' 25.32", E 39° 33' 07.34", 793 m, 14.IV.2018, 1 female; Hazro, Dadaş, N 38° 15' 51.97", E 40° 44' 14.89", 1136 m, 27.IV.2018, 1 female, Ülgen, N 38° 14' 59.02", E 40° 53' 17.26", 989 m, 27.IV.2018, 1 female; Kocaköy, Tepecik, N 38° 16' 05.49", E 40° 33' 03.61", 884 m, 25.IV.2018, 1 female, Yağızköy, N 38° 18' 24.87", E 40° 30' 20.70", 921 m, 24.IV.2018, 1 female; Kulp, Özbek, N 38° 29' 11.20", E 40° 57' 56.80", 948 m, 29.IV.2018, 1 female; Silvan, Çarıklı, N 38° 03' 31.08", E 41° 11' 32.52", 591 m, 29.IV.2018, 1 female. Frequent. Hostplant unknown.

*Tenthredo (Paratenthredo) monozonus* (Kriechbaumer, 1869)

*Material examined:* Bingöl: Sarıççek, N 38° 54' 06.49", E 40° 36' 37.86", 1059 m, 17.V.2018, 1 female. Rare. Hostplant unknown.

*Tenthredo (Zonuledo) distinguenda* (Stein, 1885)

*Material examined:* Bingöl: Kırkağıl, N 38° 54' 48.08", E 40° 22' 42.70", 1731 m, 27.V.2017, 1 male; Hazro, Bağyurdu, N 39° 14' 32.71", E 40° 49' 08.85", 994 m, 27.IV.2018, 1 male; Kiği: Nacaklı, N 39° 10' 17.26", E 40° 20' 33.73", 1439 m, 29.V.2016, 1 female; Diyarbakır: Çermik, Yayıklı, N 38° 03' 52.46", E 39° 20' 33.49",

1119m, 19.IV.2018, 1 female; Ergani, Akçoban, N 37° 55' 56.21", E 39° 41' 19.67", 970 m, 27.IV.2017, 1 male. Frequent. Hostplant unknown.

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

*Material examined:* Bingöl: Adaklı, Donatıtepe, N 39° 12' 17.51", E 40° 27' 22.56", 1371 m, 11.VI.2018, 1 female. Sporadic. Hostplant unknown.

### *Tenthredo (Zonuledo) nazarensis* (André, 1881)

*Material examined:* Diyarbakır: Yukarıkılıçtaşı, N 37° 56' 49.73", E 40° 14' 54.28", 597 m, 29.III.2018, 1 female; Çermik, Asmalı, N 38° 11' 39.73", E 39° 33' 07.34", 808 m, 14.IV.2018, 1 male, Karakaya, N 38° 02' 48.67", E 39° 19' 62.05", 553 m, 15.IV.2018, 1 male. Sporadic. Hostplant unknown.

### *Tenthredo (Zonuledo) zonula* Klug, 1817

*Material examined:* Bingöl: Ağaçeli, N 38° 55' 44.45", E 40° 42' 18.73", 1257 m, 05.V.2018, 1 female, Çeltiksuyu, Between N 38° 51' 15.71", E 40° 33' 56.68" and N 38° 56' 16.89", E 40° 33' 45.63", 1013-1017m, 04.V.2018, 1 female, 3 males, Çukurca, N 38° 55' 13.31", E 40° 31' 17.62", 1250 m, 05.V.2018, 1 male, İncesu, N 38° 51' 41.86", E 40° 37' 27.74", 1065 m, 05.V.2018, 1 female, Kaleöntü, N 38° 53' 53.74", E 40° 33' 25.10", 1031 m, 05.V.2018, 1 male, Kardeşler, N 38° 54' 53.33", E 40° 37' 27.47" and N 38° 55' 34.84", E 40° 38' 20.73", 1068-1082 m, 17.V.2018, 2 males, Köklü, N 38° 55' 52.81", E 40° 38' 31.61", 1086 m, 17.V.2018, 1 male, Sarıçiçek, Between N 38° 53' 16.55", E 40° 34' 07.32" and N 38° 52' 54.56", E 40° 34' 02.06", 1025-1028 m, 04.V.2018, 1 male; Karlıova, N 39° 16' 30.61", E 40° 59' 54.17", 1806 m, 03.VI.2018, 1 female, Toklular, N 39° 15' 57.30", E 40° 59' 28.61", 1787 m, 03.VI.2018, 1 male; Kiğı, Demirkanat, N 39° 13' 16.52", E 40° 20' 37.14", 1454 m, 12.VI.2018, 1 female; Solhan, Arakonak, N 38° 57' 26.93", E 41° 06' 54.36", 1612 m, 02.VI.2018, 1 female; Yayladere, Hasköy, N 39° 12' 37.44", E 40° 04' 28.96", 1406 m, 13.VI.2018, 2 males, Korlu, N 39° 10' 36.36", E 40° 09' 19.47", 1231 m, 13.VI.2018, 1 male, Yolgüdü, N 39° 10' 28.62", E 40° 04' 20.21", 1509 m, 15.VII. 2017, 1 female; Diyarbakır: Güvercinlik, N 37° 59' 06.08", E 40° 14' 29.81", 613 m, 29.III.2018, 1 male Sivritepe, Between N 38° 06' 34.79", E 40° 12' 41.83" and N 38° 06' 30.86", E 40° 13' 19.38", 619-630 m, 29.III.2018, 1 female; Bismil, Ambar, N 37° 50' 41.20", E 40° 33' 30.69", 548 m, 30. III.2018, 1 female, Başaklı, N 37° 49' 42.46", E 40° 28' 49.43", 558 m, 30.III.2018, 1 male, Göksü, N 37° 50' 07.51", E 40° 32' 26.34", 598 m, 30.III.2018, 1 female, Sarılar, N 37° 48' 53.53", E 40° 23' 55.47", 593 m, 30.III.2018, 1 male; Çermik, Aşağışeyhler, N 38° 10' 28.47", E 39° 29' 21.77", 693 m, 14.IV.2018, 1 male, Asmalı, N 38° 10' 35.47", E 39° 30' 11.98", 791m, 14.IV.2018, 1 male, Başarıbucağı, N 38° 06' 00.76", E 39° 34' 10.70", 743 m, 15.IV.2018, 1 female, Bahçe, N 38° 06' 55.82", E 39° 23' 43.79", 833 m, 14.IV.2018, 1 female, Gözerek, N 38° 08' 49.67", E 39° 33' 18.21", 1052 m, 15.IV.2018, 1 female, Güzel, N 38° 01' 08.45", E 39° 11' 31.16", 840 m, 15.IV.2018, 1 female, Karakaya, N 38° 03' 24.42", E 39° 18' 54.30", 618 m, 13. IV.2018, 1 male, Kartaltaşı, N 38° 03' 50.68", E 39° 23' 40.86", 712 m, 13.IV.2018, 1 male, Kayağediği, N 38° 09' 16.86", E 39° 34' 28.52", 1085 m, 15.V.2018, 2 females, Kurudağ, N 38° 05' 31.20", E 39° 17' 34.30", 897 m, 13.IV.2018, 1 male, Toplu, N 38° 06' 16.37", E 39° 33' 48.02", 779 m, 15.IV.2018, 1 male; Çınar, Bozçalı, N 37° 45' 19.49", E 40° 21' 08.98", 669 m, 30.III.2018, 1 female; Çüngüş, Between N 38° 13' 11.54", E 39° 17' 38.99" and N 38° 13' 00.66", E 39° 17' 33.85", 980-1001 m, 19.IV.2018, 1 male, Güneydere, N 38° 13' 43.21", E 39° 17' 39.27", 1119 m, 19.IV.2018, 1 male, Kayarpınar, N 38° 18' 28.44", E 39° 11' 32.32", 756 m, 20.IV.2018, 1 male, Keleşevleri, N 38° 11' 40.95", E 39° 21' 15.33", 968 m, 19.IV.2018, 1 male, Malkaya, Between N 38° 13' 55.18", E 39° 15' 05.18" and N 38° 14' 19.47", E 39° 16' 37.75", 864-1136 m, 20.IV.2018, 1 female, Oyuklu, N 38° 12' 27.82", E 39° 21' 58.48", 1000 m, 19.IV.2018, 1 female, Sağtepe, N 38° 13' 41.26", E 39° 22' 33.16", 1128 m, 19.IV.2018, 1 male, Yenice, Between N 38° 17' 05.87", E 39° 15' 28.49" and N 38° 16' 44.83", E 39° 15' 09.29", 1209-1304 m, 20.IV.2018, 1 female, 1 male; Eğil, Ulubaş, N 38° 18' 57.60", E 40° 02' 14.45", 792 m, 19.IV.2018, 1 female; Hazro: Dadaş, N 38° 16' 00.95", E 40° 44' 32.71", 1169 m, 27.IV.2018, 1 male. Common. Hostplant: *Hypericum perforatum*.

### *Tenthredopsis annuligera* (Eversmann, 1847)

*Material examined:* Diyarbakır: Çermik, Karamusa, N 38° 09' 32.42", E 39° 30' 28.84", 909 m, 27.IV.2017, 1 female. Sporadic. Hostplant unknown.

*Tenthredopsis albonotata* (Brullé, 1832)

*Material examined:* Diyarbakır: Çermik, Gözerek, N 38° 09' 18.84", E 39° 33' 36.50", 948 m, 15.IV.2018, 1 male; Dicle, Kocaalan, N 38° 21' 39.51", E 40° 07' 09.51", 806 m, 20.IV.2018, 1 female, Hazro, Ormankaya, N 38° 17' 10.83", E 40° 47' 46.39", 1077 m, 27.IV.2018, 1 female; Lice, Yalaza, N 38° 20' 00.71", E 40° 40' 56.36", 929 m, 25.IV.2018, 1 male. Frequent. Hostplant unknown.

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