

A Study of the Turkish Cryptini IV. (Cryptinae: Ichneumonidae: Hymenoptera)

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Abstract: Faunistic data of 39 species belonging to the tribe Cryptini from Cryptinae subfamily were studied. All species were collected from Isparta and surrounding districts between 2001 and 2004. General distribution of each species was given. Among them, 9 species noted in the text by asterisk are new records for the Turkish fauna.

Key Words: Ichneumonidae, Cryptinae, Cryptini, new records, fauna, Turkey

Türkiye Cryptini IV. (Cryptinae: Ichneumonidae: Hymenoptera) Üzerine Bir Çalışma

Özet: Cryptinae altfamilyasından Cryptini tribusuna ait 39 tür faunistik olarak çalışılmıştır. Saptanan türler 2001 ve 2004 yılları arası Isparta ve çevre illerde toplanmıştır. Her bir türün genel dağılımı verilmiştir. Bunlardan yıldızla işaretlenen 9 tür Türkiye faunası için yeni kayıttır.

Anahtar Sözcükler: Ichneumonidae, Cryptinae, Cryptini, yeni kayıt, fauna, Türkiye

Introduction

Cryptini is the largest group of Ichneumonidae, and about 200 genera are known in the world fauna (Townes, 1970; Yu and Horstmann, 1997; Kasparyan and Ruiz Cancino, 2004). It differs from the other Cryptinae by the second recurrent vein (2m-cu) usually reclival and with 1 bulla, but sometimes vertical; propodeum with only 2 transversal carinae; if only 1 transversal carina is present, it is the basal carina; face of males frequently marked with white or yellow. Keys for the genera of Cryptini were given mainly by Townes (1970) and Horstmann (1990, 1993).

The Cryptini fauna of Turkey has not been well studied. Both in the study of Beyarslan and Kolarov (1994) and in the catalogue of Kolarov (1995) only 34 species are listed. Lately some new records have been added to this fauna (Kolarov et al., 1997a, 1997b, 2002; Schwarz, 1997, 2005; Çoruh and Özbek, 2005; Gürbüz et al., 2006). Until now 76 Cryptini species and subspecies have been known from Turkey. Isparta

province (37°45'N/30°30'E) has an altitude of 1050 m, situated in the western Mediterranean region of Turkey. Isparta is one of the important refugia of Turkey, possessing different topographic conditions and various climates (Gruev 2002).

In our series of articles (Kolarov and Gürbüz, 2004, 2006; Gürbüz and Kolarov, 2006), the subfamilies Pimplinae, Tryphoninae, Anomaloninae, Banchinae, Ophioninae, and Xoridae were studied. In the fourth part of this series of studies, faunistic data of 39 species from the tribe Cryptini are presented. Nine of them, noted in the text by asterisk, are new records for the Turkish fauna. For the other species, new localities were established.

Materials and Method

The Ichneumonidae samples were collected from Isparta and surrounding districts in Turkey, between 2001 and 2004. The materials were obtained from grass-

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type plants using a standard sweeping-net. The samples are preserved in the collection of the Biology Department of Süleyman Demirel University, Isparta, Turkey.

Results

Thirty-nine species of the Ichneumonidae were recorded in Isparta and surrounding districts. List of the species is given below along with the dates of collection.

List of the species

Acroricnus seductor syriacus (Mocsary, 1883)

Material Examined: Isparta, Çünür, 1150 m, 29.VII.2002, 1♀.

General Distribution: Greece, Turkey, Cyprus, Syria, Lebanon and Palestina.

Agrothereutes fumipennis (Gravenhorst, 1829)

Material Examined: Isparta, Ayazmana, 1100 m, 23.IV.2001, 1♂; Eğirdir, Kasnakmeşesi, 1450 m, 07.VI.2004, 2♂♂; Kirazlıdere, 1010 m, 19.VI.2004, 1♂; Gökçay, 1050 m, 29.VI.2004, 1♂; Aksu, 950 m, 3.VII.2004, 1♂.

General Distribution: Palaearctic region.

Agrothereutes hospes (Tschek, 1871)

Material Examined: Isparta, Gölcük, 1200 m, 10.X.2001, 1♀.; Sav, 1050 m, 28.VI.2004, 1♂.

General Distribution: Europe and Turkey.

**Agrothereutes parvulus* (Habermehl, 1926)

Material Examined: Isparta, Kirazlıdere, 1150 m, 07.VI.2004, 1♂.

General Distribution: France and Bulgaria.

Aritranis claviventris (Kriechbaumer, 1894)

Material Examined: Antalya, Karaman Beli, 1350 m, 29.V.2004, 1♂.

General Distribution: Europe and Turkey.

Aritranis director (Thunberg, 1824)

Material Examined: Isparta, Gökçay, 1050 m, 26.V.2004, 6♂♂; 29.VI.2004, 8♂♂ 1♀; Güneykent, 12.V.2004, 3♂♂; Kirazlıdere, 1150 m, 07.VI.2004, 2♂♂ 1♀; 19.VI.2004, 7♂♂; Yalvaç, 950 m, 18.VI.2004, 1♂; Dere mahallesi, 1100 m, 07.VII.2004, 12♂♂; Eğirdir, Kasnakmeşesi, 1450 m, 07.VI.2004, 1♂; 25.VII.2004, 1♂; Antalya, Karaman Beli, 1320 m, 29.V.004, 1♂; Burdur, Ağlasun, 850 m, 26.VI.2004, 1♂ .

General Distribution: Holarctic region.

* *Aritranis longicauda* (Kriechbaumer, 1873)

Material Examined: Isparta, Çünür, 1010 m, 09.IV.2002, 1♂; Uluborlu, 12.V.2004, 1♂; Güneykent, 12.V.2004, 1♂; Merkez, 1050 m, 22.V.2004, 1♀; Dere mahallesi, 1150 m, 24.V.2004 1♂ 1♀; Gökçay, 1150 m, 26.V.2004 4♂♂ 5♀♀; 29.V.2004 2♂♂; 29.VI.2004, 2♂♂; 07.VI.2004 3♂♂; Kirazlıdere, 19.VI.2004, 2♂♂ 2♀♀, 07.VI.2004, 6♂♂ 1♀; Eğirdir, Kasnakmeşesi, 1450 m, 07.VI.2004, 1♂.

General Distribution: Europe and Algeria.

Aritranis nigrifemur (Szepligeti, 1916)

Material Examined: Isparta, Dere mahallesi, 29.VI.2004, 1♀; Gökçay, 1010 m, 29.VI.2004, 1♀; Eğirdir, Kasnakmeşesi, 1450 m, 02.VII.2004, 1♂.

General Distribution: Europe and Turkey.

Aritranis occisor (Gravenhorst, 1829)

Material Examined: Isparta, Yalvaç, 950 m, 18.VI.2004, 1♂.

General Distribution: Palearctic region.

Buathra laborator (Thunberg, 1824)

Material Examined: Isparta, Yılanlı, 1250 m, 23.V.2004, 1♂ 1♀; Burdur, Ağlasun, 850 m, 26.V.2004, 1♂.

General Distribution: Holarctic region.

Buathra tarsoleucos (Schrank, 1781)

Material Examined: Isparta, Dere mahallesi, 1150 m, 29.V.2004, 1♂; Isparta, Yılanlı, 1250 m, 22.V.2004, 1♀.

General Distribution: Palaearctic region.

**Cryptus diana* Gravenhorst, 1829

Material Examined: Isparta, Güneykent, 1130 m, 12.V.2004, 1♀; Gökçay, 29.VI.2004, 1♀; Dere mahallesi, 1100 m, 07.VII.2004, 1♀.

General Distribution: Palaearctic region.

Cryptus spinosus Gravenhorst, 1829

Material Examined: Isparta, Gökçay, 1050 m, 29.VI.2004, 1♀.

General Distribution: Western Palaearctic region.

Cryptus spiralis (Geoffroy, 1785)

Material Examined: Isparta, Uluborlu, 12.V.2004, 1♀.; Sav, 1050 m, 28.VI.2004, 1♀; Eğirdir,

Kasnakmeşesi, 1450 m, 07.VI.2004, 2♀; 02.VII.2004, 1♀; 25.VII.2004, 1♀.

General Distribution: Palaearctic region.

**Cryptus subspinosus* Smits van Burgst, 1913

Material Examined: Isparta, Merkez, 1050 m, 22.V.2004, 1♀.

General Distribution: Tunisia, Algeria, Spain, France, Italia, Bulgaria and Israel.

Gambrus incubitor (Linnaeus, 1758)

Material Examined: Isparta, Eğirdir, Kasnakmeşesi, 1450 m, 08.V.2004, 1♂.

General Distribution: Palaearctic and Ethiopian region.

**Hidryta sordida* (Tschek, 1871)

Material Examined: Isparta, Yukarı Gökdere, 1150 m, 23.V.2004, 2♂♂.

General Distribution: Europe.

**Hoplocryptus confector* (Gravenhorst, 1829)

Material Examined: Isparta, Dere mahallesi, 1100 m, 29.VI.2002, 1♂.

General Distribution: Europe.

**Hoplocryptus fugitivus* (Gravenhorst, 1829)

Material Examined: Isparta, Dere mahallesi, 1100 m, 29.VI.2002, 1♀; 07.VII.2004, 1♀; Ağılköy, 22.V.2004, 1♂; Sav, 1050 m, 28.VI.2004, 2♀♀.

General Distribution: Europe.

Hoplocryptus odoriferator (Dufour & Perris, 1840)

Material Examined: Isparta, Uluborlu, 12.V.2004, 1♂.

General Distribution: Spain, France, Germany, Italy, Austria and Bulgaria.

Hoplocryptus quadriguttatus (Gravenhorst, 1829)

Material Examined: Isparta, Eğirdir, Kasnakmeşesi, 1450 m, 07.VI.2004, 1♂.

General Distribution: Europe and Turkey.

Idiolispa analis (Gravenhorst, 18VII)

Material Examined: Isparta, Yılanlı, 1250 m, 12.V.2004, 1♂; 22.V.2004, 1♂; Yukarı Gökdere, 1150 m, 23.V.2004, 1♂; Burdur, Dirmil, 1650 m, 07.VII.2004, 1♂.

General Distribution: Holarctic and Oriental region.

Ischnus agitator (Oliver, 1792)

Material Examined: Isparta, Yılanlı, 1250 m, 22.V.2004, 1♀.

General Distribution: Europe, Tunisia and Turkey.

Ischnus migrator (Fabricius, 1775)

Material Examined: Isparta, Eğirdir, Kasnakmeşesi, 1450 m, 02.VI.2004, 2♂♂.

General Distribution: Palaearctic region.

**Listrognathus (Listrognathus) furax* (Tschek, 1871)

Material Examined: Isparta, Dere mahallesi, 1150 m, 24.V.2004, 3♂♂; Gökçay, 26.V.2004, 1♂.

General Distribution: Europe and Iran.

Meringopus pseudonymus (Tschek, 1872)

Material Examined: Isparta, Aksu, 1250 m, 22.V.2004, 1♀; Gönen, 1050 m, 31.V.2002, 1♀; Sav, 1050 m, 28.VI.2004, 1♀; Gökçay, 1050 m, 29.VI.2004, 1♀.

General Distribution: Europe, Algeria, Turkey, Israel, Jordan and Tadjikistan.

Meringopus titillator rhodius (Dalla Torre, 1902)

Material Examined: Antalya, Kızılkaya, 750 m, 29.V.2004, 1♀; Isparta, Eğirdir, Kasnakmeşesi, 1450 m, 2.VII.2004, 1♂1♀.

General Distribution: Croatia, Greece, Turkey, Armenia, Russia-Dagestan, Azerbaijan, Turkmenistan, Iran, Afghanistan, Syria, Jordan and Palestina.

Mesostenus albinotatus Gravenhorst, 1829

Material Examined: Dere Mahallesi, 1150 m, 29.VI.2002, 1♀; 29.VII.2002, 1♀; Güneykent, 1130 m, 12.V.2004, 2♀♀; Eğirdir, Kasnakmeşesi, 1450 m, 07.VI.2004, 1♀; 02.VII.2004, 1♀; Kirazlıdere, 1010 m, 19.VI.2004, 1♀.

General Distribution: Holarctic region.

Mesostenus grammicus Gravenhorst, 1829

Material Examined: Isparta, Eğirdir, Kasnakmeşesi, 1450 m, 02.VII.2004, 1♀.

General Distribution: Western Palaearctic region.

Mesostenus transfuga Gravenhorst, 1829

Material Examined: Isparta, Merkez, 1100 m, 10.VII.2002, Gölcük, 1200 m, 07.VI.2004, 1♀; Sav, 1050 m, 28.VI.2004, 1♂; Eğirdir, Kasnakmeşesi, 1450

m, 02.VII.2004, 1♀; 1♀; Burdur, Dirmil, 1650 m, 07.VII.2004, 1♂.

General Distribution: Western Palaearctic region.

Myrmeleonostenus italicus (Gravenhorst, 1829)

Material Examined: Isparta, Eğirdir, Kasnakmeşesi, 1450 m, 08.V.2004, 1♀; 02.VII.2004, 1♀. Uluborlu, 1160m, 12.V.2004, 1♀; Gökçay, 1150 m, 26.V.2004, 1♀; Keçiborlu, 1100 m, 26.V.2002, 1♀; Sav, 1050 m, 28.VI.2004, 1♀; Gölcük, 1200 m, 07.VI.2004, 1♀; Antalya, Avlan Beli, 29.V.2004, 1♀.

General Distribution: Western Palaearctic region.

**Pycnocryptodes reticulator* Aubert, 1971

Material Examined: Isparta, Yalvaç, 1000 m, 17.VII.2002, 1♀.

General Distribution: Cyprus.

Stenarella domator (Poda, 1761)

Material Examined: Isparta, Yukarı Gökdere, 1150 m, 23.V.2004, 1♀.

General Distribution: Western Palaearctic region.

Trychosis atripes (Gravenhorst, 1829)

Material Examined: Isparta, Gölcük, 1200 m, 07.VI.2004, 1♀.

General Distribution: Western Palaearctic region.

Trychosis legator (Thunberg, 1824)

Material Examined: Isparta, Sav, 1050 m, 16.X.2002, 1♀; 21.V.2004, 1♀; Uluborlu, 12.V.2004, 1♂, Merkez, 15.VI.2004, 2♂♂; Gölcük, 1200 m, 07.VI.2004, 1♀; Gökçay, 1050 m, 29.VI.2004, 1♀; Kirazlıdere, 1010 m, 19.VI.2004, 1♂ 1♀; Burdur, Karaman Beli, 1350 m, 29.V.2004, 4♂♂; Burdur, Dirmil, 1650 m, 07.VII.2004, 1♂; Isparta, Dere Mahallesi, 07.VII.2004, 1♂.

General Distribution: Palaearctic region.

Trychosis neglecta (Tschek, 1871)

Material Examined: Isparta, Eğirdir, Kasnakmeşesi, 1450 m, 08.VI.2004, 1♀; Sav, 1150 m, 21.V.2004, 1♀.

General Distribution: Europe and Turkey.

Trychosis pauper (Tschek, 1871)

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General Distribution: Europe and Turkey.

Trychosis priesneri Rossem, 1971

Material Examined: Isparta, Güneykent, 1030 m, 12.V.2004, 1♂. Antalya, Kızılkaya, 750 m, 29.V.2004, 1♀.

General Distribution: France, Switzerland, Austria, Poland, Former Yugoslavia, Greece and Turkey.

Trychosis tristator (Tschek, 1871)

Material Examined: Isparta, Yukarı Gökdere, 1150 m, 12.V.2004, 1♂; Yılanlı, 1250 m, 12.V.2004, 1♂; 22.V.2004, 1♀; Merkez, 1050 m, 22.V.2004, 1♂; Gökçay, 26.V.2004, 2♂♂; Kirazlıdere, 1150 m, 07.VI.2004, 1♀; 15.VI.2004, 1♂; Atabey, 1100 m, 26.VI.2004, 1♀.

General Distribution: Europe and Turkey.

Discussion

Approximately $\frac{1}{3}$ of all Turkish Cryptini species known in Turkey have been recorded from Isparta and surrounding districts in this study. The dominant species are *Aritranis longicauda*, *Aritranis director*, *Myrmeleonostenus italicus*, *Trychosis legator*, *Trychosis pauper*, and *Trychosis tristator*. About half of the species are rare and were collected from only 1 locality. The reason for this is that the investigated region has an important geographical position, suitable climatic factors, and different topographic zonation, all of which result in a rich flora, and therefore, a rich Cryptini fauna.

With this study the number of Turkish Cryptini has reached to a total of 85 species and subspecies.

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