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Microgastrinae species collected from some provinces of Erzurum and Kars in Eastern Anatolia of Turkey (Hymenoptera, Braconidae)

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Abstract: In this study are treated specimens of Apantelini, Cotesiini and Microgastrini (Hymenoptera: Braconidae: Microgastrinae) collected from the provinces of Erzurum and Kars between the years 1992-1999. Evaluated 11 species belonging to 4 genera have been determined. Amongst those *Cotesia neustriae* (TOBIAS 1986) is a new record for the Turkish fauna.

Key words: Hymenoptera, Braconidae, Microgastrinae, fauna, Turkey.

Introduction

Microgastrinae are solitary or gregarious koinobiont endoparasitoids of the larvae of Lepidoptera and are therefore, the most important single group for regulating lepidopteran population in the world (WHITFIELD 1997; GOULD & BOLTON 1988).

In recent years, studies on Microgastrinae fauna of Turkey have shown a good progress (BEYARSLAN 1988, BEYARSLAN & İNANÇ 1990, BEYARSLAN et al. 2002a, 2002b, İNANÇ 1992, 1997, 2002a, 2002b, İNANÇ & BEYARSLAN 1990a, 1990b, 1997, 2001a, 2001b, 2001c, İNANÇ & ÇETİN ERDOĞAN 2004). 163 species belonging to 11 genera of subfamily Microgastrinae are known from Turkey. Approximately, some 90 of these species have been recorded from W Palearctic, 50 species for the whole Palearctic and the rest is known from both Palearctic and different zoogeographic regions (İNANÇ 2002b).

In this study, specimens of Microgastrinae, collected from the provinces of Erzurum and Kars between the years 1992-2000 were evaluated. A total of 3 species belonging to Apantelini, 7 species to Cotesiini and 1 species to Microgastrini were identified.

Material and Methods

Adult specimens of Microgastrinae (Hymenoptera: Braconidae) were collected from provinces Erzurum and Kars of eastern Turkey. Sweeping nets were used to obtain samples on grass-type plants. Collected samples were then pinned and labelled according to taxonomic rules and regulations. Specimens are deposited in the collection of the Zoological Museum of the Department of Biology, Trakya University.

Results

Tribe *Apantelini*

Genus *Apantales* FOERSTER 1862

Apantales ingenuoides PAPP 1971

Material examined: Kars-Sankamş, 18.08.2000, 2000 m, 5♀, 3♂.

General Distribution: Bulgaria, France, Hungary, Mongolia (PAPP 1984), Turkey (İNANÇ & BEYARSLAN 1990a).

Genus *Dolichogenidae* VIERECK 1911

Dolichogenidae gracillariae (WILKINSON 1940)

Material examined: Erzurum-Üniversite, 14.07.1997, 1850 m, 1♂.

General Distribution: Austria, England, Germany (NIXON 1972), Turkey (İNANÇ & BEYARSLAN 2001b).

Dolichogenidae sicaria (MARSHALL 1885)

Material examined: Erzurum-Üniversite, 25.07.1997, 1850 m, 5♀, 2♂.

General Distribution: North-West Europe, New Zealand (NIXON 1972), Palearctic (PAPP 1978), Romania, Russia (SHENEFELT 1972), Turkey (İNANÇ 1997).

Tribe *Cotesiini*

Genus *Cotesia* CAMERON 1891

Cotesia gonopterygis (MARSHALL 1897)

Material examined: Erzurum-Halicılık, 07.07.1999, 1850 m, 1♀, 2♂.

General Distribution: England, Germany, Hungary, Japan (PAPP 1987), Turkey (İNANÇ 1997)

Cotesia melanoscela (RATZEBURG 1844)

Material examined: Erzurum-Üniversite, 10.07.1992, 1850 m, 5♀, 12.07.1992, 4♀, 16.07.1992, 1♂, 19.07.1992, 1♂.

General Distribution: China, Mongolia, (PAPP 1970), Denmark, W-Canada (PAPP 1989), U.S.A (SHENEFELT 1972), Turkey (İNANÇ & BEYARSLAN 2001c).

Cotesia neustriiae (TOBIAS 1986)

Material examined: Erzurum-Oltu-Sansaz, 19.06.1998, 1400 m, 1♀, 08.06.1998, 1400 m, 1♀; Erzurum-Tortum-Aksu, 06.07.1997, 1600 m, 1♀, 04.07.1997, 1♀.

General Distribution: European part of Russia (PAPP 1990).

New record for the fauna of Turkey

Cotesia nothus (MARSHALL 1885)

Material examined: Erzurum-Pasinler, 12.08.1997, 1750 m, 2♂♂.

General Distribution: England, Germany, Hungary (PAPP 1987), Turkey (BEYARSLAN 1988).

Cotesia ruficrus (HALIDAY 1834)

Material examined: Erzurum-Tortum-Aksu, 10.06.1998, 1800 m, 1♀.

General Distribution: Armenia, Australia, Azerbaidshan, China, England, Fiji, former Czechoslovakia, France, Georgia, Germany, Hawaii, India, Island, Italia, Japan, Java, Jugoslavia, Kamerun, Korea, Madagascar, The Philippines, Poland, Russia, Sudan, Uganda, (SHENEFELT 1972), Israel (PAPP 1970), Turkey (BEYARSLAN 1988).

Cotesia vanessae (REINHARD 1880)

Material examined: Erzurum-Söğütlik, 09.09.1990, 1870 m, 1♀.

General Distribution: Austria, England, Finland, Germany, Hungary, Russia (PAPP 1988), Australia, China, North- and West-Africa (YOU et al.1988), Turkey (İNANÇ & BEYARSLAN 2001c).

Cotesia zygaenarum (MARSHALL 1885)

Material examined: Kars-Sarıkamış-Şeytangeçmez, 02.06.1999, 1900 m, 1♂.

General Distribution: Palearctic Region (PAPP 1987), Turkey (İNANÇ & ÇETİN ERDOĞAN 2004).

Tribe Microgastrini

Genus *Sathon* MASON 1981

Sathon falcatus (NEES 1834)

Material examined: Erzurum-Üniversite, 03.08.1999, 1850 m, 1♀.

General Distribution: Java, Palearctic (SHENEFELT 1972), Turkey (İNANÇ & BEYARSLAN 2001c).

Discussion

In this study, 11 species were found among the Microgastrinae captured, including 1 *Apanteles*, 7 *Cotesia*, 2 *Dolichogenidae*, 1 *Sathon*. *Cotesia neustriæ* (TOBIAS 1986) is new record for the Turkish fauna. By adding new record, the number of Microgastrinae species in Turkey has been raised from 163 to 164.

Zusammenfassung

In vorliegender Arbeit werden Apantelini, Cotesiini und Microgastrini (Hymenoptera: Braconidae: Microgastrinae) behandelt, die in den türkischen Provinzen Erzurum und Kars in den Jahren 1992-1999 gesammelt wurden. Die 11 festgestellten Arten gehören vier verschiedenen Gattungen an, *Cotesia neustriae* (TOBIAS 1986) wurde erstmals für die türkische Fauna nachgewiesen.

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