

NEW AND LITTLE KNOWN TRYPHONINI (HYMENOPTERA: ICHNEUMONIDAE) FOR BULGARIAN FAUNA

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Abstract

Faunistic data of 60 Tryphonini species from Bulgaria are reported. Of them 30 species are new records for Bulgarian fauna. Zoogeographical characterization of all listed species is given. With this study, the number of the Tryphonini species occurring in Bulgaria is increased from 65 to 95.

KEY WORDS: Tryphonini, Ichneumonidae, Hymenoptera, faunistics, zoogeography, Bulgaria.

Introduction

The Tryphonini species are koinobiont ectoparasitoids of Tenthredinidae and Argidae (Hymenoptera) larvae. They develop after the host has spun its cocoon (TOWNES, 1969). Palearctic species were revised and keyed by KASPARYAN (1973, 1981 and 1999). Bulgarian Tryphonini fauna has not been studied enough. In previous papers of mine (KOLAROV, 1977, 1979, 1986, 1987, 1988, 1990, 1994) and others, 65 species were reported from Bulgaria. In the present paper faunistic data for 60 Tryphonini species from Bulgaria are given. Of them, 30 species, marked by an asterisk (*), are new records for Bulgarian fauna. For the other species new localities are added. With this study, the number of the Tryphonini species occurring in Bulgaria is increased from 65 to 95. A short zoogeographic characterization of the species is proposed. The distribution data are taken mainly from Yu et al. (2005).

Material and Methods

Material was collected by sweeping with hand net and Malaise traps in several parts of Bulgaria. The stuffing and taxonomical identification of collected material was carried out in the University of Plovdiv, Bulgaria. Generally the taxonomical works of KASPARYAN (1973, 1981, 1999) were used.

Results and Discussion

List of the species

Dyspetes arrogator Heinrich, 1949

Material examined: Vitosha Mt.: Kopototo, 1350 m a.s.l., 18.06.1998, 1♀.

Distribution: Palaearctic and Oriental regions.

Cosmoconus (Cosmoconus) ceratophorus (Thomson, 1888)

Material examined: Rhodopi Mt.: reserve Kormisosh, 700 m a.s.l., 10.07.1991, 4♀.

Distribution: Europe and Siberia.

Cosmoconus (Cosmoconus) elongator (Fabricius, 1775)

Material examined: Stara Planina Mt.: Hut Tchumerna, 08.07.1992, 1♂.

Distribution: Palaearctic region.

* *Cosmoconus (Cosmoconus) nigriventris* Kasparyan, 1971

Material examined: Rila Mt.: Borovets, 1600 m a.s.l., 24.06.2001, 2♂.

Distribution: Palaearctic region.

Tryphon (Tryphon) atriceps Stephens, 1835

Material examined: Strandja Mt.: Varvara, 07.06.1997, 1♀.

Distribution: Europe, Turkey, Azerbaijan, Georgia, Iran and Afghanistan.

* *Tryphon (Tryphon) bidentulus* Thomson, 1883

Material examined: Vitosha Mt.: Bosnek, 940 m a.s.l., 15.06.1999, 1♂.

Distribution: Europe and Siberia.

* *Tryphon (Tryphon) caucasicus* Kasparyan, 1969

Material examined: Stara Planina Mt.: Elena, 1000 m a.s.l., 19.06.2003, 1♂, 1♀.

Distribution: Turkey and Caucasus.

Tryphon (Tryphon) latrator (Fabricius, 1781)

Material examined: Razgrad heights: Trubatch, 06.05.1998, 1♂; Vitosha Mt.: Bosnek, 940 m a.s.l., 03.-15.06.1999, 3♂.

Distribution: Europe, Kazakhstan, Kyrgyzstan, Turkmenistan, Tajikistan, Uzbekistan, Mongolia and Siberia.

* *Tryphon (Tryphon) nigripes* Holmgren, 1855

Material examined: Osogovo Mt., 1200 m a.s.l., 15.07.2005, 1♂, 2♀.

Distribution: Europe.

* *Tryphon (Tryphon) psilosagator* Aubert, 1966

Material examined: Rhodopi Mt.: Hut Tschudnite mostove, 1500 m a.s.l., 09.06.2006, 2♂.

Distribution: France, Italy, Greece, Ukraine, South of European Russia, Turkey and Kazakhstan.

Tryphon (Tryphon) thomsoni Roman, 1939

Material examined: Strandja Mt.: Vitanovo, 200 m a.s.l., 30.05.2000, 4♂, 8.06.2000, 2♂, 1♀; Strandja Mt.: Uzunbudjak reserve, 7.07.2000, 1♀.

Distribution: Europe, Azerbaijan, Georgia, Turkey, Armenia, Israel, Tajikistan and Siberia.

Tryphon (Tryphon) trochanteratus Holmgren, 1857

Material examined: Plovdiv: Applegarden, 08.-12.05.2001, 4♂, 3♀.

Distribution: Europe, Georgia, Turkey, Kazakhstan and Siberia.

Tryphon (Stenocrotaphon) nigrinus Brischke, 1871

Material examined: Dobritch, 20.05.1987, 1♀.

Distribution: Germany, Poland, Bulgaria, Lithuania, European Russia, Kazakhstan and Korea.

Tryphon (Stenocrotaphon) obtusator (Thunberg, 1822)

Material examined: Vitosha Mt.: Ribni Dol, 1240 m a.s.l., 30.05.1998, 1♂; Vitosha Mt.: Kopitoto, 1350 m a.s.l., 03.06.1998, 3♂, 3♀.

Distribution: Europe, Israel, Siberia and Korea.

Tryphon (Stenocrotaphon) subsulcatus subsulcatus Holmgren, 1857

Material examined: Mezek near Svilengrad, 22.04.1989, 9♂.

Distribution: Europe and Siberia.

Tryphon (Symboethus) bidentatus Stephens, 1835

Material examined: Vitosha Mt.: Kopitoto, 1350 m a.s.l., 08.06.1998, 5♂, 2♀, 23.06.1998, 1♂, 3♀.

Distribution: Palaearctic region.

* *Tryphon (Symboethus) brunniventris* Gravenhorst, 1829

Material examined: Pirin Mt.: Near Bansko, 1300 m a.s.l., 02.07.2008, 1♂.

Distribution: Palearctic region.

Tryphon (Symboethus) duplicatus Heinrich, 1953

Material examined: Strandja Mt.: Vitanovo, 08.06.2000, 1♀.

Distribution: Europe and Siberia.

Tryphon (Symboethus) heliophilus Gravenhorst, 1829

Material examined: Strandja Mt.: Vitanovo, 18.08.2000, 1♀.

Distribution: Palearctic region.

* *Tryphon (Symboethus) hinzi* Heinrich, 1953

Material examined: Vitosha Mt.: Kopitoto, 1350 m a.s.l., 30.06.1992, 1♂; Rhodopi Mt.: Hut Zdravets, 1200 m a.s.l., 24.05.1987, 1♂.

Distribution: Palearctic region.

* *Thibetoides acerbus* Victorov, 1964

Material examined: Strandja Mt.: Bolyarovo, 02.05.2000, 1♂.

Distribution: Ukraine, Azerbaijan, Georgia and Armenia.

* *Parablastus bituberculatus* Constantineanu, 1973

Material examined: Shabla, 24.06.2002, 1♀.

Distribution: Romania.

Neleges proditor Gravenhorst, 1829

Material examined: Strandja Mt.: Vitanovo, 18.08.2000, 1♀, 19.06.2000, 1♀, 17.07.2000, 1♀.

Distribution: Europe, Azerbaijan and Turkey.

Monoblastus caudatus Hartig, 1837

Material examined: Svilengrad, 22.04.1989, 1♀.

Distribution: Spain, France, Netherlands, Belgium, Germany, Poland, Austria and Bulgaria.

Grypocentrus albipes Ruthe, 1855

Material examined: Razgrad heights: Tropishte, 27.07.1999, 1♂.

Distribution: Holarctic region.

* *Grypocentrus apicalis* Thomson, 1883

Material examined: Rhodopi Mt.: Hvoina, 08.06.1981, 1♀.

Distribution: Palaearctic region.

Grypocentrus cinctellus Ruthe, 1855

Material examined: Razgrad distr.: Lilyasko plato: Rossina, 30.09.1999, 1♀.

Distribution: Europe and Caucasus.

* *Grypocentrus incisulus* Ruthe, 1855

Material examined: Rhodopi Mt.: Hut Studenets, 1200 m a.s.l., 02.06.1999, 1♂, 1♀.

Distribution: Palaearctic region.

* *Polyblastus (Polyblastus) carbonator* Kasparyan, 1970

Material examined: Stara Planina Mt.: Beklemeto, 1500 m a.s.l., 20.06.2007, 2♂, 1♀; Kyustendil, 28.05.1997, 1♂.

Distribution: Holarctic region.

* *Polyblastus (Polyblastus) pinguis* (Gravenhorst, 1820)

Material examined: Rhodopi Mt.: Hut Ravnishta, 900 m a.s.l., 08.05.2004, 1♂, 1♀.

Distribution: Europe and Kazakhstan.

Polyblastus (Polyblastus) subalpinus Holmgren

Material examined: Vitosha Mt.: Hut Koumata, 1820 m a.s.l., 20.07.2004, 1♂.

Distribution: Holarctic region.

Polyblastus (Polyblastus) varitarsus (Gravenhorst, 1829)

Material examined: Strandja Mt.: Vitanovo, 08.06.2000, 1♂.

Distribution: Holarctic region.

* *Polyblastus (Copenchus) macrocentrus* Thomson, 1888

Material examined: Samokov, 1000 m a.s.l., 11.06.2001, 1♀.

Distribution: Palaearctic region.

Polyblastus (Labroctonus) alternans Schiodte, 1839

Material examined: Strandja Mt.: Vitanovo, 15.05.2000, 1♂.

Distribution: Europe and Caucasus.

* *Polyblastus (Labroctonus) westringi* Holmgren, 1855

Material examined: Vitosha Mt.: Kopitoto, 1350 m a.s.l., 29.06.1998, 1♂.

Distribution: Palaearctic region.

* *Ctenochira annulata* (Holmgren, 1855)

Material examined: Stara Planina: Teteven, 1000 m a.s.l., 02.06.1998, 1♀.

Distribution: Holarctic region.

* *Ctenochira arcuata* (Holmgren, 1855)

Material examined: Vitosha Mt.: Kopitoto, 1350 m a.s.l., 08.06.1998, 1♂.

Distribution: Holarctic region.

* *Ctenochira bisinuata* Foerster, 1855

Material examined: Rhodopi Mt.: Pamporovo, 1600 m a.s.l., 28.06.1997, 1♂, 1♀.

Distribution: Europe and Kyrgyzstan.

* *Ctenochira flavicauda* (Roman, 1912)

Material examined: Rhodopi Mt.: Laki, 1000 m a.s.l., 28.06.2002, 2♂, 2♀.

Distribution: Europe.

Ctenochira gelida Kasparyan, 1973

Material examined: Strandja Mt.: Trakiitsi, 26.07.1995, 1♀.

Distribution: Finland, Austria, Bulgaria, Tschitinsk region of Russia, Siberia and Mongolia.

Ctenochira genalis (Thomson, 1883)

Material examined: Strandja Mt.: Vitanovo, 02.08.1999, 1♂; Vitosha Mt., 01.08.1991, 1♂.

Distribution: Europe, Caucasus, Siberia and Far Southeast of Russia.

* *Ctenochira grossa* (Brischke, 1871)

Material examined: Vitosha Mt.: B. Krusha, 16.06.1993, 1♀.

Distribution: Palaearctic region.

* *Ctenochira haemosterna* (Haliday, 1839)

Material examined: Rila Mt.: Hut Maljovitsa, 1800 m a.s.l., 02.07.1992, 1♀.

Distribution: Holarctic region.

* *Ctenochira helveticator* Aubert, 1965

Material examined: Rhodopi Mt.: Hut Pashalijtsa, 1600 m a.s.l., 12.07.2003, 1♂, 1♀.

Distribution: France, Germany, Switzerland and Austria.

* *Ctenochira infesta* (Holmgren, 1855)

Material examined: Stara Planina Mt.: Shipka, 1600 m a.s.l., 23.06.2006, 2♂, 1♀.

Distribution: Palaearctic region.

Ctenochira marginata (Holmgren, 1855)

Material examined: Vitosha Mt.: Ribni Dol, 14.06.2000, 2♀.

Distribution: Europe, Caucasus and Armenia.

Ctenochira meridianator Aubert, 1969

Material examined: Vitosha Mt.: Kopitoto, 1350 m a.s.l., 28.06.1998, 1♂, 06.07.1998, 1♂; Razgrad distr.: Lilyasko plato, 30.09.1999, 1♀; Strandja Mt.: Vitanovo, 17.07.2000, 1♀.

Distribution: Palaearctic region.

Ctenochira propinqua (Gravenhorst, 1829)

Material examined: Vitosha Mt.: Kopitoto, 1350 m a.s.l., 15.06.1998, 5♂; Vitosha Mt.: Ribni Dol, 1240 m a.s.l., 14.06.2000, 2♀.

Distribution: Palaearctic region.

* *Ctenochira rubranator* Aubert, 1965

Material examined: Rhodopi Mt.: Rakitovo, 800 m a.s.l., 20.05.1992, 1♂.

Distribution: Palaearctic region.

* *Ctenochira sanguinatoria* (Ratzeburg, 1852)

Material examined: Rhodopi Mt.: Dospat, 1200 m a.s.l., 12.07.2004, 2♂.

Distribution: Europe and Siberia.

* *Ctenochira sphaerocephala* (Gravenhorst, 1829)

Material examined: Stara Planina Mt.: Hut Reselets near Tscherven Bryag, 23.07.1992, 1♀.

Distribution: Palaearctic region.

Ctenochira validicornis (Brischke, 1871)

Material examined: Vitosha Mt.: Kopitoto, 1350 m a.s.l., 22.06.1998, 1♀.

Distribution: Palaearctic region.

* *Erromenus analis* Brischke, 1871

Material examined: Sakar Mt., 400 m a.s.l., 02.05.2006, 2♀.

Distribution: Holarctic region.

* *Erromenus bibulus* Kasparyan, 1973

Material examined: Rhodopi Mt.: Hut Rhodopski Partizanin, 600 m a.s.l., 24.04.2001, 1♂, 1♀.

Distribution: Europe and Siberia.

* *Erromenus calcator* (Müller, 1776)

Material examined: East Rhodopi Mt.: Shiroka Polyana, 450 m a.s.l., 12.05.1976, 2♂, 1♀.

Distribution: Palearctic region.

Erromenus melanotus (Gravenhorst, 1829)

Material examined: Rhodopi Mt.: Devin, 1100 m a.s.l., 21.07.1986, 1♂.

Distribution: Palearctic region.

Erromenus plebejus (Woldstedt, 1877)

Material examined: East Rhodopi Mt.: Hill Gorata: Sveta Marina, 21.04.1989, 4♂.

Distribution: Palearctic region.

Erromenus punctulatus Holmgren, 1857

Material examined: Vitosha Mt.: Kopitoto, 1350 m a.s.l., 02.06.1998, 1♀.

Distribution: Holarctic region.

Erromenus zonarius (Gravenhorst, 1829)

Material examined: Strandja Mt.: Vitanovo, 08.06.2000, 1♀.

Distribution: Holarctic region.

* *Aderaeon hamatus* Kasparyan, 1971

Material examined: Stara Planina Mt.: Hut Ribaritsa, 1600 m a.s.l., 23.07.2000, 1♂.

Distribution: Ukraine, South of European Russia, Azerbaijan, Georgia, Turkey and Armenia.

Zoogeographic characterization

The Zoogeographic characterization follows the chorotype classification, proposed by VIGNA TAGLIANTI et al. (1999). After investigation of the recent geographical distribution of the species, treated above, they can be divided into the following groups:

1. Holarctic chorotype (10 species, 10.5%) – This zoogeographical group is represented by the species *Grypocentrus albipes*, *Polyblastus (P.) carbonator*, *P. (P.) subalpinus*, *P. (P.) varitarsus*, *Ctenochira annulata*, *C. arcuata*, *C. haemosterna*, *Erromenus analis*, *E. punctulatus* and *E. zonarius*.

2. Palearctic chorotype (24 species, 25%): *Dyspetes arrogator*, *Cosmoconus (C.) elongator*, *C. (C.) nigriventris*, *Tryphon (Stenocrotaphon) nigrinus*, *T. (St.) obtusator*, *T. (Symboethus) bidentatus*, *T. (S.) bruniventris*, *T. (S.) heliophilus*, *T. (S.) hinzi*, *Grypocentrus apicalis*, *G. incisulus*, *Polyblastus (Copenchus) macrocentrus*, *P. (Labroctonus) westringi*, *Ctenochira genalis*, *C. grossa*, *C. infesta*, *C. meridianator*, *C. propinqua*, *C. rubranator*, *C. sphaerocephala*, *C. validicornis*, *Erromenus calcator*, *E. melanotus* and *E. plebejus*.

3. Sibero-European chorotype (10 species, 10.5%) includes the species: *Cosmoconus (Cosmoconus) ceratophorus*, *Tryphon (Tryphon) bidentulus*, *T. (T.) latrator*, *T. (T.) thomsoni*, *T. (T.) trochanteratus*, *T. (St.)*

subsulcatus subsulcatus, *T. (Symboethus) duplicatus*, *Ctenochira gelida*, *C. sanguinatoria* and *Erromenus bibulus*.

4. Centralasiatic-Mediterranean chorotype (1 species, 1%) – only the *Tryphon (Tryphon) psilosagator* belongs to this group.

5. Turano-European range (1 species, 1%) is represented only by *Tryphon (Tryphon) atriceps*.

6. European chorotype (10 species, 10.5%) shows the species: *Tryphon (Tryphon) nigripes*, *Neleges proditor*, *Monoblastus caudatus*, *Grypocentrus cinctellus*, *Polyblastus (Polyblastus) pinguis*, *P. (Labroctonus) alternans*, *Ctenochira bisinuata*, *C. flavicauda*, *C. helveticator* and *C. marginata*.

7. Ponto-Caucasian range (3 species, 3%) includes the species: *Tryphon (Tryphon) caucasicus*, *Thibetoides acerbus* and *Aderaeon hamatus*.

8. Pontian chorotype (1 species, 1%) comprises only *Parablastus bituberculatus*.

Most numerous are the species with Palaearctic chorotype. Usually they are transpalearcts. One species – *Dyspetes arrogator*, occurs also in the Oriental region.

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НОВЕ И МАЛО ПОЗНАТЕ ВРСТЕ ГРУПЕ TRYRHONINI (HYMENOPTERA: ICHNEUMONIDAE) У ФАУНИ БУГАРСКЕ

ЈАНКО КОЛАРОВ

Извод

У раду су дати фаунистички подаци о 60 врста из групе Tryrhonini са територије Бугарске. Налази 30 врста са овог списка представљају прве налазе у Бугарској. Дата је и зоогеографска класификација врста наведених у овом раду. На основу резултата ове студије фаунистички списак Tryrhonini Бугарске увећан је са 65 на 95 врста.

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