

**FAUNA AND DISTRIBUTION OF MACEDONIAN CRYPTINAE
(HYMENOPTERA, ICHNEUMONIDAE), WITH A CHECKLIST OF
SPECIES**

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ABSTRACT: Faunistic data on 13 Cryptinae species from the Republic of Macedonia are presented. All of them are new records for the Macedonian fauna. A checklist of Macedonian Cryptinae is given.

KEY WORDS: Ichneumonidae, Cryptinae, faunistics, distribution, checklist, Macedonia

INTRODUCTION

Cryptinae is the largest subfamily of Ichneumonidae and comprises more than 4500 species in the world (YU and HORSTMANN, 1997). They are parasites in cocoons of Lepidoptera, Symphyta, parasitic Hymenoptera (Ichneumonidae and Braconidae), Neuroptera, and Gyrinidae; eggs and cocoons of spiders; Diptera puparia; nests of wasps and bees; and cases of Trichoptera (TOWNES, 1970). Many species are secondary parasites. A key to the genera of Cryptinae was given by TOWNES (1970).

The Macedonian Cryptinae fauna has been poorly studied. Until now, only eight species were established (SEYRIG, 1927; CINGOVSKI, 1965; ROSSEM, 1969; HORSTMANN, 1983 and 1993; SCHWARZ, 1998).

In the present paper, faunistic data on 13 Cryptinae species from the Republic of Macedonia are listed. All of them are new records for the Macedonian fauna. With this study the number of known Macedonian Cryptinae rises to 21 species.

MATERIAL AND METHODS

Material was collected using a sweep hand net in several parts of the Republic of Macedonia in 1994. The taxonomic study was carried out during a stay of first author, from September to November 2006, at the Instituto de la Biodiversidad CIBIO (University of Alicante). All material is preserved in the collection of J. Kolarov in Plovdiv.

RESULTS

List of the species

Tribe Phygadeuontini

Blapsidotes vicinus (Gravenhorst, 1829)

Material: Kitka Mt., 1000 m, 24.06.1994, 1 ♂.

Distribution: Europe.

Dichrogaster modesta (Gravenhorst, 1829)

Material: Galicica Mt., 1500 m, 19.06.1994, 1 ♀; Kitka Mt., 1000 m, 24.06.1994, 2 ♂.

Distribution: Europe, Turkey and Israel.

Endasys femoralis (Habermehl, 1912)

Material: Krukla, 16.06.1994, 1 ♂.

Distribution: Europe.

Endasys plagiator (Gravenhorst, 1829)

Material: Galicica Mt., Oteshevo, 750 m, 18.06.1994, 2 ♂.

Distribution: Europe and Turkey.

Glyphicnemis vagabunda (Gravenhorst, 1829)

Material: Galicica Mt., 1500 m, 19.06.1994, 1 ♂.

Distribution: Europe, Turkey, Azerbaydjan and Georgia.

TRIBE Cryptini

Acrorycnus stylator (Thunberg, 1824)

Material: Galicica Mt., Oteshevo, 750 m, 18.06.1994, 1 ♀.

Distribution: Holarctic region.

Agrothereutes fumipennis (Gravenhorst, 1829)

Material: Baba Mt., Kazhani, 18.06.1994, 1 ♂.

Distribution: Palearctic region.

Agrothereutes leucorhaeus (Donovan, 1810)

Material: Galicica Mt., 1200 m, 19.06.1994, 1 ♂.

Distribution: Europe, Turkey and Israel.

Aritranis director (Thunberg, 1824)

Material: Dren Mt., 1000 m, 17.06.1994, 2 ♂.

Distribution: Holarctic region.

Aritranis insectator (Tschek, 1871)

Material: Galicica Mt., 1500 m, 19.06.1994, 1 ♂.

Distribution: Europe.

Cryptus spiralis (Geoffroy, 1785)

Material: Galicica, Oteshevo, 750 m, 18.06.1994, 1 ♀.

Distribution: Palearctic region.

Mesostenus albinotatus Gravenhorst, 1829

Material: Kitka Mt., 1000 m, 24.06.1994, 1 ♀.

Distribution: Holarctic region.

Sphecophaga vesparum (Curtis, 1829)

Material: Galicica Mt., 1500 m, 14.06.1994, 1 ♀.

Distribution: Holarctic region, introduced in New Zeland.

CHECK LIST OF THE MACEDONIAN CRYPTINAE

Tribe Phygadeuontini

Blapsidotes vicinus (Gravenhorst, 1829)

Chirotica tenuipes Horstmann, 1983

Dichrogaster modesta (Gravenhorst, 1829)

Endasys femoralis Habermehl, 1912

Endasys plagiador (Gravenhorst, 1829)

Gelis areator (Panzer, 1804)

Gelis balcanicus Horstmann, 1993

Gelis stevenii (Gravenhorst, 1829)

Glyphicnemis vagabunda (Gravenhorst, 1829)

Tribe Cryptini

Acrorycnus stylator (Thunberg, 1824)

Agrothereutes fumipennis (Gravenhorst, 1829)

Agrothereutes leucorhaeus (Donovan, 1810)

Aritranis director (Thunberg, 1824)

Aritranis insectator (Tschek, 1871)

Cryptus spiralis (Geoffroy, 1785)

Cryptus subspinosus Smith van Burgst, 1913

Gambrus tricolor (Gravenhorst, 1829)

Hoplocryptus murarius (Börner, 1782)

Listrognathus (*Listrognathus*) *mactator* (Thunberg, 1822)

Mesostenus albinotatus Gravenhorst, 1829

Sphecophaga vesparum (Curtis, 1829)

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REFERENCES

- CINGOVSKI J., 1965. Biological and ecological study of *Palaeocimbex quadrimaculata* Müll. in Macedonia. Posebno izdanje. Prirodonaucni muzei. No 3, Skopje.
- HORSTMANN K., 1983. Die westpaläarktischen Arten der Gattung *Chirotica* Förster, 1869 (Hymenoptera, Ichneumonidae). Entomofauna. 4(1):1-33.
- HORSTMANN K., 1993. Nachträge zu Revisionen der Gattungen *Aclastus* Förster, *Ceratophygadeuon* Viereck, *Chirotica* FÖRSTER und *Gelis* Thunberg. Nachrichtenblatt der Bayerischen Entomologen. 42(1):7-15.
- ROSSEM G. VAN, 1969. A revision of the genus *Cryptus* Fabricius s. str. in the western Palearctic region, with keys to genera of Cryptina and species of *Cryptus* (Hym., Ichneumonidae). Tijdschrift voor Entomologie. 112:299-374.
- SCHWARZ M., 1998. Revision der westpaläarktischen Arten der Gattungen *Gelis* Thunberg mit apteren Weibchen und *Thaumatogelis* Schmiedeknecht (Hymenoptera, Ichneumonidae). Teil 2. Linzer biol. Beitr. 30:629-704.
- SEYRIG A., 1927. Travaux scientifiques de l'Armée d'Orient (1916-1918). Hymenopteres Ichneumonides. Bulletin du Museum National d'Histoire Naturelle, Paris. 33:235-240.
- TOWNES H., 1970. The genera of Ichneumonidae, Part 2. Memoirs of the American Entomological Institute. No 13 (1969). 307 pp.
- YU D. S. & K. HORSTMANN, 1997. A Catalogue of world Ichneumonidae (Hymenoptera). No 58, 1/2. 1558 pp.

ФАУНА И РАСПРОСТРАЊЕЊЕ CRYPTINAE (HYMENOPTERA, ICHNEUMONIDAE) У МАКЕДОНИЈИ, СА СПИСКОМ ВРСТА

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ИЗВОД

Фауна Cryptinae Македоније је недовољно истражена. До сада је било публиковано само осам врста (SEYRIG, 1927; CINGOVSKI, 1965; ROSSEM, 1969; HORSTMANN, 1983, 1993; SCHWARZ, 1998). У овом раду наведено је 13 нових врста Cryptinae за Републику Македонију. Са нашим истраживањима повећан је број познатих врста Cryptinae Македоније на 21.

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