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Danksagung

Mein Dank gilt dem Ehepaar Dr. BURMEISTER für die freundliche Veröffentlichung meiner Arbeit, Frl. MÜLLER (ZSM) für die instruktiven Fotos, Herrn Dr. BAEHR für die Ausleihe der Vergleichsexemplare und nicht zuletzt meiner Frau für die Reise und eifrige Sammeltätigkeit

Literatur

FREUDE, H. 1976: In: FREUDE, HARDE & LOHSE: Die Käfer Mittel-Europas, Bd. 2. – Krefeld.
FUENTE, de Mª. & J. MORALES 1927: Tables Analiticas per la Clasificacion de Los Coleopteres dela Peninsula Iberica. – Barcelona.
WINKLER, A. 1924-1932: Catalogus Coleopterorum regionis palaearcticae. – Wien.

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Approach to the knowledge of the Ichneumonidae in Los Monegros (Spain)

(Insecta: Hymenoptera)

J. SELFA, J. L. ANENTO & J. BLASCO-ZUMETA

Abstract

An intensive survey (1989 and 1994) has given data on the family Ichneumonidae in Los Monegros (Zaragoza, Spain) that is respected as one of the most interesting desertic areas of the Iberian Peninsula. The results of this work have been completed with the study of material housed in the Staatliches Museum für Naturkunde (Stuttgart). 128 specimens belonging to 4 subfamilies, 19 genera and 22 species are analysed.

Introduction

Los Monegros is supposed by the researchers as an interesting ecosystem of undoubted scientific value because of its high degree of diversity. OCHOA (1982) has described its climatic conditions which cause the presence of a natural juniperus forest that has partially been reduced and replaced by trees for forestry. This locality is very dry with open woodland (*Juniperus thurifera* L., *Rhamnus lyciodes* L. and *Pinus halepensis* M)., growing on calcareous grassland (*Artemisa, Eryngium, Gypsophila, Onopordum, Rosmarinus, Suaeda* and *Teucrium*). The botanical corology of Los Monegros is determined by 70 % of mediterranean elements (MOLERO 1988) J. BLASCO-ZUMETA was interested in the insect populations distributed in this region. He collected material from 1989 to 1994 in the area "La Retuerta de Pina" (Pina de Ebro, Zaragoza,

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Abb. 1: Lage des Untersuchungsgebietes "Los Monegros".

Spain; UTM coordinates: 30TYL29; Altitude: 360 m). The sampling methods used by him are explained in BÄCHLI & BLASCO-ZUMETA (1995).

At present the information concerning the Hymenoptera only refers to the Symphyta (BLASCO-ZUMETA 1994), Eumenidae (CASTRO 1992), Sphecidae (GAYUBO 1992), Chrysidoidea (OLMI 1995), Chalcidoidea (ASKEW 1991, 1993, 1994a, 1994b, 1994c; ASKEW in press); ASKEW & BLASCO 1997; DARLING, 1995; GARRIDO & NIEVES 1996), and Ceraphronoidea (DESSART 1991, 1994, 1996). On the other hand, the subfamily Agryotipinae is recorded for Peninsular Spain for the first time (ANENTO & SELFA (1998).

In this paper, the data about material sampled with Malaise trap together with material from the Staatliches Museum für Naturkunde (Stuttgart, Germany) are presented. The 128 related specimens belong to 4 subfamilies, 19 genera and 22 species.

Results

COLLYRIINAE

***Collyria iberica* SCHMIEDECKNECHT, 1908**

Material: Pina de Ebro, Zaragoza, 11-11-1990, 11♀♀ and 2♂♂, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 17-11-1990, 2♀♀, BLASCO leg., Valencia Col.;. Pina de Ebro, Zaragoza, 9-6-1991, 1♀ and 1♂, BLASCO leg., Valencia Col.

Distribution: Spain, Morocco, Tunisia.

***Collyria calcitrator coxator* (VILLERS, 1789)**

Material: Pina de Ebro, Zaragoza, 26-5-1991, 5♀♀, BLASCO leg., Valencia Col..

Distribution: Continental Europe.

ICHNEUMONINAE

***Amblyteles armatorius* (FORSTER, 1771)**

Material: Pina de Ebro, Zaragoza, 20-5-1991, 1♂, BLASCO leg. Valencia Col.; Pina de Ebro, Zaragoza, 20-5-1991, 1♂, BLASCO leg. Blasco Col.; Pina de Ebro, Zaragoza, 21-5-1991, 1♂,

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BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 26-5-1991, 1♂, BLASCO leg.,Valencia Col.; Pina de Ebro, Zaragoza, 22-8-1991, 1♂, BLASCO leg.,Valencia Col.
Distribution: Algeria, Dagestan, Continental Europe, Iran, Israel, Japan, Madeira, Mallorca, Morocco, Sakhalin, Siberia, Tenerife, Turkey, United Kingdom.

Barichneumon bilunulatus bilunulatus **(GRAVENHORST, 1829)**
Material: Pina de Ebro, Zaragoza, 17-10-1990, 1♀, BLASCO leg., Valencia Col.
Distribution: Algeria, Continental Europe, Israel, Morocco, Kazakhstan, Siberia, United Kingdom.

Barichneumon sedulus **(GRAVENHORST, 1820)**
Material: Pina de Ebro, Zaragoza, 6-10-1990, 1♀ and 1♂, BLASCO leg., Blasco Col.; Pina de Ebro, Zaragoza, 14-10-1990, 1♀, BLASCO leg., Blasco Col.; Pina de Ebro, Zaragoza, 17-10-1990, 1♀, BLASCO leg., Valencia Col. Pina de Ebro, Zaragoza, 17-11-1990, 4♀, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 7-1-1991, 1♀, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 12-1-1991, 1♀, BLASCO leg., Valencia Col.
Distribution: Continental Europe, Siberia, United Kingdom.

Ctenichneumon inspector **(WESMAEL, 1845)**
Material: Pina de Ebro, Zaragoza, 17-10-1990, 1♀, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 9-2-1992, 1♂, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 9-2-1992, 1♂, BLASCO leg., Blasco Col..
Distribution: Caucasus, Continental Europe, United Kingdom.

Heterischnus ridibundus **(COSTA, 1885)**
Material: Pina de Ebro, Zaragoza, 9-12-1991, 1♀, , BLASCO leg., Valencia Col., DILLER det., 1995.
Distribution: Continental Europe, Corsica, Crete, Mallorca, Sicily, Tunisia.

Ichneumon sarcitorius sarcitorius **LINNAEUS, 1758**
Material: Pina de Ebro, Zaragoza, 9-6-1991, 1♂, BLASCO leg., Valencia Col.
Distribution: Canary Islands, China, Continental Europe, Israel, Madeira, Morocco, Siberia, Turkey, United Kingdom.

Obtusodonta equitatoria equitatoria **(PANZER, 1786)**
Material: Pina de Ebro, Zaragoza, 17-10-1990, 1♂, BLASCO leg., Valencia Col.. Pina de Ebro, Zaragoza, 26-5-1991, 1♂, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 30-4-1994, 1♂, BLASCO leg., Blasco Col.
Distribution: Caucasus, Dagestan, Continental Europe, Corsica, Iran, Israel, Kazakhastn, Sakhalin, Siberia, Sicily, Turkey, United Kingdom.

Platylabus pedatorius **(FABRICIUS, 1793)**
Material: Pina de Ebro, Zaragoza, 9-12-1990, 1♀ and 1♂, BLASCO leg., Valencia Col.
Distribution: Algeria, Caucasus, Continental Europe, United Kingdom.

Platylabus tricingulatus **(GRAVENHORST, 1820)**
Material: Pina de Ebro, Zaragoza, 17-11-1990, 1♀, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 9-6-1991, 1♂, BLASCO leg., Valencia Col.
Distribution: Caucasus, Continental Europe, Corsica, Turkey, United Kingdom.

Pseudoamblyteles homocerus homocerus **(WESMAEL, 1854)**
Material: Pina de Ebro, Zaragoza, 9-4-1991, 1♀, BLASCO leg., Valencia Col.
Distribution: Afghanistan, Algeria, China, Continental Europe, Iran, Kamtschatka, Morocco, Siberia.

Spilothyrateles fabricii **(SCHRANK, 1802)**
Material: Pina de Ebro, Zaragoza, 9-4-1991, 1♀, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 20-5-1991, 1♀ and 1♂, BLASCO leg., Valencia Col.
Distribution: Caucasus, Central Asia, Continental Europe, Kazakhstan, United Kingdom.

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Stenodontus theresae PIC, 1901
Material: Pina de Ebro, Zaragoza, 11-11-1990, 1♀, BLASCO leg., Valencia Col.
Distribution: Continental Europe.

Triptognathus unifasciatus (SPINOLA, 1843)
Material: Pina de Ebro, Zaragoza, 18-6-1991, 1♂, BLASCO leg., Valencia Col.
Distribution: Caucasus, Central Asia, Continental Europe, Kazakhstan, Siberia, Turkey.

Virgichneumon digrammus digrammus(GRAVENHORST, 1820)
Material: Pina de Ebro, Zaragoza, 9-6-1991, 1♂, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 9-6-1991, 1♂, BLASCO leg., Blasco Col.; Pina de Ebro, Zaragoza, 7-5-1991, 1♂, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 1-6-1991, 1♂, BLASCO leg., Valencia Col.,
Distribution: Caucasus, Continental Europe, Kazakhstan, Mallorca, Siberia, United Kingdom.

ORTHOPELMATINAE

Orthopelma mediator (THUNBERG, 1822)
Material: Pina de Ebro, Zaragoza, 17-11-1990, 3♀♀, BLASCO leg., Valencia Col.
Distribution: Continental Europe.

PIMPLINAE

Endromopoda detrita detrita (HOLMGREN, 1860)
Material: Pina de Ebro, Zaragoza, 20-5-1991, 1♀, BLASCO leg., Valencia Col.
Distribution: Continental Europe, Corsica, Morocco, Tunisia, United Kingdom.

Exeristes roborator (FABRICIUS, 1793)
Material: Pina de Ebro, Zaragoza, 6-8-1991, 1♀, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 12-8-1991, 2♀♀, BLASCO leg., Valencia Col., Pina de Ebro, Zaragoza, 19-5-1992, 1♂, Osten Leg., Zwakhals Det., 1995, Sttutgart Col.
Distribution: Algeria, Cyprus, Continental Europe, Egypt, Iran, Morocco, Russia, Siberia, Tunisia, Turkey.

Itoplectis maculator maculator (FABRICIUS, 1775)
Material: Pina de Ebro, Zaragoza, 22-2-1991, 1♂, BLASCO leg., Valencia Col., Pina de Ebro, Zaragoza, 9-3-1991, 1♀, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 11-4-1991, 1♂, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 28-5-1991, 1♀, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 9-6-1991, 8♀♀ and 20♂♂, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 11-6-1991, 1♀, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 15-6-1991, 2♀♀, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 20-6-1991, 4♀♀ and 1♂, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 28-6-1991, 1♂, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 6-7-1991, 1♀ and 1♂, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 8-7-1991, 1♀, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 22-5-1992, 1♀, Osten Leg., Zwakhals Det., 1995, Sttutgart Col.
Distribution: Canary Islands, Caucasus, Continental Europa, Morocco, Tunisia, Turkey, United Kingdom.

Pimpla turionellae turionellae (LINNAEUS, 1758)
Material: Pina de Ebro, Zaragoza, 25-5-1991, 1♀, BLASCO leg., Valencia Col.
Distribution: Continental Europe, Corsica, Morocco, Tunisia, United Kingdom.

Tromatobia ornata ornata (GRAVENHORST, 1829)
Material: Pina de Ebro, Zaragoza, 6-10-1990, 1♀, BLASCO leg., Valencia Col.; Pina de Ebro, Zaragoza, 15-6-1991, 1♀, BLASCO leg., Valencia Col.
Distribution: Central Asia, Continental Europe, Mallorca, Morocco, Tunisia, United Kingdom.

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Discussion

In this area, the phenology of the family Ichneumonidae is, at least in a first approach, very similar to the results of and in other mediterranean forest ecosystems (ANENTO & SELFA, 1997a, 1997b) with maximum values of species and specimens in spring and autumn.

Most species (14) have a distribution extending to the mediterranean Islands and North Africa, and therefore they must be considered rather as mediterranean than as holopalearctic (northern palearctic) elements. This fact corresponds to the botanical corology established by MOLERO (1988) for Los Monegros.

On the other hand, three species are more abundant and involve more than 50 per cent of total captures. *Barichneumon sedulus* (sex ratio 2:1) is an holopalearctic element widely distributed in Eurasia, *Collyria iberica* (sex ratio 1:5) is a meridional mediterranean species restricted to Spain and North Africa and *Itoplectis maculator maculator* (sex ratio 2:1) is an holomediterranean element extended to Caucasus an Central Europe.

Acknowledgements

The authors are grateful to Dr. Till OSTEN (Curator of the Staatliches Museum für Naturkunde, Stuttgart, Germany) for loan of material, and to Mr. E. DILLER (Curator of the Hymenoptera Section in the Zoologische Staatssammlung; Munich, Germany) and Mrs. Dr. J. DILLER for their advice.

References

ANENTO, J. & SELFA, J. 1997a.: Aproximación al conocimiento de los Ichneumoninae (Hymenoptera; Ichneumonidae) en las Sierras de Peñagolosa y de la Calderona. – Boln. Asoc. Esp. Ent. **21**(3/4): 127-139.

-- 1997b: Primeros datos sobre la fauna de Ichneumoninae (Hymenoptera; Ichneumonidae) en tres parques naturales de la Comunitat Valenciana. – Ecología **11**, 501-509.

-- (in press): Agryotipinae (Hymenoptera; Ichneumonidae) nueva subfamilia para la fauna española. – Nouv. Rev. Ent.

ASKEW, R. R. 1991: Some Chalcididae (Hym.; Chalcidoidea) from Spain with description of a new species of *Brachymeria* Westwod. – Eos **67**, 131-133.

-- 1993.: Some Pteromalidae (Hym.; Chalcidoidea) from Monegros with descriptions of four new species. – Eos **69**, 75-82.

-- 1994a.: Two new species of *Ormyrus* (Hym.; Ormyridae). – Entomologist's Monthly Magazine **130**, 87-93.

-- 1994b: Further observations on Chalcididae (Hymenoptera) from Spain with some nomenclatural changes and the description of a new species. – Graellsia **50**, 29-34.

-- 1994c. The presence of *Philomides paphius* Haliday, 1862 (Hymenoptera, Chalcidoidea, Philomidinae) in Spain. – Misc. Zool. **17**, 280-282.

-- (in press.): *Koloptera* Graham (Hym.; Eulophidae, Tetrastichinae) in Spain with description of a new species. – Entomologist's Monthly Magazine.

ASKEW, R. R. & BLASCO-ZUMETA ,J. 1997: Parasitic Hymenoptera inhabiting seeds of *Ephedra nebrodensis* in Spain, with description of a Phytophagous pteromalid and four other new species of Chalcidoidea. – Journal of Natural History **31**, 965-982.

BÄCHLI, G. & BLASCO-ZUMETA, J. 1995: Drosophilidae (Diptera) species of a *Juniperus thurifera* L. forest of Los Monegros region (Zaragoza, Spain). – Zapateri **5**, 51-62.

BLASCO-ZUMETA, J. 1994: Contribución al conocimiento de los sínfitos (Hym.; Symphyta) de los Monegros. – Zapateri **4**, 119-121.

CASTRO, L. 1992: Sobre los Euménidos (Hym.; Vespoidea) del Valle Medio del Ebro. – Zapateri **1**(2), 21-34.

DARLING, D. C. 1995: New Paleartic species of *Spalangiopelta* (Hymenoptera, Chalcidoidea, Pteromalidae, Ceinae). – The Canadian Entomologist **127**, 225-233.

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DESSART, P. 1991: *Lagynodes ooii*, espèce nouvelle du Japon et mâle présumé de *Lagynodes occipitalis* Kieffer, 1906 (Hym.; Ceraphronoidea; Megaspillidae). – Bull. Annls. Soc. belge Ent. **127**, 379-384.
– – 1994: Hymenoptera Ceraphronoidea nouveaux ou peu connus. – Bull. Annls. Soc. belge Ent. **64**; 49-104.
– – 1996: Hymenoptera Ceraphronoidea nouveaux ou peu connus (n° 2). – Bull. Annls. Soc. belge Ent. **132**, 45-62.
GARRIDO, A. M. & NIEVES, J. L. 1996: Revisión de las especies de Pteromálidos descritos por R. García Mercet (Hym.; Chal.; Pteromalidae). – Boln.Asoc.esp.Ent. **20**(1-2), 221-235.
GAYUBO, S. F. 1992: A new species of *Harpactus* (Hym.; Sphecidae) from Spain. – Ent. News **103**(5), 180-184.
MOLERO, J. 1988: Estudio de la flora y vegetación. In: PEDROCCHI, C.: Evaluación preliminar de Impacto Ambiental de los regadíos en el Polígono Monegros II. – M.O.P.U.-I.P.E.
OCHOA, M. J. 1982: Relaciones entre el medio y comunidades de sabinar continental árido en el Valle del Ebro. – INIA. Madrid. 52 pp.
OLMI, M. 1995: Description de trois nouvelles spèces de Dryinidae (Hym.; Chrysidoidea). – Revue fr. Ent. **17**(4), 133-136.

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Zum taxonomischen Status levantinischer *Lophyridia concolor* (DEJEAN, 1822)

(Coleoptera, Cicindelidae)

Michael FRANZEN

Abstract

Lophyridia concolor of the Levant differ from more western populations in having a denser elytral punctation of coloured spots with copper-green spaces between. The diameter of the coloured spots usually exceeds the distance between the spots. In general appearance Levantine specimens are greenish-brown. In contrast, in Aegean specimens and populations from the western part of the Turkish south coast the diameter of the coloured spots is usually less than the distance between the spots. The general appearance of western specimens is copper-red. Furthermore Levantine specimens show a tendancy to smaller total length. Intermediate populations exist along the middle and eastern Turkish south coast and on Cyprus. For the easternmost populations the name *Lophyridia concolor rouxi* (BARTHÉLEMY, 1835), comb. nov. is proposed.

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Zeitschrift/Journal: Nachrichtenblatt der Bayerischen Entomologen

Jahr/Year: 1999

Band/Volume: 048

Autor(en)/Author(s): Selfa Jesus, Anento Jorge L., Blasco-Zumeta Javier

Artikel/Article: Approach to the knwoledge of the Ichneumonidae in Los Monegros (Spain) (Hymenoptera). 72-77