



FRAGMENTA FAUNISTICA 59 (1): 1–6, 2016

PL ISSN 0015-9301 © MUSEUM AND INSTITUTE OF ZOOLOGY PAS

DOI 10.3161/00159301FF2016.59.1.001

**Detailed iconography of the widespread Neotropical millipede, *Myrmecodesmus hastatus* (Schubart, 1945), and the first record of the species from the Caribbean area (Diplopoda, Polydesmida, Pyrgodesmidae)**

Sergei I. GOLOVATCH<sup>1</sup>, Jean-Jacques GEOFFROY<sup>2</sup>, Jean-Paul MAURIÈS<sup>3</sup>  
and Didier VANDENSPIEGEL<sup>4</sup>

<sup>1</sup>*Institute for Problems of Ecology and Evolution, Russian Academy of Sciences, Leninsky pr. 33, Moscow 119071, Russia; e-mail: sgolovatch@yandex.ru*

<sup>2</sup>*Muséum national d'Histoire naturelle, DSE, Site MNHN de Brunoy, 4 avenue du petit Château, 91800 Brunoy, France*

<sup>3</sup>*Muséum national d'Histoire naturelle, Département Systématique & Evolution, CP n°53, 61 rue Buffon, 75005 Paris, France*

<sup>4</sup>*Muséum Royal de l'Afrique Centrale, Tervuren, B-3080 Belgium*

**Abstract:** The small-bodied millipede, *Myrmecodesmus hastatus* (Schubart, 1945), which seems to be strongly associated with ant and termite nests, and currently populates much of South America, is recorded from Martinique for the first time. Abundant, mostly SEM illustrations are provided to facilitate its recognition. This record strongly extends its distribution to also cover the Antilles.

**Key words:** Diplopoda, *Myrmecodesmus*, myrmecophily, termitophily, synanthropization, Neotropics



FRAGMENTA FAUNISTICA 59 (1): 7–27, 2016

PL ISSN 0015-9301 © MUSEUM AND INSTITUTE OF ZOOLOGY PAS

DOI 10.3161/00159301FF2016.59.1.007

## **Bees (Hymenoptera: Apoidea, Apiformes) of the Kujawy Lakeland (central Poland)**

Józef BANASZAK and Anna SOBIERAJ-BETLIŃSKA

*Department of Ecology, Institute of Environmental Biology, Kazimierz Wielki University, 12 Ossolińskich Av.,  
85-093 Bydgoszcz, Poland; e-mail: lednica@ukw.edu.pl, anna.sobieraj@ukw.edu.pl*

**Abstract:** Bee diversity was studied in 14 habitats in 7 localities in the Kujawy Lakeland (Pojezierze Kujawskie) in central Poland. Additionally, we investigated the species diversity and phenology of bumblebees on red clover (*Trifolium pratense*). In total, 146 bee species were recorded in the study area, accounting for 30.7% of bee species reported from Poland so far and 46.2% of bee species known from the Wielkopolska-Kujawy Lowland (Nizina Wielkopolsko-Kujawska). These include 14 red-listed species.

**Key words:** wild bees, Pojezierze Kujawskie, Nadgoplański Park Tysiąclecia, dominance structure, species occurrence



FRAGMENTA FAUNISTICA 59 (1): 29–37, 2016

PL ISSN 0015-9301 © MUSEUM AND INSTITUTE OF ZOOLOGY PAS

DOI 10.3161/00159301FF2016.59.1.029

## New data on *Aricia agestis* (Lepidoptera: Lycaenidae), its life history and occurrence in the Podkarpacie region of Poland

Jarosław BURY

Markowa 1498, 37-120 Markowa, Poland; e-mail: jarekbury2@wp.pl

**Abstract:** *Aricia agestis* (Lycaenidae) is a widespread and not endangered species, however its biology is poorly known in Poland. *Helianthemum nummularium* L. (Cistaceae) and *Erodium cicutarium* L., *Geranium pratense* L., *Geranium sanguineum* L., and *Geranium pusillum* L. (Geraniaceae) were mentioned as larval host plants from Poland so far, but no data about preimaginal stages of the species were known from south-eastern part of the country. From 2009 up to 2014 many new records of imagines of *A. agestis* were revealed in mountain and sub-mountain zones of Podkarpacie region, where *A. agestis* was known from few isolated localities. Additionally, during the observations carried out in 2012 in central and south Podkarpacie region, eggs and early instar caterpillars (L1 & L2) of the second generation were found for the first time in nature on *Geranium phaeum* L. (Lipnik), and their occurrence on *G. pratense* L. was detected at the locality of Markowa. Interactions of caterpillars with ants were not recorded. In conclusion, *A. agestis* is in expansion in mountain and sub-mountain zones of Podkarpacie region (south-eastern Poland) and *Geranium phaeum* L. is established as the new larval host plants of *A. agestis* from Poland.

**Key words:** expansion range, host plant, *Geranium phaeum*, life history, Polish Carpathian Foothills, south-eastern Poland



FRAGMENTA FAUNISTICA 59 (1): 39–46, 2016

PL ISSN 0015-9301 © MUSEUM AND INSTITUTE OF ZOOLOGY PAS

DOI 10.3161/00159301FF2016.59.1.039

## Vertical distribution of scuttle flies (Diptera: Phoridae) in a beech forest

Carlos GARCÍA-ROMERA and Jose Antonio BARRIENTOS

*Departamento de Biología Animal, de Biología Vegetal y de Ecología (Unidad de Zoología), Facultad de Ciencias,  
Universidad Autónoma de Barcelona, E-08193 Bellaterra, Barcelona; Spain  
Corresponding author. e-mail: cgarci24@xtec.cat*

**Abstract:** The structure of scuttle fly communities in vegetative strata of a beech forest in the Montseny Natural Park (Catalonia, Spain) was compared. Window traps were used from March 1990 to March 1991. Relative abundance and species richness of scuttle flies were higher in the herb and shrub layers than in the canopy, while diversity was not significantly different between strata. Saprophagous species dominated in all strata, while the mycophagous and zoophagous species decreased with height. Herb layer was dominated by *Megaselia pectoralis* and *M. subpleuralis*. Shrub layer was dominated by *M. pectoralis*, *M. pectorella*, *M. diversa*, *M. subpleuralis* and *M. superciliata*. Canopy layer was dominated by *M. pectorella*, *M. pectoralis*, *M. pusilla* and *M. diversa*.

**Key words:** Phoridae, Montseny, Spain, beech forest, vertical distribution, trophic groups



FRAGMENTA FAUNISTICA 59 (1): 47–50, 2016

PL ISSN 0015-9301 © MUSEUM AND INSTITUTE OF ZOOLOGY PAS

DOI 10.3161/00159301FF2016.59.1.047

## **First record of *Modicogryllus frontalis* (Orthoptera: Gryllidae) from the Baltic coast**

Stanislav RADA and Filip TRNKA

*Department of Ecology and Environmental Sciences, Faculty of Science, Palacký University Olomouc, Šlechtitelů 27,  
783 71 Olomouc - Holiče, Czech Republic; e-mail: stanislav.rada@seznam.cz*

**Abstract:** A nymph of cricket *Modicogryllus frontalis* was found near Czołpino (northern Poland) on sandy dunes close to the Baltic coast. It is the northernmost locality of the species in Poland and in Europe and the first record from the Baltic Coast. The distribution of the species in Central Europe is summarized and presented on the map.

**Key words:** Central Europe, distribution, Eastern Cricket, Słowiński National Park



FRAGMENTA FAUNISTICA 59 (1): 51–63, 2016

PL ISSN 0015-9301 © MUSEUM AND INSTITUTE OF ZOOLOGY PAS

DOI 10.3161/00159301FF2016.59.1.051

## Caddisflies (Trichoptera) of the Świętokrzyski National Park

Krzysztof GÓRECKI

*University of Life Sciences, Department of Entomology and Environmental Protection, Dąbrowskiego 159,  
60–594 Poznań, Poland; e-mail: goral@up.poznan.pl*

**Abstract:** This faunistic study was carried out in the period 2008–2014 in the Natura 2000 Łysogóry (PLH260002) area, which is situated entirely in the Świętokrzyski National Park (ŚPN). The study revealed the occurrence of 82 caddisfly species (Trichoptera). The insects were caught by light-trapping at 10 sites in the National Park and at one locality on its boundary. Five caddisfly species from the Polish Red List were found. *Stenophylax vibex* (Curtis, 1834), a rare species in Poland, has so far been found only in the ŚPN. Fifty-three species of caddisflies were found for the first time in the Świętokrzyski National Park, 19 of which are new to the Świętokrzyskie Mountains area. The study did not confirm the presence of sixteen species recorded previously but it has raised the total number of caddisfly species recorded in the Świętokrzyski National Park to 98.

**Key words:** Natura 2000, Łysogóry, Polish national park, light-trap



FRAGMENTA FAUNISTICA 59 (1): 65–71, 2016  
PL ISSN 0015-9301 © MUSEUM AND INSTITUTE OF ZOOLOGY PAS  
DOI 10.3161/00159301FF2016.59.1.065

## **First record of the expansive harvestmen *Dicranopalpus ramosus* (Simon, 1909) (Arachnida: Opiliones) in Poland**

Robert ROZWALKA<sup>1</sup> and Tomasz RUTKOWSKI<sup>2</sup>

<sup>1</sup>*Department of Zoology, Maria Curie-Skłodowska University, Akademicka 19, 20-033 Lublin, Poland;  
e-mail: arachnologia@wp.pl*

<sup>2</sup>*Natural History Collections, Faculty of Biology, Adam Mickiewicz University in Poznań, Umultowska 89,  
61-614 Poznań, Poland; e-mail: pardosa@gazeta.pl*

**Abstract:** The harvestmen *Dicranopalpus ramosus* (Simon, 1909) (Arachnida: Opiliones) is reported from Poland for the first time. It was found in the Dąbrówka near Poznań (Wielkopolska Lowland), more than 400 km East of the nearest known localities of this species in Germany.

**Key words:** distribution, expansive species, new site