

FIVE NEW FOR LITHUANIAN FAUNA SPECIES OF SPHECIDAE AND CRABRONIDAE (HYMENOPTERA, APOIDEA)

Eduardas BUDRYS

Institute of Ecology, Akademijos 2, 2600 Vilnius, Lithuania. E-mail: ebudrys@ekoi.lt

Abstract. Five wasp species have been found for the first time in Lithuania: *Sphex rufocinctus* Brulle, 1833 (Sphecidae), *Mimumesa spooneri* (Richards, 1948), *Astata boops* (Schrink, 1781), *Stizus perrisii* Dufour, 1840, and *Ectemnius nigritarsus* (Herrich-Schaeffer, 1841) (Crabronidae). *S. rufocinctus* and *S. perrisii* are widespread in Southern Europe but rare in Central Europe. Lithuania is the northernmost part of the known *Stizus perrisii* distribution area. *A. boops* and *E. nigritarsus* have wide Palearctic distribution; the latter species and *M. spooneri* are considered as rare in most parts of their distribution area. The map of species distribution in Lithuania, capturing localities and dates as well as the number of specimens are submitted herein.

Key words: distribution, Hymenoptera, Apoidea, Sphecidae, Crabronidae

INTRODUCTION

The checklist of apoid wasps (Ampulicidae, Sphecidae and Crabronidae sensu Melo, 1999) of Lithuania, published by E. Budrys (1992), includes one species of Ampulicidae, six species of Sphecidae, and 138 species of Crabronidae.

During the last ten years, one species of Sphecidae and four species of Crabronidae were added to the list of Lithuanian fauna. The objective of this paper is to present the data on the distribution of these wasps in Lithuania.

MATERIAL AND METHODS

A total of ten specimens of the five species new for Lithuanian fauna have been studied. All of them were collected by net capturing or net sweeping. Examination of the wasps was carried out with the help of an MBS-10 binocular microscope. All specimens are deposited in the Institute of Ecology, Vilnius (Akademijos 2, LT-2600 Vilnius, Lithuania).

The faunal data were processed using the database managing system Borland Paradox 4.5 for DOS and mapping utility DMAP by Alan Morton (Department of Biology, Imperial College, Ascot, UK), working in the environment of the database; relational structure and tools of the database were detailed in E. Budrys (1999), L. Balčiauskas and E. Budrys (1997).

RESULTS AND DISCUSSION

Distribution of the species is presented in Fig. 1.

Sphecidae

Sphex rufocinctus Brulle, 1833

Varėna distr.: Puvočiai env. (54°07'N 24°19'E), pine forest road, on sand, 03 07 2000 1♀, leg. K. Majauskaitė.

The species is common in Southern Europe, but rarer in Central Europe (Bitsch et al., 1997), multiple records of it are known from Poland (Noskiewicz & Pulawski, 1960), an isolated population is known from Gotland (Sweden), but the species is absent from the rest of Fennoscandia (Lomholdt, 1975–1976).

Crabronidae

Mimumesa spooneri (Richards, 1948)

Varėna distr.: Čepkeliai Raistas env. (54°00'N 24°30'E), 22 08 1974 1♀, leg. A. Jakimavičius; 3 km S Puvočiai (54°05'N 24°20'E), sandy burned pine forest glade, 02 07 1997 1♂, leg. E. Budrys.

The species is rather common in England but it is rare and has scattered distribution in the rest of Europe (Bitsch et al., 2001) with a few records from Belgium, the Netherlands, Germany, Denmark and Finland.



Figure 1. Distribution of five species of Sphecidae and Crabronidae in Lithuania.

***Astata boops* (Schrank, 1781)**

Vilnius env. (54°41'N 25°20'E), 07 07 2000 1♂, leg. D. Kasulytė.

The species is widespread in the Palearctic Region, however rare in Northern Europe (Lomholdt, 1975–1976).

***Stizus perrisi* Dufour, 1838**

Varėna distr.: Marcinkonys (54°04'N 24°24'E), pine forest glade, 05 07 2001 1♂, leg. E. Budrys; Puvočiai env. (54°07'N 24°19'E), 19 06 1999 1♂, leg. D. Mikelaitis; 3 km S Puvočiai (54°05'N 24°20'E), burned forest glade, on flowers of *Frangula alnus*, 29 06 1997 2♂, 18 06 1998 1♂, leg. E. Budrys.

The species is widespread in Southern Europe, but it is rare and has scattered distribution in Western (France, Germany) and Central (Czech Republic, Hungary, Poland) Europe (Bitsch et al., 1997). The species is absent from Fennoscandia and Denmark. Southern Lithuania seems to be the northernmost known part of the distribution area of *S. perrisi*.

***Estemnius nigritarsus* (Herrich-Schaeffer, 1841)**

Biržai distr.: Biržų Giria forest (56°18'N 24°53'E), 30 06 1998 1♀, leg. V. Jonaitis.

The species has wide trans-Palearctic distribution, however it is considered to be rare and having very local distribution in Europe (Bitsch & Leclercq, 1993). Scanty specimens of it have been recorded in France, Spain,

Belgium, Germany, Switzerland, Italy, Romania, and the former Czechoslovakia. The species is absent from Fennoscandia and Denmark (Lomholdt, 1975–1976). The female from Northern Lithuania has dark coloration: fore and mid tibiae completely black, hind tibia pale yellow, with latero-basal black spot reaching mid of tibia and small latero-apical black spot, metasomal tergite II with big lateral yellow spots, tergites I, III and IV completely black, tergite V with yellow band nearly interrupted medially.

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**PENKIOS NAUJOS LIETUVOS FAUNAI ŽIEDVAPSVIŲ
(HYMENOPTERA, APOIDEA: SPHECIDAE,
CRABRONIDAE) RŪŠYS**

E. Budrys

SANTRAUKA

Pateikiamos 5 naujos Lietuvos faunai žiedvapsvių rūšys: *Sphex rufocinctus* (Sphecidae), *Mimumesa spooneri*, *Astata boops*, *Stizus perrisi* ir *Ectemnius nigritarsus* (Crabronidae). *S. rufocinctus* ir *S. perrisi* yra plačiai paplitusios Pietų Europoje, tačiau retos Centrinėje Europoje; Lietuva yra šiauriausia žinomo rūšies *S. perrisi* arealo dalis. *A. boops* ir *E. nigritarsus* yra plačiai paplitusios Palearktikoje rūšys; *M. spooneri* ir *E. nigritarsus* laikomos retomis beveik visame savo areale. Pateikiamas išvardintų rūšių paplitimo Lietuvoje žemėlapis, nurodytos sugavimo vietas, datos ir individų skaičius.

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