

## NEW DATA ABOUT INSECTS OF ORDERS DERMAPTERA AND ORTHOPTERA IN LITHUANIA

POVILAS IVINSKIS, JOLANTA RIMŠAITĖ

Nature Research Centre, Akademijos 2, LT-08412 Vilnius, Lithuania, entlab@gmail.com

### Introduction

The knowledge about the fauna of earwigs (Insecta: Dermaptera) in Lithuania was inconsistent. According to the Fauna Europaea database (Heller, 2013), four species of these insects have been reported from Lithuania so far.

This report contains information about one new species of earwigs in Lithuania: *Chelidura guentheri* (Galvagni, 1994) (Forficulidae) (Fig. 1–2) and new data about *Labia minor* (Linnaeus, 1758) (Spongiphoridae) (Fig. 3). Moreover, new distribution data about interesting species of Orthoptera, *Myrmecophilus acervorum* (Panzer, 1799) (Myrmecophilidae), is presented in this report.

### Material and Methods

The material was collected during the insect field investigation by the authors in 2018. The insects were collected using the window, Barber and light traps. Specimens were identified using the key (Kočárek *et al.*, 2005). The material is deposited in the collection of Nature Research Centre (Vilnius, Lithuania).

#### List of localities

Locality	Administrative district	Coordinates (LAT, LONG)
Baltoji Vokė	Šalčininkai distr.	54.464168, 25.126108
Vingis park	Vilnius city	54.683881, 25.231251

#### List of species

##### Dermaptera

##### FORFICULIDAE

##### *Chelidura guentheri* (Galvagni, 1994)

Vingis park, 25 08–03 09 2018, 1 ♂, in the window trap on *Tilia cordata* (Mill., 1768).

##### SPONGIPHORIDAE

##### *Labia minor* (Linnaeus, 1758)

Baltoji Vokė, 12 09 2018, 1 ♂, meadow, in the light trap.

##### Orthoptera

##### MYRMECOPHILIDAE

***Myrmecophilus acervorum* (Panzer, 1799)**

Vingis park, 25 06–03 07 2018, 1 ♂, in the Barber trap.



Figure 1. Male of *Chelidura guentheri*, fragment of abdomen.

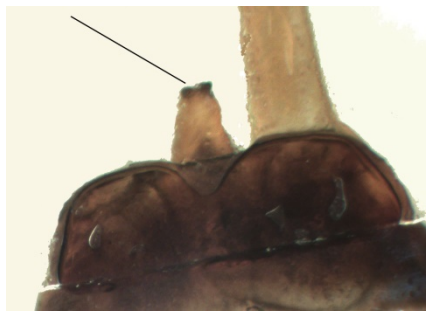


Figure 2. Male of *Chelidura guentheri*, pygidial apex.

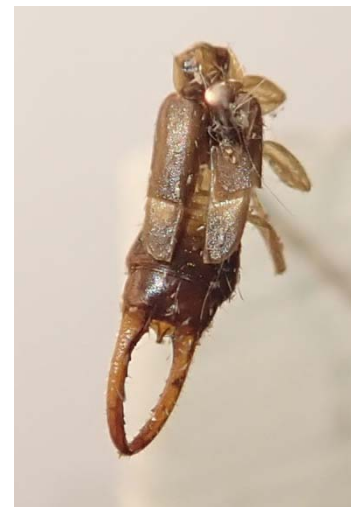


Figure 3. Male of *Labia minor*, general view.

## Discussion

Dermaptera comprises about 2000 predominantly tropical species worldwide (Kočárek *et al.*, 2005). Three species of Dermaptera have been reported from Estonia, two – from Belarus, seven – from Poland, The Czech Republic, Slovakia, eight species are known from Germany (Kočárek *et al.*, 2005; Jaskuła *et al.*, 2011; Heller, 2013; Haas, 2018). Unfortunately, no in-depth studies have been carried out on this order in Lithuania and neighbouring countries.

The species *Chelidura guentheri* is similar morphologically to *Ch. acanthopygia* (Gene, 1832). The main character enabling to distinguish these species is the distal part of the male's pygidium in the caudal view: *Ch. acanthopygia* has narrow and triangular pygidium, which apex is usually simple and rounded, whereas *Ch. guentheri* can be identified by more or less subparallel pygidium with a concave apex (Fig. 2). Females of these two species are indistinguishable morphologically. *Ch. guentheri* and *Ch. acanthopygia* are characterized by similar bionomy: both of them are woodland species living in litter, under bark of trees (Kočárek *et al.*, 2005). Up to now, *Ch. guentheri* has been detected in the countries of Central Europe (France, Germany, Netherlands, Czech, Slovakia, Poland) and southern Norway (Kočárek *et al.*, 2005; Jaskuła *et al.*, 2011; Heller, 2013). According to the Fauna Europaea database (Heller, 2013), *Ch. acanthopygia* has been found in Lithuania, despite the fact that the accurate data of distribution was not presented there.

*Labia minor* is identified by yellowish brown body colouration, black head, yellow legs. Elytra and hind wings are well developed. Male's forceps are slender, separated basally, with 7–8 denticles on the inner face (Fig. 3). *L. minor* is a coprobiont species preferring pastures, the specimens are frequent flyers (Kočárek *et al.*, 2005). It is a cosmopolitan species distributed in many European countries. As for neighbouring

countries, *L. minor* has been reported in Poland and Latvia (Heller, 2013). The first time this species was found in Vilnius district in 1924 and later, in 1931, in Vilnius city itself (Ogijewicz, 1932). There was no data in Fauna Europaea database about this species from Lithuania (Heller, 2013). To sum up, six species of Dermaptera are known in Lithuania so far.

Ant-loving crickets of the species *Myrmecophilus acervorum* (Orthoptera: Myrmecophilidae) are small thermophilous and hygrobiont insects living in the nests of ants. In 2017, this species was found in Lithuania (Kaunas distr., Jurbarkas distr, the Curonian Spit) for the first time (Ferenca *et al.*, 2017). In this publication, the new finding place of *M. acervorum* – Vingis park in Vilnius – is presented. The specimens were found in Barber traps placed in a solar-heated place.

## References

- Ferenca R., Tamutis V., Martinaitis K. 2017. *Myrmecophilus acervorum* (Panzer, 1799) (Orthoptera: Myrmecophilidae) – a new species for Lithuanian fauna. *Bulletin of the Lithuanian Entomological Society* 1 (29): 8–10.
- Haas F. 2018. Earwig research centre. Available from <http://www.earwigs-online.de> (Accessed 15 10 2018).
- Heller K. G. 2013. Dermaptera, Earwigs. Fauna Europaea version 2017.06. Available from <https://fauna-eu.org> (Accessed 15 10 2018).
- Jaskuła R., Soszyńska-Maj A., Hikisz J. 2011. *Chelidurella guentheri* Galvagni, 1994 (Dermaptera: Forficulidae) – an overlooked earwing species in Poland. *Polish Journal of Entomology* 80: 423–427.
- Kočárek P., Holuša J., Vidlička L. 2005. *Blattaria, Mantodea, Orthoptera and Dermaptera of the Czech and Slovak Republics*. Zlín.
- Ogijewicz B. 1932. Przyczynek do znajomości fauny skorkowatych (Dermaptera) najbliższych okolic Wilna. *Polskie Pismo Entomologiczne*. XI (1-4): 136.

## Nauji duomenys apie Dermaptera ir Orthoptera būrių vabzdžius Lietuvoje

P. IVINSKIS, J. RIMŠAITĖ

### Santrauka

Publikacijoje pateikiami duomenys apie naują Lietuvos faunai auslindų (Insecta: Dermaptera) rūšį – *Chelidura guentheri* (Galvagni, 1994) (Forficulidae), duomenys apie *Labia minor* (Linnaeus, 1758) (Spongiphoridae) rūšies auslindas bei tiesiasparnio *Myrmecophilus acervorum* (Panzer, 1799) (Orthoptera) nauji paplitimo duomenys. Auslinda *Ch. guentheri* pagauta Vingio parke naudojant langinę gaudyklę, o *L. minor* Baltosios Vokės apylinkėse atskrido į šviesos gaudykles. Iki šiol svirpliukas *M. acervorum* buvo aptiktas Kuršių nerijoje, Kauno bei Jurbarko rajonuose, tad radavietė Vilniaus Vingio parke papildė duomenis apie šios mažai tirtos rūšies paplitimą Lietuvoje.

Received: 22 October, 2018