

**MYRMECOPHILUS ACERVORUM (PANZER, 1799) (ORTHOPTERA: MYRMECOPHILIDAE) – A NEW SPECIES FOR LITHUANIAN FAUNA**

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## Introduction

The first general review of the Orthoptera of Lithuania dealt with 45 species belonging to 8 families (Budrys & Pakalniškis, 2007). This report contains information on one more species belonging for a family Myrmecophilidae and contribute the knowledge on Lithuanian Orthoptera fauna. Myrmecophilidae is a new Orthoptera family for the Lithuanian fauna.

## Material and Methods

The material was collected during field investigations by the authors of this report R. Ferenc (R.F.), V. Tamutis (V.T.) and K. Martinaitis (K.M.). All the specimens were collected in the dead rotten wood colonised by the ants. Specimens were identified using key (Stalling & Birrer, 2013). The material is deposited in the collection of Kaunas T. Ivanauskas zoological museum.

### List of localities

Locality	Administrative district	Coordinates (LAT, LONG)
Juodkrantė env. (1)	Neringa mun.	55.520117, 21.108978
Juodkrantė env. (2)	Neringa mun.	55.523021, 21.108082
Kačerginė	Kaunas distr.	54.933892, 23.709714
Kalviai	Jurbarkas distr.	55.073021, 23.354432

## List of species

### *Myrmecophilus acervorum* (Panzer, 1799) (Fig 1)

Kalviai, 20 07 1999, 1♀ in the rotten wood of *Alnus glutinosa* (R.F.); Juodkrantė (1), 04 09 2008, 1♀, under the bark of a dead *Pinus sylvestris* in the great cormorants colony (V.T.); Kačerginė, 12 05 2013, 1♀, in the stump of *Salix caprea* colonised by the ants (K.M.); Juodkrantė (2), 20 07 2017, 1♀, in the rotting wood of the *Pinus sylvestris* in the great cormorants colony (R.F.)

## Discussion

Ant-loving crickets (*Myrmecophilus* Berthold, 1827) are widespread in the world. More than 60 species are known worldwide. Of these, 34 species live in Asia, 7 species

in Africa, 7 species in Australia, 4 species in North America and 1 species in South America. Two species are endemics of the Fiji and Hawaii Islands. There are 10 species of genus *Myrmecophilus* in Europe. Most of them are found only in Southern Europe, with only one species *Myrmecophilus acervorum* widely distributed in South and Central Europe reaching east to Armenia (Heller, 2017; Cigliano *et al.*, 2017; Stalling, 2013). In the neighboring countries this species is known from Poland (Taszakowski *et al.*, 2013) and Kaliningrad region of Russia (Heller, 2013).



**Fig. 1.** *Myrmecophilus acervorum*. Great cormorant colony Juodkrantė (photo R. Ferenc)

Ant-loving crickets are small insects, which are known to live as guests in the nests of ants. For a secret lifestyle the relationships with their hosts are still poorly understood (Stalling, 2013). This is thermophilous and hygrobiont species, occurs in the nests of ants *Myrmica* Latr., *Formica* L., *Lasius* Fabr., *Camponotus* Mayr, *Tetramorium* Mayr., *Messor* Forel, *Pheidole* Westw., *Crematogaster* Lund., *Polyergus* Latr. (Taszakowski *et al.*, 2013). Spectrum of ecological requirements of this insect is quite broad. It prefers warm habitats, such as sunlit forests, mesophilic grasslands, dry meadows, as well as gardens, or anthropogenic habitats as railway embankments and old sand or gravel quarries. In addition to thermal requirements very important is the high humidity of the microenvironment where the insect resides. The main food source is the food provided by adult ants. Reproduction of *Myrmecophilus acervorum* is parthenogenetic. Adults start ovipositing after hibernation (Junker, 1997).

## References

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## ***Myrmecophilus acervorum* (Panzer, 1799) (Orthoptera: Myrmecophilidae) - nauja Lietuvos faunos svirplių rūšis**

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## Santrauka

Publikacijoje pateikiami duomenys apie naują Lietuvos faunos vabzdžių rūšį – skruzdėlinį svirpliuką (*Myrmecophilus acervorum*), rastą Kauno ir Jurbarko rajonuose, bei Kuršių Nerijos nacionaliniame parke. Tai mirmekofilinė rūšis, gyvenanti skruzdžių *Myrmica*, *Formica*, *Lasius*, *Camponotus*, *Tetramorium*, *Messor*, *Pheidole*, *Crematogaster*, *Polyergus* skruzdėlynuose.

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