

## TEN CRABRONINAE WASP SPECIES NEW TO THE LITHUANIAN FAUNA (HYMENOPTERA: CRABRONIDAE)

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### Introduction

The objective of this contribution is to supplement the check-list of Crabronidae wasps of the Lithuanian fauna (Budrys, 1992, 2001, 2005, 2006, 2008) with ten new species (one of them represented by two forms of a currently unclear taxonomic status) that have been recently collected or identified in unsorted materials from the collection of the Institute of Ecology of Nature Research Centre (formerly Institute of Ecology of Vilnius University).

### Material and Methods

The wasps were collected using an entomological net, or honey-sugar baits spayed on leaves; some specimens were collected using yellow pan traps. The collectors were Algimantas Jakimavičius (abbreviated as A.J.), Vytautas Jonaitis (V.J.), Saulius Pakalniškis (S.P.), Romas Radvila (R.R.) and, if not stated otherwise, the author. All specimens are preserved in the collection of the Institute of Ecology of Nature Research Centre, Vilnius.

### List of localities

Kaunas city	Žaliakalnis	54°54'12"N 23°54'14"E
Kaunas district	Garliava	54°49'50"N 23°52'30"E
	Karkazai	54°51'00"N 23°54'25"E
	Pavejuonis pr.	55°04'00"N 23°46'00"E
	Nemirseta	55°51'53"N 21°03'40"E
Klaipėda district	Bargailiai	55°30'38"N 23°28'58"E
Radviškis district	Daulėnai	54°14'15"N 25°44'50"E
Šalčininkai district	Rūdinkai military training area	54°22'40"N 25°05'50"E
	Marcinkonys env.	54°04'00"N 24°24'00"E
	Puvočiai	54°07'07"N 24°18'20"E
	0.7 km SE Puvociai	54°06'32"N 24°18'39"E
	1.4 km SE Puvociai	54°06'20"N 24°19'04"E
	2.1 km SE Puvociai	54°06'00"N 24°19'22"E
	3 km S Puvočiai	54°05'22"N 24°18'42"E
Vilnius city	Roduka	54°06'58"N 24°15'12"E
	Pilaitė	54°42'10"N 25°11'04"E
	Vilnius district	1 km N Kiemeliai

## List of species

### *Crossocerus heydeni* Kohl, 1880

Pavejuonis pr., 29 07 1999, 1♂; Daulėnai, 13 06 2002, 1♂ (both V.J.).

### *Crossocerus megacephalus* (Rossi, 1790)

0.7 km SE Puvočiai, 14 07 2006, 1♀; 1.4 km SE Puvočiai, 14 07 2006, 1♂, 16 07 2006, 1♂; all collected using honey baits on *Populus tremula* leaves.

### *Crossocerus styrius* (Kohl, 1892)

Garliava, 28 07 1999, 1♀; Karkazai, 28 07 1999, 1♀1♂ (all V.J.); Bargailiai, 03 08 2000, 1♀1♂; 2.1 km SSE Puvočiai, 04 07 2006, 1♀, honey baits on leaves.

### *Miscophus bicolor* Jurine, 1807

3 km S Puvočiai, 17 07 2005, 2♀2♂, 24 07 2007, 1♀; Roduka, 28 07 2007, 1♀.

### *Miscophus concolor* Dahlbom, 1845

1 km N Kiemeliai, 03-05 07 2007, 1♀; Nemirseta, 26 06 2009, 1♀; both in yellow pan traps.

### *Miscophus niger* (Kohl, 1892)

Puvočiai, 21 07 2007, 1♀; 3 km S Puvočiai, 22 07 2007, 1♂; Rūdninkai military training area, 13 08 2008, 1♀.

### *Oxybelus haemorrhoidalis haemorrhoidalis* Olivier, 1812

Nemirseta, 26 06 2009, 1♀.

### *Oxybelus haemorrhoidalis victor* Lepeletier, 1845

Rūdninkai military training area, 15 07 1997 (S.P.), 1♀, 14 06 1999, 1♀; Nemirseta, 26 06 2009 1♀.

### *Oxybelus latro* Olivier, 1812

3 km S Puvočiai, 16 07 2005, 1♂.

### *Oxybelus mandibularis* Dahlbom, 1845

Marcinkonys env., 22 08 1974, 1♂ (A.J.); 3 km S Puvočiai, 08 07 1994, 1♂, 24 07 2007, 1♂.

### *Oxybelus variegatus* Wesmael, 1852

Žaliakalnis, 09 06 1978, 1♀ (R.R.); Pilaitė, 28 05 2000, 1♀.

## Discussion

*Crossocerus heydeni*, *C. megacephalus*, *C. styrius*, *Miscophus niger*, *M. bicolor*, *Oxybelus haemorrhoidalis*, *O. latro*, *O. mandibularis* are widely distributed across Palearctic (Nemkov *et al.*, 1995; Pulawski, 2003). Ranges of the former four species and *O. mandibularis* include Fennoscandia (Lomholdt, 1975–1976). However, *M. bicolor*, *O. haemorrhoidalis* and *O. latro* inhabit Southern and Central Europe only (Bitsch & Leclercq, 1993; Schmid-Egger *et al.*, 2001) and are absent in the north of Europe. *Miscophus concolor* and *O. variegatus* inhabit the Western Palearctic only. The former species seems to have a purely European distribution ranging from Finland (65°N) to Spain, northern Italy and Bulgaria (Schmid-Egger *et al.*, 2001; Pulawski, 2003). *O. variegatus* is absent in the north of Europe; it is ranging from Germany and Spain to Uzbekistan and Afghanistan.

According to the general distribution of the species, the occurrence of *C. heydeni*, *C. megacephalus*, *C. styrius*, *M. niger*, *M. concolor* and *O. mandibularis* in Lithuania could be expected. The populations of *M. bicolor*, *O. haemorrhoidalis*, *O. latro* and *O.*

*variegatus* in southern Lithuania are at or close to the northern distribution limit of these species.

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**Dešimt naujų Lietuvos faunai žiedvapsvių rūšių (Hymenoptera: Crabronidae)***E. BUDRYS***Santrauka**

Pateikiami duomenys apie dešimt žiedvapsvių rūšių, pirmąkart aptiktų Lietuvoje: *Crossocerus heydeni* Kohl, 1880, *C. megacephalus* (Rossi, 1790), *C. styrius* (Kohl, 1892), *Miscophus bicolor* Jurine, 1807, *M. concolor* Dahlbom, 1845, *M. niger* (Kohl, 1892), *Oxybelus haemorrhoidalis* Olivier, 1812 (aptiktos dvi šios rūšies morfologinės „formas“, kurių sisteminė padėtis nevisai aiški: *O. h. haemorrhoidalis* Olivier, 1812 ir *O. h. victor* Lepeletier, 1845), *O. latro* Olivier, 1812, *O. mandibularis* Dahlbom, 1845 ir *O. variegatus* Wesmael, 1852. Žiedvapsvių *M. bicolor*, *O. haemorrhoidalis*, *O. latro* ir *O. variegatus* Lietuvos populiacijos yra ties šiaurine jų arealo riba ar netoli jos; kitos šešios rūšys aptiktos ir aplinkinėse šalyse, tad jų buvimas Lietuvoje buvo tikėtinas. Kiekvienai aptariamai rūšiai pateiktos sugavimo vietos, datos, individų skaičius ir rinkikas.

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