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## NEW AND RARE BEETLE (COLEOPTERA) SPECIES FROM CURONIAN SPIT (LITHUANIA)

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### Introduction

The Curonian Spit is surrounded by the Baltic Sea and the Curonian Lagoon. It is unique of which is comprised of relief created by the sea and wind, the highest spit in the whole Northern Europe, Lagoon marl prints, remains of former Lagoon's forest and soil brought by the wind and constant interesting eolic processes. Very specific climate conditions determine unique vegetation cover in the Curonian Spit that is critical for the diversity of insects and their population size.

The fauna of Coleoptera is investigated already more than 130 years in the Curonian Spit. However, data on many species is fragmentary. The first data on Coleoptera fauna in the Curonian Spit present F. L. Lentz (1897). After many years new data on some Coleoptera species distribution were published (Pileckis, 1963, 1968; Sharova, Grünthal, 1973; Bercio, Folwaczny, 1979). During the last decade there were many reports on the Coleoptera fauna from the Curonian Spit (Šablevičius, Ferenca, 1995; Barševskis, 2001; Šablevičius, 2003; Ferenca, 2004; Tamutis, 2005; Žiogas, Zolubas, 2005; Ferenca et al., 2006; Ivinskis *et al.*, 2009).

The field practices of students are important both to study process and research experience. In many cases their collected material is very important for faunistic and ecological investigations of insects in Lithuania. In this report we present the records on new and rare beetle species found in the Curonian spit during the field practices time of students of Vytautas Magnus University in the last decade of May, 2011.

### Material and Methods

The material was collected in the environs of Juodkrantė during transects expeditions and using sweep net. The stereomicroscope SMZ - 168 and various guides (Freude *et al.* 1967, 1979; Hůrka, 1996) have been used for species identification. The beetles were collected by Radvilė Nagrockaitė (R.N.) and Eglė Žilinskytė (E.Ž.).

In this report we followed the classification of the order Coleoptera accepted by Bouchard *et al.* (2011) and used the genera and species names accepted in the Catalogue of Lithuanian beetles (Tamutis *et al.* 2011). The material is deposited in the Kaunas T. Ivanauskas Zoological Museum.

## List of localities

Neringa t.	Juodkrantė env. (1)	55°32'57,3"N, 21°07'11,2"E
	Juodkrantė env. (2)	55°33'20,6"N, 21°06'21,3"E
	Juodkrantė env. (3)	55°32'35,9"N, 21°05'56,4"E

**Results**

## List of species

## CARABIDAE

***Calosoma inquisitor* (Linnaeus, 1758)**

Juodkrantė env. (2), 27 05 2011, 1 spec. (E.Ž.).

## CLERIDAE

***Opilo mollis* (Linnaeus, 1758)**

Juodkrantė env. (3), 28 05 2011, 1 spec. (R.N.)

## COCCINELIDAE

***Harmonia axyridis* (Pallas, 1773)**

Juodkrantė env. (1), 26 05 2011, 1 spec. (R.N.).

**Discussion**

*Calosoma inquisitor* (Linnaeus, 1758) was mentioned twice in Curonian Spit (Ferenca, 2004, 2006). Our specimen was found on the beach of the sea. This species is included into Lithuanian Red Data book since 1990 (Red Data Book of Lithuania, 1992).

*Opilo mollis* (Linnaeus, 1758) has been noted for Lithuania by Löbl *et al.* (2007) in Catalogue of Palaearctic Coleoptera. However, this notification was not confirmed by local entomologists till now. *O. mollis* is considered as very rare species in some neighboring countries (Burakowski *et al.*, 1986; Telnov, 2004; Lundberg & Gustafsson, 1995), not yet found in Belarus and Kaliningrad Region.

*Harmonia axyridis* (Pallas, 1773) is new alien species in Lithuanian fauna. The presumed native distribution of *H. axyridis* extends from Altai Mountains in the west to the Pacific Coast in the east, and from southern Siberia in the north to southern China in the south. The first established population was documented in 1988 in North America. After this initial detection, it spread rapidly across North America (Koch, 2003). *H. axyridis* has also been released in Europe (Katsoyannos *et al.*, 1997; Iperti & Bertand, 2001). *H. axyridis* occurs in many color forms. Adults are strongly oval and convex, about 6 mm long and 5 mm wide. *H. axyridis* have a mix of individuals ranging in color from pale yellow-orange to bright red-orange, with or without black spots on the wing covers. The head, antennae and mouthparts are generally straw-yellow but are sometimes tinged with black. *H. axyridis* was found in the wood lot on the grass near Juodkrantė. It was typical red color with 19 black spots (Figure 1.). This species was recently found in Poland (Przewozny *et al.*, 2007) and Latvia (Barševskis, 2009) as well.

## Acknowledgement

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### **Naujos ir retos vabalų (Coleoptera) rūšys iš Kuršių nerijos (Lietuva)**

R. NAGROCKAITĖ, B. TAMUTĖ, V. TAMUTIS

### **Santrauka**

Straipsnyje pateikiama informacija apie 1 naują Lietuvai svetimžemę boružių rūšį *Harmonia axyridis* (Pallas, 1773) ir 2 retas vabalų rūšis aptiktas Juodkrantės apylinkėse Kuršių nerijoje 2011 metais. Taip pat apžvelgiamas šių rūšių paplitimas kaimyninėse valstybėse. Pirmą kartą skelbiami tikri *Opilo mollis* (L.) radvietės duomenys.



Figure 1. The specimen of *Harmonia axyridis* found in Curronian Spit, 2011.

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