

Leistus rufomarginatus (Duftschmid, 1812) (Coleoptera: Carabidae) – ground beetle new to Belarus

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ABSTRACT

Leistus rufomarginatus (Duftschmid, 1812) was recorded for the first time in Belarus from Białowieża Primeval Forest and Rumlovo municipal forest in Grodno city (West Belarus).

Key words: Coleoptera, Carabidae, *Leistus rufomarginatus*, new record, Belarus

INTRODUCTION

Three species of the genus *Leistus* Frölich, 1799 are known from Belarus. Among them *Leistus terminatus* (Panzer, 1793) and *L. ferrugineus* (Linnaeus, 1758) are common for the whole territory of the country. *L. piceus* Frölich, 1799 is known from Białowieża Primeval Forest and the vicinity of Vitebsk city (Alexandrovitch et al. 1996).

Leistus rufomarginatus is westeuropean-caucasian species distributed in the South Caucasus and Turkey (Shilenkov 1999). It reaches southern Sweden in the north of Europe (Silfverberg 2004) and Brittany in the west (Perrault 1991). In the 40th of the XX century, it was introduced in the UK (Crowson 1942). Currently, *L. rufomarginatus* gets to Scotland in the north (Andrews, Brooks 2010). At the end of XX century, this species was recorded in Ireland (Bolger et al. 2013). It reaches southern Italy (including Sicily) and Greece (Brandmayr et al 2005) in southern Europe.

The eastern edge of the natural area of *L. rufomarginatus* in Central Europe is poorly studied. In the first half of the XX century, this species was known from the Kaliningrad region and the north-eastern Poland (Bercio, Folwaczny 1979). In the first decade of the XXI century, it was found in the western Lithuania (Ferenca et al. 2002, Ivinskis et al. 2009) and the south-western Latvia (Telnov 2004).

L. rufomarginatus is widespread in the northern and western parts of Poland. In the central and southern Poland it is distributed to the west from Vistula (Burakowski et al.). The most eastern findings were discovered relatively recently in Warmian-Masurian Voivodeship – in the Borecka Primeval Forest (Maciejewski 1998), on the islands of the Mamry Lake (Ulrich, Zalewski 2006) and in the Masurian Landscape Park (Aleksandrowicz 2011).

MATERIAL

– Białowieża Primeval Forest), old-growth hornbeam-oak forest (UTM FD93, 52°35'15"N 23°52'31"E), 10 November 1991, 1 ♂, a beetle was caught in a pitfall trap, leg. H. Kazulka, det. M. Kazulka.

– Grodno, Rumlevo municipal park, deciduous forest (UTM FE84, 53°39'36"N, 23°51'17"E), 14 October 2012, 2 ♀♀, in the litter layer, manual collection. leg. A. Rhyzhaya, det. O. Aleksandrowicz.

CONCLUSION

L. rufomarginatus is the forest stenotopic mesohygrophilous species. In Europe it populates mainly deciduous and rarely coniferous forests (Šustek 1983). Beetles have fully developed wings and wing muscles, which are functionally developed in June (Rushton et al. 1996). Its flight migration was observed in the UK (Jobe 1990). The fly ability is important for the beetle's migration over long distances and allows them to get rapid expansions and populate new habitats.

The finding from the Białowieża Forest, where the ground beetle fauna is well studied (Aleksandrowicz, Wojas 2001), is of particular interest. However, there were earlier no records for *L. rufomarginatus* in Polish or Belarusian parts of the Białowieża Forest.

Evidently, *L. rufomarginatus* is highly expansive species, which had expanded its area to the Atlantic Ocean, and in the late XX and early XXI century had started expansion to the north-east. We can assume that this is due to a longer plant growing season and mild winters in recent decades, as this species actively feeds and reproduces in the late autumn (Šustek 1983).

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SUMMARY

Proszę o uzupełnienie Summary