

## The studies of the False darkling beetle *Phryganophilus ruficollis* (Fabricius, 1798) in Latvia 2012-2013

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Key words: Coleoptera, Melandryidae, *Phryganophilus ruficollis*, saproxylic beetles

The *Phryganophilus ruficollis* is included in European Council Directive on the Conservation of natural habitats and of wild fauna and flora as a priority species. The species has a wide distribution area, which includes Palaearctic forest zone from Japan and Far East of Russia to Atlantic Ocean (Nikitsky, Pollock 2008). Until now the species was found in Latvia two times – in 1861 and in 1998, when two specimens were caught (Kawall 1867, Barševskis 2001).

The aim of the study was to clarify the status of the population in the known locality in Slītere National park and search for species through at least 10 potential localities in Latvia.

The window trap was used as the main method. From April till July 68 and 57 traps were exposed in 2012 and 2013 respectively in Slītere National park. 110 traps (10 traps per locality) were exposed from April till July 2013 in potential localities in Latvia.

Consequently *Phryganophilus ruficollis* was neither found in the known locality, nor in the potential localities. Other mycetophagous and saproxylomycetophagous beetles, like Erotylidae, Mycetophagidae, Melandryidae, Pyrochroidae families were found in all localities. Several species were caught as 1 to 3 specimens per one or several localities (e.g. *Dolotarsus lividus* and *Phloiotrya rufipes* (Melandryidae), *Orchesia micans* (Orchesiidae), *Leiesthes seminigra* (Endomychidae), *Triplax rufipes* (Erotylidae)). *Cryptophagus reflexus* (Cryptophagidae) was caught in one locality, which is a new species of the fauna of Latvia. A very rare species *Leiesthes seminigra* and *Mycetina cruciata* (Endomychidae) were found in two and five new localities respectively.

The fact that the target species was not found during the two field seasons does not mean that the searching methods were unsuitable. The populations of the *Phryganophilus ruficollis* are not multitudinous in Central and Northern parts of Europe and commonly the beetles can be found by one or in small groups. Even in localities, where species made permanent populations and traps were exposed all vegetation season, only one or several beetles were caught per year (Gutowski 2009).

It is most likely that the population of the *Phryganophilus ruficollis* in the known locality in Slītere National park is dispersal and/or small-numbered. Substantially bigger effort is necessary for establishing *Phryganophilus ruficollis*, than it is usually used in other studies or principally new methods for studies of species should be introduced.

### Acknowledgements

The study was supported by the LIFE+ project „Management of Fennoscandian wooded meadows (6530\*) and two priority beetle species: planning, public participation, innovation” (LIFE09/NAT/LV/000240). We are greatly indebted to Dr. Dmitry Telnov, Ruslans Matrozis, Vilnis Skuja, Ērika Kļaviņa, Ilze Strauta, Anitra Tooma, Alise Telnova, for different kind of assistance in this study and to Katrīne Latkovska for corrections of the article.

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