

# Book of Abstracts



## 4. Simpozij o biologiji slatkih voda s međunarodnim sudjelovanjem



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## Book of Abstracts

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## Editors' remarks

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#### **Diversity and distribution of Simuliidae (Insecta: Diptera) in the Balkan Peninsula**

The aim of this study was to investigate the diversity and distribution of blackflies (Insecta: Diptera, Simuliidae) fauna in the Balkan Peninsula. Samples were collected from 2013 to 2021 at 256 sites. The distribution analysis and ecological differentiation of species was done according to altitudinal categories, water body type, catchment area and hydro-ecoregion. A total of 46 blackflies taxa were identified. The predominant species was *Simulium ornatum* (detected at 119 sites, with 7,630 individuals examined - 19% of all individuals collected). *Simulium reptans*, *S. variegatum*, and *S. balcanicum* were also found to be frequent. The only species recorded in all hydro-ecoregions was *S. reptans*. Most of the recorded species were euryvalent with respect to altitude and water body type. *Prosimulium hirtipes* was common in small rivers, while *S. brevidens* was a crenobiont found at altitudes above 800 m. The highest diversity (Species richness, Shannon index and Equitability) of blackflies was found in small and medium-sized water bodies at altitudes of 500-800 m. High beta diversity characterized all simuliid communities, which was reflected in high values of species turnover and low values of nestedness.