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**Tackling Present & Future Environmental
Challenges of a European Riverscape**

CONFERENCE BOOK



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MACROINVERTEBRATE FAUNA ALONG THE SERBIAN STRETCH OF THE DANUBE RIVER

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The aim of this study is to present the principal features of macroinvertebrate fauna along Serbian stretch of the Danube River (588 km that belongs to middle and partly lower Danube) and its main tributaries, revealed as a part of the Joint Danube Survey 4 (JDS4). The research was carried out in 2019 at 12 locations (five at the Danube and seven at tributaries – the Tisa, Sava, Velika Morava and Timok Rivers). To collect confident information, different sampling techniques were used: Kick and Sweep, multihabitat sampling, Deep-Water Dredging and free diving for mussel collection. A total of 202 macroinvertebrate taxa were identified, with insects as the most diverse component (114 taxa), followed by Mollusca and Annelida (32 taxa each), and Crustacea (20 taxa). Among insects Diptera, family Chironomidae was the most diverse (65 species). In respect to abundance, Mollusca was found to be dominant group with share of 37.46% of the total community, followed by Annelida (25.04%), Crustacea (19.83%), and insects with 17.63%. Other groups were represented with less than 1% participation. As expected in fluvial type rivers, potamophilous species dominate in macroinvertebrate community. Active filter feeders and gatherers/collectors are principal components in respect to feeding preference in investigated rivers which is a typical situation for the river type. Our study revealed presence of rare and protected taxa such as *Unio crassus* Philipsson, 1788 and *Theodoxus transversalis* (Pfeiffer, 1828), but also presence of 22 alien taxa, of which 14 are characterized as invasive in this stretch. This result indicate that macroinvertebrate community is dynamic and that it deserves persistent screening.