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# ABSTRACT BOOK



## SEFS11 Abstract book

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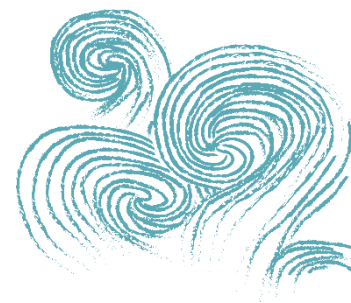


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## SS9\_P2\_Who is the better candidate? Macroinvertebrates and diatoms for ecological status assessment of Sava Lake (Serbia)

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Sava Lake was created from the right arm of the Sava River, and the inhabitants of Belgrade use the lake intensively for swimming and bathing. We analysed macrozoobenthos and epilithic diatom communities at six sites from April to October 2017, to assess the ecological status of Sava Lake according to the National legislation of Serbia. Considering macrozoobenthos communities, the mean values of Zelinka and Marvan saprobity index indicated high ecological status. In contrast, results obtained from the mean values of BMWP (Biological Monitoring Working Party) scores suggested moderate to poor ecological status. The mean values of the IPS diatom index (Indice de Polluosensibilité) indicated high ecological status, while the TDIL index (Trophic Diatom Index for lakes) was slightly more sensitive and indicated good ecological status. Water chemical parameters indicated that Sava Lake was mainly oligotrophic during the study period (average total phosphorus concentrations were 10.7 µg L<sup>-1</sup> and average total nitrogen concentrations 410 µg L<sup>-1</sup>). Before being able to adopt an integrative approach for ecological status assessment (combining two or more biological quality elements), more studies must be performed on how to choose the most sensitive and adequate indices. This is especially true for lakes experiencing intensive anthropogenic pressure during the summer season. Also, the boundary values in the National legislation of Serbia must be adapted for lakes, such as Sava Lake.