

Danube water physico–chemical parameters in relation with ichthyofauna diversity

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Abstract

Aquatic habitats are sharply deteriorating all over the world due to increasing human impact. The Danube River not an exception especially due to its high economically importance and therefore intense exploitation. Biodiversity inventories are needed to understand the impact of human activities on the Danube ecosystem and to detect potential early warning signals for catastrophic ecological changes in the species communities. In this work we used known physico–chemical indicators (Ilie *et al.*, 2017) and fish diversity to assess the ecotoxicological status of the Danube River from eleven locations. Electrofishing was performed in linear 500 m transects, upstream and downstream over shore, as well as over the main water body. Most of the high levels of inorganic pollutants found could be explained by point and diffuse sources scattered along the sector such as discharged household and farm wastewater, as well as nearby agricultural areas where fertilizers have been used and then leaked in the water stream during rainfalls (Ivan *et al.*, 2021). Although the Danube water analysis was found to be in what are considered normal ranges, heavy metals concentrations shown a slight correlation with the current status of fish communities which we surveyed, therefore requiring a more detailed investigation for future prospects.

Keywords: ecotoxicology; ichthyofauna; pollution.

References

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