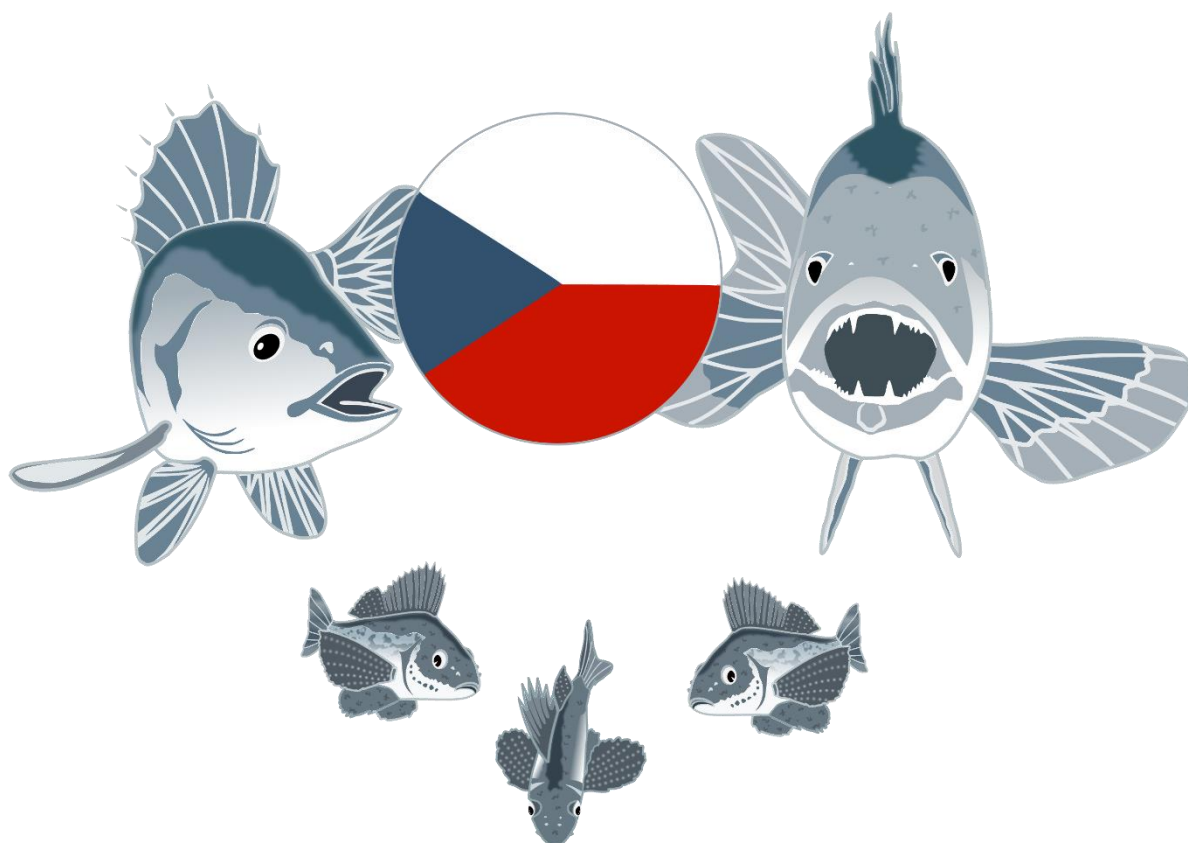


5th International Percid Fish Symposium

Percis V

2022



Book of abstracts

September 18-23, 2022

České Budějovice, Czech Republic

Editor: Michaela Holubová

Biology centre CAS, v.v.i., Institute of Hydrobiology in České Budějovice

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Accumulation of 17 organochlorine pesticides in muscle of pikeperch (*Sander lucioperca*) from Garaši reservoir (Serbia)

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Samples of pikeperch (20 in total) were caught at Garaši reservoir during the summer of 2017. The objectives of this research was to analyse the concentrations of 17 organochlorine pesticides (aldrin, α -HCH, β -HCH, γ -HCH, δ -HCH, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endosulfan I, endosulfan II, endosulfan sulfate, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, and metoxychlor) in fish muscle by gas chromatography with mass spectrometric (GC-MS) detection. QuEChERS method was used for extraction and clean-up of pesticide residues from muscle tissue. Three phenyl phosphate (TPP) was used as an internal standard. Concentrations of 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, heptachlor and heptachlor epoxide in fish muscle were compared with the maximum allowed concentrations (MAC) in fish meat set by the national legislation of Serbia. This reservoir is used as a drinking water source. Therefore, the hypothesis was that it was exposed to low organic pollution. The concentrations of all analyzed pesticides were below the detection limits. In conclusion, there is no health risk for consumption of pikeperch from Garaši reservoir.