BOOK OF ABSTRACTS



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INFLUENCE OF TOWN POLLUTIONS ON LEVELS OF WATER GENOTOXICITY DURING DIFFERENT WATER LEVEL REGIMES

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Water, being of critical importance for the survival of life on the planet, requires our permanent care and attention. There is a growing concern about the genotoxicity of complex environmental mixtures present in surface waters, due to the risk of genetic damage and cancer, both in aquatic organisms and humans. *Allium* anaphase-telophase test has been accepted as a promising tool to detect, among other things, toxicity and genotoxicity of river water. The present study has focused on exploring the status of water pollution in areas with combined industrial and agricultural activities in order to estimate the magnitude of toxicity and genotoxicity using the *Allium* test. We collected samples of surface water from the Sava River, upstream and downstream from the town of Šaba@nd at the Danube River upstream and downstream from the town of Joba@nd at the Danube River upstream and downstream from the town of Joba@nd at the Danube River upstream and downstream from the town of Joba@nd at the Danube River upstream and downstream from the town of Joba@nd at the Danube River upstream and complex sampling was done in periods of low and high water level. While at low water level genotoxicity was higher at points downstream of Šaba@nd Smederevo, samples collected in periods of highwater level were more genotoxic upstream from the towns. This can be explained as a consequence of agricultural activities.

ALLIUM TEST, GENOTOXICITY, RIVER WATER, TOWN POLLUTIONS, AGRICULTURE