TOXICITY ASSESSMENT OF HOSPITAL WASTEWATER BY THE USE OF A BIOTEST BATTERY

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Abstract: In the paper toxicity assessment of hospital wastewaters samples was performed using direct-contact tests consisting of five species, which represent three different trophic levels of the food chain. IC₅₀ or EC₅₀ values were estimated for each tested organism: *Pseudokirchneriella subcapitata* IC₅₀/72h 18.77%, *Daphnia magna* EC₅₀/48h 20.76%, *Thamnocephalus platyurus* EC₅₀/24h 22.62%, *Artemia salina* EC₅₀/24h 59.87% and *Vibrio fisheri* EC₅₀/15min 46.17%. Toxic potential of hospital wastewater was described using a system of wastewater toxicity classification. The toxic units (TU) values estimated for each test indicate that hospital wastewaters are toxic (Class III). The variable results of the tests’ sensitivity confirmed the need of application of microbiotests battery with organisms of different trophic levels.