



Acute and Chronic Toxicity of Fluoroquinolone Antibiotics through Fresh Water cladoceron *Daphnia magna*

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Abstract: The 48 h acute toxicity test of antibiotics gemifloxacin and gatifloxacin on growth, survival and reproduction of *Daphnia magna* were conducted. The EC₅₀ results obtained after 48 h acute test for gemifloxacin and gatifloxacin was 489.2 mg l⁻¹ and 330.8 mg l⁻¹ respectively. Adverse effect on reproducibility was observed on 21st day of exposure as a chronic toxicity test. The survival of *Daphnia magna* reduced to zero after exposure of 94.5 mg l⁻¹ and 202.5 mg l⁻¹ of gemifloxacin and gatifloxacin respectively.

Keywords: *Daphnia magna*, Gemifloxacin, Gatifloxacin, Non target organisms, Toxicity
