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IMPACT OF CLOFIBRATE TOXICITY ON *PANGASIUS* SPECIES AND ITS POTENTIAL MITIGATION WITH *ARTEMISIA PALLENS*

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Abstract

Pharmaceutical industries release effluents into the water bodies which affects the quality of water and the lives of various aquatic organisms. Approximately half of the global wastewater from pharmaceutical industries is released without any recommended pre-processing; which are rich in APIs like clofibrate that affects the aquatic environment and is a question for their survival. For the betterment of aquatic life, there is a need to investigate the toxic effects on exposure to Clofibrate and hence we have chosen *Artemisia pallens* for its bioremediation action in *Pangasius sp*. fish model. Clofibrate enters into environmental matrices from industries and results in pollution-causing large - scale death of marine life. The toxicity accumulated in the fish is transferred to humans via the food web which further affects the lipid metabolism in humans. Hence, the studies were conducted based on the histopathological reports obtained after 10 days of exposure (1.18 mg/L of Clofibrate), the kidney, intestine and gills had severe damage. The study focuses on the fact that presence of a bioremediator may have an effect on the survival of the fish; thus, biomonitoring the pollution.

Key words: Artemisia pallens, clofibrate, effluents, histopathology, *Pangasius sp.*

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