

RESEARCH PAPER

Study of lethal toxicity of Hilban® on freshwater catfish, Singhi (*Heteropneustes fossilis*; Bloch, 1794)

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The objective of the present study was to investigate the behavioural and morphological changes and acute toxicity of Hilban[®] in freshwater catfish, *Heteropneustes fossilis*. This study was conducted by exposing the fish to different concentrations of chlorpyrifos (0.5 to 150µl/L) for 96 h along with control groups. The data were subjected to get LC₅₀ by probit analysis. The LC₅₀ values for chlorpyrifos for 24, 48, 72 and 96 h were 51.98, 18.91, 7.47 and 4.61µl/L, respectively. Fish exposed to higher concentration showed uncoordinated alterations in behavioural responses, especially erratic and jerky swimming, frequent surfacing and ingulping, mucus secretion, an increase in opercular movement and copious secretion of mucus all over the body. It is concluded that Hilban[®] is highly toxic to catfish and severely affect their physiology and behaviour.

Key words : Acute toxicity, Chlorpyrifos, *Heteropneustes fossilis*, LC₅₀, Mortality

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