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IMPACT OF AMMONIA ON BIOCHEMICAL PROFILES OF A CATFISH

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ABSTRACT

Ammonia-induced and its depurative responses in DNA, RNA and protein content of liver, gill and skeletal muscle of an air-breathing walking catfish (*Clarias batrachus*) were analysed. DNA, RNA and protein content decreased gradually in these tissues upto 35 days of ammonia exposure. Maximum effects of ammonia on DNA, RNA and protein were found on 35th day of exposure. These macromolecular profiles declined maximally in gill followed by liver and skeletal muscle. Withdrawal of ammonia from water for 14 days after 35 days of exposure showed complete reversal in DNA, RNA and protein content in different tissues. It can be concluded that ammonia is detrimental to the freshwater foodfish and some of the harmful effects can be reverted after withdrawal of this toxicant from the water.

KEY WORDS : Ammonia, toxicity, protein, DNA, RNA, Catfish