

Behavioural Responses of African Catfish (*Clarias gariepinus*) Exposed to Different Chemicals

Bridget, D. Ayoku¹, Leo, C. Osuji¹ and Mudiaga, C. Onojake^{1,2*}

¹Department of Pure and Industrial Chemistry, University of Port Harcourt, P.M.B 5323, Choba, Port Harcourt, Nigeria

²Centre for Marine Pollution Monitoring and Seafood Safety, University of Port Harcourt, P.M.B 5323, Choba, Port Harcourt, Nigeria

*Corresponding author. E-mail: ononed@yahoo.com, mudiaga.onojake@uniport.edu.ng
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ABSTRACT

*The African Catfish (*Clarias gariepinus*) was exposed to different toxicant concentrations of 100, 200, 300, 400, 500 mg/L using a static non-renewable bioassay method. Another set up without the toxicant was set up to serve as control. Two replicate concentrations for the different toxicants used in thirty (30 L) litres rectangular tanks were also set up. The aquariums were filled to fifteen-liter mark, loaded with ten fishes and properly labelled. Parameters such as cumulative average value of operculum movement; tail beat frequency, cumulative number of discoloration, erratic swimming, and mortality were monitored in-situ. The results showed that the lethal effect of the toxicants on the fishes depends on concentration and duration of exposure to the toxicant. Also in-situ observation showed that the cumulative average number of discoloration, erratic swimming, and mortality increased with increase in concentration and exposure time, while the cumulative average of operculum movement and tail beat frequency decreased with increase concentration and exposure time.*

Keywords: Pesticides, Insecticides, Contaminants, Fish, Behaviour

INTRODUCTION

Fish is the cheapest animal protein source in Nigeria it is readily available, delicious, and has significant health impact (Fawole et al., 2007). It is a commonly traded food commodity in Nigeria and it is becoming the fastest growing