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Journal Name:	Asian Journal of Environment & Ecology
Manuscript Number:	Ms_AJEE_34778
Title of the Manuscript:	Toxicity and Histopathological effects of African Clariid Mud Catfish, <i>Clarias gariepinus</i> (Buchell, 1822) fingerlings Exposed to liquid soaps (GBC and morning fresh liquid soap)
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	The topic is misleading. There is nothing like the "Toxicity and Histopathological effects of African Clariid Mud Catfish, <i>Clarias gariepinus</i> (Buchell, 1822) fingerlings". African catfish doesn't have toxicity effects. Rather there is the toxicity and histological effects of GBC and morning fresh liquid soap on African catfish <i>Clarias gariepinus</i> exposed for 96 hours. This should be the topic. Moreover, The research is interesting and important especially in Nigeria. However there are some questions: How many fish were used per treatment per replicate? The authors wrote.. Toxicity experiment were carried out with five treatments i.e. 0.00 (control), 400, 450, 500 and 550 ppm for each of the soap (GBC car wash and Morning fresh) in duplicate. Twenty-five (25) fingerlings of <i>C. gariepinus</i> were stocked each in the five glass aquaria of 25 x 15.5 x 15.5 cm³ for the experiment and a total of 500 <i>Clarias gariepinus</i> fingerlings were used in total for the study (for each soap) Are the authors saying 500 fish for GBC and 500 for Morning fresh? Ordinarily 25 fish /treatment 0-550ppm gives 125 and two replicates gives 250 and how come there is 500 fish or each treatment? Why did the authors use 2 replicates? It is bad to have	Title have been rephrased, please check the revised Manuscript No, 250 fish for GBC car wash and 250 for Morning fresh, making it a total of 500 25 fish per treatment (0-550ppm) in duplicate gives you 250. For the two liquid soap, 250 each makes it 500 We have included the chemical compositions of GBC and Morning fresh in the discussion.



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	a research with only 1 degree of freedom. The authors do not have enough experiment to conclude as they did. They should restructure the discussion by including the chemical composition of the soaps. The active ingredients should be stated. More so the effects of the active ingredients should be stated. Analysis of the histology of the gills is not enough to state that one soap is more toxic than the other. There was no analysis of the muscles etc to determine other effects.	Histological alterations in the gills has been long proposed as a sensitive biomarker in fish exposed to contaminants. We have chosen to analyse the gills for histological changes in the present study because it is the organ that is constantly in contact with the exposed medium. Also fish gills possess a thin epithelia that allows contaminants bind to it exerting its effects. Analysis muscle histology as suggested by the reviewer, may not provide us with a full detail of the organ changes in the test medium as the gill is the best organ for this kind of analysis.
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<u>Minor</u> REVISION comments	In your abstract you said.... GBC liquid soap was slightly more toxic to the test organism than morning fresh liquid soap. In your discussion and conclusions you stated as follows.....Also, LC50 values indicates that GBC liquid soap had more toxic effects than morning fresh liquid soap in <i>Clarias gariepinus</i> fingerlings, suggesting that the chemical constituents of GBC may have more effects in other exposed non target organisms in the environment... these are conflicting results. Which is right? The major reason why you do not have a definite stand is because you DID OT ANALYSIS OF VARIANCE AND HAD NO separations of means and more so ONLY 1 df which is non compliable for your ANOVA if you ever did. Please check your spellings.	We can't use ANOVA for the generated dataset, as we didn't measure enzyme activity, gene expression and protein level across control and exposure concentrations. We have used probit analysis, because, it is the required statistical tool for determining LC₅₀ and the most appropriate for our experimental dataset.
<u>Optional/General</u> comments		