

**Review Form 1.7**

Journal Name:	<b>Asian Journal of Research in Zoology</b>
Manuscript Number:	<b>Ms_AJRIZ_108983</b>
Title of the Manuscript:	<b>Impact of Mangrove Deforestation on Fiddler Crab Distribution and Soil Physicochemistry at Eagle Island, Rivers State</b>
Type of the Article	<b>Original Research Article</b>

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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)
<p><b>Compulsory REVISION</b> comments</p> <ol style="list-style-type: none"> <li><b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</li> <li><b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</li> <li><b>Is the abstract of the article comprehensive?</b></li> <li><b>Are subsections and structure of the manuscript appropriate?</b></li> <li><b>Do you think the manuscript is scientifically correct?</b></li> <li><b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></li> </ol> <p><b>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</b></p>	<ol style="list-style-type: none"> <li>This article is of fundamental importance for the scientific community, given the eco-systemic importance of the mangrove which fulfills the functions of provisioning, regulation and support, which are certainly essential for the preservation of marine biodiversity and coastal, but more for the world population in general, and coastal communities in particular. This research has the particularity of highlighting the process of biocenosis-biotope balance, through the role of aquatic fauna, in particular fiddler crabs which act in maintaining their living environment (the mangrove) by promoting the rooting, seedling distribution and bioturbation. Based on scientific analyses, the study identifies deforestation as the main factor somewhere in the natural degradation of the mangrove, taking into account the strong propensity of fiddler crabs to rather occupy niches located outside the mangrove.</li> <li>The title is quite evocative</li> <li>The summary of the article is comprehensive, but the methodology and results are not very explicit. For example: saying that the physicochemical conditions of the soil have been determined does not illustrate the method used. Example 2 for the results: saying that there are more crabs in deforested areas than in forested areas is implicit. We need to make the numbers speak for each given population.</li> <li>The structure of the manuscript is good, but the numbering is not there. The subsections of the methodologies and results sections can be better structured following the order of the specific objectives.</li> <li>The scientific structure is there, but there are improvements to be made at the substantive level, particularly with regard to the material and method, results and discussion parts.</li> <li>The references are sufficient and recent. Suggested additional references:  Zogning, L., F, R., (2021). Pressions humaines et stratégies de gestion durable des formations de mangrove de Tiko (Sud-ouest Cameroun). Thèse de Doctorat en Géographie, Université de Yaoundé 1 (Cameroun), 382 p.  Zogning, L., F, R., Tchawa, P., and Mbaha, J.P., (2023). Mapping and Botanical study of pressures causing mangrove dynamics of Tiko (Southwest Cameroon), Open Access Library Journal, 10:e9723.</li> </ol>	
<p><b>Minor REVISION</b> comments</p> <ol style="list-style-type: none"> <li><b>Is language/English quality of the article suitable for scholarly communications?</b></li> </ol>	<ol style="list-style-type: none"> <li>The quality/English of the article is suitable for scientific communications, but a rereading would allow the author to better refine the document.</li> </ol>	
<p><b>Optional/General</b> comments</p>	<p><b>General optional comments:</b>  <b>Introduction :</b> The author will also make the effort to keep the scientific approach in the writing, so that the problem is clearly highlighted and there can be a strong link between the different paragraphs through the transitions. The hypothesis of the study does not emerge clearly from reading this part.   <b>Materials and methods :</b> Write <i>Avicennia germinans</i> and not <i>avicennia germnians</i> What is the unit of measurement for soil temperature? What is the unit of measurement for salinity? Who is the author of figure 1? You must take the trouble to specify the sources of your illustrations. Furthermore, Figure 1 has no framework, let alone orientation. The blue color is not illustrated in the legend. You can redo this location map if you do not complete the information.  <b>Experimental design part:</b></p>	

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	<p>In which site did you identify the sandy soils? Semi-muddy? Muddy? What is the need to categorize these types of soil in relation to the objectives of your research? Write GPS Garmin and not GPS Gamin. Estimated crab population: The location of the photographer must be taken into account in this method. It makes more sense to use a drone in deforested areas, and to take photos and videos upstream of trees in forested areas. This makes it possible to have an overview of the transect plots or quadras previously demarcated, and to reduce the representativeness of the same individual on several photos taken from the ground.</p> <p><b>In short, there is a need to reorganize the order of presentation of ideas in the methodological part as follows:</b></p> <ol style="list-style-type: none"><li>1- Location of the study area</li><li>2- Sampling and collection of field data<ol style="list-style-type: none"><li>2.1. Sampling In addition to justifying the type of sampling chosen, you must take care to mark out the transects or quadras of the wooded and deforested sites, in which you are carrying out field investigations.</li><li>2.2. Collection of field data<ol style="list-style-type: none"><li>2.2.1 Method for inventorying the population of fiddler crabs in forested and deforested sites</li><li>2.2.2 Procedure for identifying burrows in deforested and non-deforested sites.</li><li>2.2.3. Method for sampling the microbial population in wooded and deforested sites</li><li>2.2.4 Strategy for determining the concentration of heavy metals between forested and deforested sites.</li></ol></li></ol></li><li>3- Analysis and processing of laboratory data<ol style="list-style-type: none"><li>Follow the same procedure, specifying at this stage the processing and analysis tools, as well as the analysis methods used for each category of field data.</li></ol></li></ol> <p><b>Results</b></p> <p>The lack of commentary makes the results of this research not very expressive. In terms of the results in addition to the structure, which needs to be reviewed, please take the trouble to provide a description of the illustrations (tables, figures) following a demonstrative approach.</p> <ol style="list-style-type: none"><li>2. Quantification and correlation of fiddler crabs in forested and deforested sites<ol style="list-style-type: none"><li>2.1. Quantification (table 1, figure 3)</li><li>2.2. Correlation (figures 4 and 5)</li></ol></li><li>3. Microbial population in forested and deforested areas (figure 7)</li><li>4. Physico-chemical conditions of the soils of the study sites (table 3, figure 6)</li></ol> <p><b>Discussions</b></p> <p>This part also needs to be reviewed. It must respect the structure for presenting the results. This is the place to show the originality of the results compared to other studies, which is not really the case when reading this discussion, which is very implicit. However, your bibliography presents 17/35 authors who worked in the Niger Delta. Some of these studies, notably those carried out by (Numbere, 2020; Aigberua et al, 2018; Aigberua et al, 2019) even have a strong link with yours, yet you make no mention of these authors in the discussion.</p> <p><b>Conclusion :</b></p> <p>Above all, take care to recall the objectives of the study, the main results including in relation to other studies, and the prospects. Bibliography. Pagination information is incomplete for some references (1, 2, 4, 5, 6, 7 31).</p>	
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**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <i>(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)</i>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

Name:	<b>Zogning Lontsi Fulbert Rodrigue</b>
Department, University & Country	<b>University of Yaounde 1, Cameroon</b>