Journal Name: **Journal of Biology and Nature**

Manuscript Number: Ms_JOBAN_12512

Title of the Manuscript: COMPARATIVE STUDY OF SEDIMENT PROPERTIES BETWEEN NYPA FRUTICANS-DOMINATED AND

RHIZOPHORA-DOMINATED FORESTS IN IKO CREEK

Type of the Article

General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

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Important Policies Regarding Peer Review

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	This manuscript is very valuable to the scientific community as it sheds light on the ecological impact of the invasive Nypa fruticans on the native habitats of Rhizophora racemosa. Through a comparative analysis of sediment characteristics, it provides important insights into how invasive species can alter local biogeochemistry, which in turn has implications for biodiversity, nutrient cycling and ecosystem resilience. The study fills an important research gap by assessing the sediment chemistry and ecological impacts of the Nypa fruticans invasion and lays the foundation for future investigations of microbial interactions and heavy metal bioaccumulation. I appreciate this manuscript because it emphasizes the importance of conserving native mangrove ecosystems, which are critical for maintaining biodiversity and mitigating the effects of climate change.	
Is the title of the article suitable? (If not please suggest an alternative title)	Comparative Analysis of Sediment Properties between Nypa fruticans and Rhizophora racemosa Mangrove Ecosystems in the Iko River Estuary"	

Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. Are subsections and structure of the manuscript appropriate?	The abstract is comprehensive, covering the study's purpose and implications. However, it could benefit from briefly mentioning the sampling methods and adding context about the invasive nature of Nypa fruticans to emphasize its ecological impact. Including a brief note on the study's limitations or geographic scope would also enhance clarity. These additions would provide a fuller perspective for readers. Yes almost	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	This manuscript appears scientifically sound and technically sound as it takes a comprehensive approach to analyzing and comparing sediment properties in two different mangrove ecosystems. The study utilizes key sediment parameters such as pH, dissolved oxygen, salinity, organic carbon and organic matter, which are important indicators of ecosystem health and nutrient dynamics. Furthermore, the statistical analysis revealing significant differences (p < 0.05) strengthens the significance of the results, while the use of relevant ecological indicators such as dissolved oxygen and organic carbon content reflects a deep understanding of the functions of the mangrove ecosystem. Overall, the study is based on established scientific methods and provides reliable baseline data on which further ecological and environmental research can build.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	To assess the sufficiency and recency of the references, I would review if they include recent studies, especially within the last 5-10 years, on topics such as invasive Nypa fruticans, sediment chemistry, and mangrove ecosystem dynamics.	

Minor REVISION comments		
Is the language/English quality of the article suitable for scholarly communications?	Yes, the language quality of the article is generally suitable for scholarly communication. However, a careful revision with regard to minor grammatical improvements and consistency in scientific terminology could further improve readability	
Optional/General comments	The Article does not indicate any competing interests that could influence the research or its interpretation	

PART 2:

		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)
	(If yes, Kindly please write down the ethical	
Are there ethical issues in this manuscript?	issues here in details)	

Reviewer Details:

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