

REVIEWER'S REPORT

Manuscript No.: IJAR-56602

Title: Soil Quality Assessment Based on Physico-Chemical and Biological Properties in the Mangrove Ecosystem of Asramam, Kollam, Kerala, South India

Recommendation:

Accept as it is
 Accept after minor revision.....
Accept after major revision
 Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality			x	
Techn. Quality		x		
Clarity			x	
Significance		x		

Reviewer Name: Dr. Hari Prashad Joshi

Detailed Reviewer's Report

This manuscript provides a valuable dataset on soil physico-chemical properties and VAM fungal colonization in the understudied Asramam mangrove ecosystem, addressing an important topic in coastal ecology. However, it requires a major revision to address significant methodological and presentational shortcomings before publication can be recommended. A primary concern is the lack of statistical analysis; the authors present mean values without any measure of variability (e.g., standard deviation) or tests of significance (e.g., ANOVA, t-tests) to determine if the observed differences between sites, depths, and rhizosphere/non-rhizosphere soils are meaningful.

The methodology section is confusing, stating samples were collected from "rhizosphere and non-rhizosphere areas," but the results often compare "top" and "bottom" layers without consistently linking them to these categories. Furthermore, the manuscript suffers from numerous grammatical errors, awkward phrasing, and unclear sentences that obscure the scientific meaning. The figures, mentioned but not provided in this manuscript file, are essential for evaluating the data presentation. Finally, the discussion is overly descriptive and lacks depth; it merely reports findings without adequately explaining the underlying biogeochemical processes or comparing them rigorously to the cited literature. A thorough revision focusing on statistical validation, methodological clarity, and a more analytical discussion is essential.