

Review Form 1.7

Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	Ms_IJPSS_102510
Title of the Manuscript:	Synthesis and Characterization of rice husk nanobiochar-based N and K Fertilizers: Promoting Environmental Sustainability in Agriculture
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:

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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>Compulsory REVISION comments</p> <ol style="list-style-type: none"> Is the manuscript important for scientific community? (Please write few sentences on this manuscript) Is the title of the article suitable? (If not please suggest an alternative title) Is the abstract of the article comprehensive? Are subsections and structure of the manuscript appropriate? Do you think the manuscript is scientifically correct? Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> The manuscript appears to be important for the scientific community. It addresses the crucial issue of agricultural by-products generated during the rice milling process and presents a novel approach to converting rice husk into valuable nanobiochar-based fertilizers. The study's focus on sustainable agriculture, slow-release nutrient delivery, and environmental mitigation aligns with the current need for more eco-friendly farming practices. By providing insights into the synthesis, characterization, and potential benefits of these fertilizers, the manuscript offers valuable information for researchers and practitioners interested in advancing sustainable agricultural systems. The title of the article, "Synthesis and Characterization of rice husk nanobiochar-based N and K Fertilizers: Promoting Environmental Sustainability in Agriculture," is suitable as it accurately reflects the content and focus of the study. It clearly indicates the subject matter, the use of rice husk nanobiochar for nitrogen and potassium fertilizers, and the aim of promoting environmental sustainability in agriculture. The title effectively conveys the main objectives and potential significance of the research. Therefore, there is no need for an alternative title in this case. Based on the provided abstract, it appears to be comprehensive to a certain extent. The abstract covers key aspects of the study, including the objective, methodology, results, and potential implications of the research. It provides information about the synthesis and characterization of nanobiochar-based N and K fertilizers derived from rice husk, highlighting the enhanced physical, chemical, and surface characteristics of the nanobiochar particles compared to macrobiochar counterparts. The abstract also mentions the analytical techniques used for characterization and briefly discusses the potential benefits of these fertilizers for sustainable agriculture. <p>However, there are some areas where further details could enhance the comprehensiveness of the abstract. For example, specific findings from the Fourier transform infrared spectroscopy (FT-IR), X-ray diffraction (XRD), scanning electron microscopy (SEM), and elemental analysis could be included to provide more specific insights into the results. Additionally, the abstract could benefit from providing a summary of the major conclusions drawn from the study. Nevertheless, based on the information provided, the abstract does give a reasonable overview of the research.</p> <ol style="list-style-type: none"> Based on the information provided in the manuscript, the subsections and structure of the manuscript appear to be appropriate. Based on the information provided, the methods used appear to be sound and the results obtained are promising. The authors' findings are supported by enough data, and the paper follows scientific best practices. The references given are complete and up to date. 	
<p>Minor REVISION comments</p> <ol style="list-style-type: none"> Is language/English quality of the article suitable for scholarly communications? 	<p>The language and English usage in the article are appropriate for academic purposes. The paper is presented in a concise and lucid manner, with accurate grammar, punctuation, and spelling. Additionally, it includes pertinent citations and references to substantiate the assertions made throughout the article.</p>	
<p>Optional/General comments</p>	<p>Considering the research's importance, the article is deserving of approval. The manuscript seems to be well-executed and provides informative content.</p>	

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PART 2:

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

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