

Review Form 3

Journal Name:	Asian Journal of Soil Science and Plant Nutrition
Manuscript Number:	Ms_AJSSPN_131166
Title of the Manuscript:	EFFECT OF HEAT TREATMENT PARAMETERS ON SHELF LIFE, NUTRITIONAL VALUE AND ANTINUTRITIONAL FACTORS OF BARNYARD MILLET
Type of the Article	Original Research Article

PART 1: Comments

	<b>Reviewer’s comment</b> <b>Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.</b>	<b>Author’s Feedback</b> <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<b>Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.</b>	<ul style="list-style-type: none"><li>• This manuscript is significant to the scientific community as it provides valuable insights into the effects of heat treatment on the shelf life, nutritional value, and antinutritional factors of barnyard millet.</li><li>• By demonstrating that roasting enhances bioaccessibility of total polyphenols while preserving essential nutrients, the study contributes to the growing body of research promoting millets as functional and sustainable food sources.</li><li>• The findings have important implications for improving food security, particularly in regions facing water scarcity and malnutrition.</li><li>• This study reinforces the role of barnyard millet in managing metabolic disorders such as diabetes, obesity, and hyperlipidaemia.</li></ul>	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	<ul style="list-style-type: none"><li>• Yes, the title of the given article is suitable</li></ul>	
<b>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.</b>	<ul style="list-style-type: none"><li>• Yes, the abstract of the given article is comprehensive and provides a clear overview of the study's aims, methodology, results, and conclusions.</li></ul>	
<b>Is the manuscript scientifically, correct? Please write here.</b>	<ul style="list-style-type: none"><li>• Yes, the manuscript scientifically, correct, well-structured, and consistent with established methodologies and scientific principles</li></ul>	
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>	<ul style="list-style-type: none"><li>• Add more recent references (2022–2024) on barnyard millet's nutritional profile, bioaccessibility, and roasting effects.</li><li>• Replace some outdated references (pre 2000) with newer studies, unless they are methodologically crucial.</li><li>• Some older references (e.g., Haug &amp; Lantzsch, 1983; Price et al., 1978; Ramachandra et al., 1977) may still be relevant for fundamental methods or historical context, but recent research is crucial for validating current trends, methodologies, and findings.</li></ul>	

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Is the language/English quality of the article suitable for scholarly communications?	<ul style="list-style-type: none"><li>Yes, the English quality of the article is very much suitable for scholarly communications</li></ul>	
Optional/General comments	<ul style="list-style-type: none"><li>The study focuses on barnyard millet, a highly nutritious but underutilized grain, making it valuable for food security and health benefits.</li><li>Investigating roasting effects on bioaccessibility and shelf life is an important contribution to food processing research.</li><li>The research clearly outlines the importance of millet and the need for processing improvements.</li><li>The roasting process is systematically evaluated with temperature and time variations, making the findings practical</li><li>The study provides quantitative data on polyphenol bioaccessibility, shelf life, and nutrient retention, which strengthens its scientific merit.</li><li>The use of multiple roasting conditions enhances the study's reliability.</li></ul>	

PART 2:

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

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