

### Review Form 3

Journal Name:	<a href="#">European Journal of Nutrition &amp; Food Safety</a>
Manuscript Number:	Ms_EJNFS_127836
Title of the Manuscript:	<b>COMPARATIVE ANALYSIS OF PHYTOCHEMICAL COMPOSITION, PROXIMATE CONTENT, AND HEAVY METAL CONTAMINATION IN NATURALLY AND CALCIUM CARBIDE RIPENED BANANAS</b>
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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#### **PART 1: Comments**

	<b>Reviewer's comment</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>	This manuscript is significant for the scientific community as it provides a comprehensive comparative analysis of the phytochemical composition, proximate content, and heavy metal contamination in naturally ripened versus calcium carbide-ripened bananas. There are some areas that could be improved by highlighting the nutritional differences and potential health risks associated with artificial ripening methods, the study contributes valuable insights into food safety and public health. Furthermore, the findings underscore the need for regulatory measures regarding the use of calcium carbide in fruit ripening, which is particularly relevant in developing countries where such practices are prevalent. This research not only enhances the understanding of the impact of ripening methods on fruit quality but also informs future studies aimed at improving food safety standards.	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	The title should clearly indicate the focus on bananas. Consider revising it to "Comparative Analysis of Phytochemical Composition, Proximate Content, and Heavy Metal Contamination in Naturally and Calcium Carbide-Ripened Bananas."	

**Review Form 3**

<p><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></p>	<p>The abstract of the article is generally comprehensive, as it covers the main objectives, methods, findings, and implications of the study. However, there are several suggestions for improvement:                  Clarification of Objectives: The abstract could benefit from a clearer statement of the specific objectives of the study. For example, explicitly stating that the study aims to assess the health risks associated with consuming calcium carbide-ripened bananas would provide more context.                  Methodology Details: While the abstract mentions the division of bananas into two groups, it could briefly describe the methodology used for the analyses (e.g., types of analyses performed for phytochemical, proximate, and heavy metal content). This would enhance the reader's understanding of how the results were obtained.                  Statistical Significance: The abstract mentions variations in concentrations but does not specify whether these differences were statistically significant. Including this information would strengthen the findings.                  Health Implications: The abstract could elaborate on the potential health implications of the findings, particularly regarding the higher levels of cyanogenic glycosides and phosphorus in calcium carbide-ripened bananas. This would emphasize the importance of the study in terms of public health.                  Conclusion: The concluding statement could be more impactful by summarizing the broader implications of the findings for consumer health and food safety regulations.                  Keywords: While keywords are provided, it may be beneficial to include terms related to health risks or safety regulations to enhance searchability.</p>	
<p><b>Is the manuscript scientifically, correct? Please write here.</b></p>	<p>Introduction: The introduction has explained well why the study is important. The author mentioned the widespread use of calcium carbide in fruit ripening and its potential health risks.                  Methodology: Provide a bit more detail about the methods used for phytochemical, proximate, and heavy metal analysis. This will give readers a better understanding of the study's rigor. Include formulas used in the calculations for the phytochemical, proximate, and heavy metal analysis of Naturally and Calcium Carbide-Ripened Bananas.                  Results and Discussions: The results section is clear but could benefit from a more structured presentation. The author considered breaking it down into sub-sections for phytochemical composition, proximate analysis, and heavy metal contamination. In the discussion part add a brief discussion on the implications of the findings. For instance, discuss the potential health impacts of consuming calcium carbide-ripened bananas and the need for regulatory measures.                  Conclusion: The conclusion should succinctly summarize the key findings and their significance. Emphasize the importance of promoting natural ripening methods to ensure fruit safety and nutritional quality.</p>	
<p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p>	<p>The references are relevant to the study's focus on phytochemical composition, proximate analysis, and heavy metal contamination in bananas. However, the inclusion of more recent studies would strengthen the document.                  Diversity of Sources: The references cover a range of topics related to phytochemical analysis, the effects of calcium carbide, and heavy metal contamination, which is beneficial for a comprehensive understanding of the subject.                  Recency:                  Some references date back to the early 2000s (e.g., Ugwu &amp; Nnabuchi, 2003; Harborne, 1973), which may not reflect the most current research trends or findings. More recent studies (e.g., Nuhu et al., 2020; Igbinauwa et al., 2022) are included, which is positive as they provide updated insights into the effects of calcium carbide on bananas.</p>	
<p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p>The language and English quality of the manuscript appear to be generally suitable for scholarly communications.                  The manuscript uses clear and precise language to convey scientific concepts, which is essential for scholarly writing.</p>	
<p><b>Optional/General</b> comments</p>		

**PART 2:**

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

**Reviewer Details:**

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