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| Journal Name: | [**Journal of Complementary and Alternative Medical Research**](https://journaljocamr.com/index.php/JOCAMR) |
| Manuscript Number: | **Ms\_JOCAMR\_139906** |
| Title of the Manuscript: | **EFFECTS OF EXTRACTION METHODS ON PHYSICOCHEMICAL INDICES AND FATTY ACID PROFILE OF Arachis hypogaea AND Melothria sphaerocarpa OILS FROM ELELE MARKET, RIVERS STATE, NIGERIA** |
| Type of the Article |  |

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | **Author’s Feedback** (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. A minimum of 3-4 sentences may be required for this part.** | **This manuscript offers important insights into how various oil extraction techniques affect the physicochemical properties and fatty acid profiles of *Arachis hypogaea* and *Melothria sphaerocarpa* seed oils—two underappreciated yet nutritionally and industrially significant plant species. Grasping these differences is essential for choosing suitable extraction methods that enhance oil quality and yield, particularly in areas where these seeds are readily available. The results add to the wider domains of food science, agricultural engineering, and nutraceutical development by providing information that can assist both small-scale and industrial oil processing. Moreover, the research encourages the investigation of lesser-known oilseed crops, thereby fostering biodiversity and resource sustainability.** | The authors are appreciative of this comment |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | **The existing title: "IMPACT OF EXTRACTION TECHNIQUES ON PHYSICOCHEMICAL PROPERTIES AND FATTY ACID COMPOSITION OF *Arachis hypogaea* AND *Melothria sphaerocarpa* OILS FROM ELELE MARKET, RIVERS STATE, NIGERIA" is straightforward and detailed, yet it is rather lengthy and somewhat tied to a specific location, which could restrict its interest to a wider scientific community. To enhance clarity, brevity, and broader significance, you may want to consider one of the following alternative titles:**  **1. "Impact of Extraction Methods on Physicochemical Properties and Fatty Acid Profiles of *Arachis hypogaea* and *Melothria sphaerocarpa* Seed Oils"**  **2. "Comparative Study of Oil Extraction Methods on the Quality and Composition of *Arachis hypogaea* and *Melothria sphaerocarpa* Oils"** | The authors have modified the title to capture the concern of the reviewer |
| 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. | **The abstract is generally well-structured, covering the objective, methods, key findings, and conclusion, but could benefit from minor improvements for better clarity and thoroughness for an academic reader:**  **1. Include Oil Yield Information (Quantitative if available): The summary indicates that the solvent extraction method produced a greater oil yield, yet providing specific yield percentages or comparative figures would enhance its significance.**  **2. Clarify the Significance of Findings: It would be beneficial to explain what the differences in fatty acid composition imply for nutritional value, industrial use, or oxidation resistance.**  **3. Add a One-Sentence Implication: Conclude with a sentence on how these findings can inform oil processing, local production, or functional food development.** | The oil yield is represented as a percentage of the various extracted oils in the methods adopted. All other concerns of the reviewer have been attended to. |
| Is the manuscript scientifically, correct? Please write here. | **Yes, the manuscript is largely scientifically accurate, demonstrating a strong adherence to established scientific principles and findings.** | The authors are appreciative of this |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | **The manuscript showcases a notable attempt to assess the physicochemical and GC-MS profiles of oils extracted from *Arachis hypogaea* and *Melothria sphaerocarpa*. However, it is essential to enrich the references with more current and internationally recognized sources, particularly those published in the last five years. To improve the scientific relevance and credibility of the findings, it is recommended to include recent research on green extraction methods, the health effects of significant fatty acids (such as oleic, linoleic, and palmitic), and advancements in modern GC-MS analytical techniques.** | The authors are appreciative |
| Is the language/English quality of the article suitable for scholarly communications? | **The manuscript needs moderate language editing to enhance clarity, flow, and academic tone. Although the main ideas are clear, numerous sentences have grammatical mistakes, awkward phrasing, and inconsistencies in tense and voice. Furthermore, scientific terminology requires refinement to conform to scholarly writing standards. A professional language edit is advised to improve the manuscript’s readability and ensure it meets the standards of international journals.** | It has been further edited |
| Optional/General comments | **Minor revision is recommended before acceptance.** | Revision done |

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| **PART 2:** | | |
|  | **Reviewer’s comment** | **Author’s Feedback** (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)* | None |