Review Form 3

Journal Name:	**International Journal of Biochemistry Research & Review**
Manuscript Number:	**Ms_IJBCRR_130067**
Title of the Manuscript:	**Biochemical characterization of sesame (Sesamum indicum L.) grown in Chad**
Type of the Article	**Original Research Article**

<mark>**PART 1:**</mark> **Comments**

	Reviewer's comment	Author's Feedback *(Please correct the manuscript and highlight that part in the manuscript. 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.	The article explores the biochemical composition of sesame seeds from two varieties (local black-seed variety and S 42) grown in two different sites (Kournari and Kélo) in Chad. The study provides valuable data on moisture, ash, lipids, proteins, carbohydrates, energy value, and crude fiber content, emphasizing the influence of both genetic and environmental factors. It concludes with recommendations for using sesame seeds to combat malnutrition and enhance food security.	
Is the title of the article suitable? **(If not please suggest an alternative title)**	**Yes** **Strengths** 1. Comprehensive Analysis: The study is thorough, analyzing multiple biochemical parameters and their interrelations through correlation and variance analysis. This provides a holistic understanding of the nutritional profile of sesame seeds. 2. Correlation Insights: The use of correlation analysis to establish relationships between variables, such as the negative correlation between lipids and moisture, adds depth to the study. 3. Site-Specific Observations: The paper effectively highlights the impact of environmental factors on sesame seed composition, showcasing how site-specific conditions influence nutritional content. 4. Practical Implications: The discussion emphasizes the potential of sesame seeds in addressing protein-energy malnutrition and their role in enhancing food security in Chad. 5. Contextual Comparisons: The comparison of results with those from other regions (e.g., Nigeria, Egypt, and Turkey) and crops (e.g., cereals and peanuts) enriches the discussion.	

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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.	1. Lack of Experimental Method Details: The article does not provide detailed methodologies for biochemical analyses. This limits reproducibility and verification of results. 2. Limited Variety Scope: Only two varieties were studied, which restricts the generalizability of findings. Including additional varieties would strengthen the conclusions. 3. Statistical Interpretation: While p-values are reported, the statistical analysis could benefit from a clearer explanation of effect sizes and confidence intervals to support the significance of the results. 4. Figures and Tables: Figure 2, which discusses the interaction of variables, is not presented in the text, and its absence reduces the visual clarity of the findings.	
Is the manuscript scientifically, correct? Please write here.	Yes after corrections	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	OK	

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Is the language/English quality of the article suitable for scholarly communications?	There are several typographical errors and inconsistencies (e.g., "Raw Fibers" vs. "Crude Fiber," inconsistent decimal markers like commas instead of periods). These detract from the article's professionalism.	
<u>**Optional/General**</u> comments	**Suggestions for Improvement** 1. Detailed Methodology: Include precise details on experimental protocols, such as analytical methods for nutrient quantification and statistical software used. 2. Expand Variety and Site Selection: Future studies should investigate more sesame varieties and sites to validate and expand the findings. 3. Visual Representation: Provide clear figures and tables, ensuring all referenced data (e.g., Figure 2) is included and formatted professionally. 4. Editorial Review: Address grammatical and typographical errors to enhance readability and professionalism. 5. Environmental Factors: Incorporate more detailed discussions on specific environmental factors (e.g., soil type, rainfall) that influence sesame composition. 6. Further Research: Recommend exploring additional parameters, such as the fatty acid profile and mineral content, to provide a more detailed nutrient composition. **Conclusion** The article provides valuable insights into the biochemical composition of sesame seeds, highlighting their nutritional significance and potential to address malnutrition in Chad. However, the study would benefit from methodological transparency, expanded scope, and improved presentation. Addressing these areas could elevate the research's impact and applicability.	

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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Reviewer Details:

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