

Review Form 3

Journal Name:	Journal of Advances in Biology & Biotechnology
Manuscript Number:	Ms_JABB_124907
Title of the Manuscript:	Characterization of the physicochemical and energetic properties of Alchornea cordifolia leaves and fruits harvested in three regions of Côte d'Ivoire
Type of the Article	Original Research Article

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PART 1: Review Comments

Compulsory REVISION 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)
<p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p>	<p>This manuscript is important for the scientific community as it provides a comprehensive analysis of the physicochemical and energetic properties of <i>Alchornea cordifolia</i> plant</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>Yes The manuscript titled "<i>Characterization of the Physicochemical and Energetic Properties of Alchornea cordifolia Leaves and Fruits Harvested in Three Regions of Côte d'Ivoire</i>" presents an intriguing study. The abstract, introduction, methods, results, discussion, and references sections offer valuable insights into the subject. However, several areas require revision to enhance clarity, readability, and overall impact. Below are specific comments and suggestions for improvement:</p>	
<p>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.</p>	<p>The abstract offers valuable insights but needs clarity and professionalism. Methodologies should be clearly identified, and results, particularly percentages and energy values, need proper context. The conclusion should specify implications, and the abstract must maintain consistent formatting and adhere to the word limit while clarifying the study's significance and knowledge gap.</p> <p>The abstract provides valuable insights; however, several areas require enhancement for improved clarity, accuracy, and professionalism;</p> <p>The phrase "<i>enhance the value of the leaves and fruits</i>" is ambiguous. It is essential to specify the type of value being referenced, such as nutritional or economic. The phrase "<i>through their dosage</i>" lacks clarity. It is not evident how dosage pertains to the characterization of physicochemical compounds. The statement "<i>tube reactions were used</i>" could be articulated more precisely. It is advisable to specify which tube reactions were applied and the methodology employed. The term "<i>conventional method</i>" is too vague. It would be beneficial to identify the specific methods or standards utilized for each analysis. The phrase "<i>by spectrophotometric use</i>" should clearly define the technique employed, such as UV-Vis spectrophotometry. Presenting results as percentages (e.g., "15.11% for young leaves") without adequate context may lead to misunderstanding. Percentages should be referenced against a total or defined basis for clarity. The assertion of "<i>261.63% energy value</i>" is not plausible. A review of the calculation and presentation of energy values is necessary. Results should be consistently framed, indicating whether they represent averages, medians, or other statistical measures. The conclusion could be more compelling. The current statement that the database reveals "interest" lacks specificity regarding the implications or potential applications of the findings. Avoid vague phrases such as "<i>not only therapeutically</i>" without elaboration on previously established therapeutic applications. Ensure consistent formatting throughout, including capitalization (e.g., capitalize "<i>this study</i>" in the Place and Duration of Study section). Limit the excessive use of abbreviations without definitions, particularly for methods or specialized terminology. Provide a more specific context regarding the significance of the study. Clarify the existing knowledge gap that this research addresses. Ensure the abstract adheres to the specified word limit as per the guidelines, without compromising clarity.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Yes The introduction effectively underscores the diminishing effectiveness of conventional medications, particularly antibiotics, thereby establishing a strong context for the exploration of herbal treatments. This relevance is both timely and well-articulated. The emphasis on Sub-Saharan Africa and Côte d'Ivoire provides crucial cultural context. However, a brief explanation of the significance of this region in the study of <i>Alchornea cordifolia</i> would be beneficial. The description of <i>Alchornea cordifolia</i> is informative and serves as a solid foundation for its traditional uses. A more detailed explanation of its ecological and economic importance within the region would enhance this section. The identification of a gap in the existing literature regarding the nutritional values of the plant is effective. Including specific examples of previous studies on similar plants may strengthen this part of the introduction by highlighting the uniqueness of this research. While the introduction concludes with a statement of aims, explicitly listing specific objectives would enhance the clarity and focus of the research direction. Some</p>	

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	<p>sentences are lengthy and would benefit from being divided into shorter, more digestible statements. This will improve readability and comprehension for a broader audience. Consider briefly defining or simplifying technical terms, such as "physicochemical parameters," to make the introduction accessible to readers who may not possess a strong scientific background. The concluding sentence should more definitively address the significance of the research. Emphasizing its potential impact on traditional medicine and dietary applications would strengthen the overall message.</p>	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>This manuscript is scientifically robust due to its rigorous methodology and thorough analysis of <i>Alchornea cordifolia</i>'s properties. The use of established techniques, like spectrophotometry, ensures accurate measurements, while the comparative approach across three regions enhances the reliability of the findings.</p> <p>Overall, the "Materials and Methods" section lays a solid foundation but could be enhanced through improved clarity, specificity, and consistency. Incorporating these suggestions will strengthen this section and ensure it is comprehensive and accessible to readers. The section is generally well-organized; however, it would benefit from more consistent use of subheadings. For example, the subheading "2.2 Methods" should be followed by additional detailed subheadings for enhanced clarity. Each method should be clearly numbered and titled to facilitate easy reference. Include the exact geographical coordinates of the harvest sites to improve reproducibility. It is advisable to specify the time of year during which the samples were collected, as this can significantly influence the maturity and composition of the plant material. If applicable, include any ethical considerations related to the harvesting of plant material, particularly if the species are protected or if permission was required for collection. Clarify how the samples were stored post-collection and prior to analysis to prevent degradation of the material. Ensure that the nomenclature used for weights (M0, M1) is consistent throughout. The designation "M1" for the final weight of the ash is misleading. Clarify the process by which the specimens of <i>Alchornea cordifolia</i> were identified. Specify whether a taxonomist or expert was involved in the identification process, as including their credentials or affiliations can enhance the credibility of the study. It is essential to mention whether voucher specimens of the collected samples were deposited in a herbarium or a similar institution. If applicable, please provide the name of the institution along with any relevant details (e.g., accession number, collection date).</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p> <p>=</p>	<p>The section is well-organized and systematically presents data. However, some subsections could be more concise to improve readability. Consider summarizing key findings at the beginning of each subsection before providing detailed explanations. Ensure that figures and tables are clearly labeled and referenced in the text for easy navigation. Include captions that succinctly describe the content of each figure and table. While findings are presented clearly, it would be beneficial to discuss the implications of high dry matter content in dead leaves. What might this indicate about the plant's physiological state or environmental adaptations? It's commendable to see comparisons among different localities. Avoid vague phrases like "according to studies" without specific references; instead, cite the study directly. The result portion pH of the fruits and leaves is very brief. Modify the figure 1, as it not clarifies young and mature leaves. The section mentions geographical variations but does not explore potential reasons (e.g., soil type, climate conditions) behind these differences. Consider discussing potential environmental or nutritional factors that may explain variations in protein content across locations. Include a concluding paragraph that synthesizes the findings from various subsections, discussing how they contribute to the overall understanding of <i>Alchornea cordifolia</i> nutritional and medicinal potential. Suggest areas for future research based on the results, such as exploring bioactive compounds in <i>Alchornea cordifolia</i>.</p> <p>Conclusion Expand on the significance of findings concerning health, nutrition, or agriculture. Suggest specific areas for future research beyond phytochemical characterization. Opt for stronger, more definitive language regarding the significance of findings.</p> <p>References: Ensure all references are relevant and correctly formatted according to the journal. Standardize the treatment of journal names, ensuring that they are either all abbreviated or fully spelled out. There are issues with the numbering of references, such as duplicate entries for [5] The section is well-organized and systematically presents data. However, some subsections could be more concise to improve readability. Consider summarizing key findings at the beginning of each subsection before providing detailed explanations. Ensure that figures and tables are clearly labeled and referenced in the text for easy navigation. Include captions that succinctly describe the content of each figure and table.</p>	

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<p><u>Minor</u> REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The writing is precise and avoids colloquial language, but some sections contain minor grammatical errors and awkward phrasing that need refinement for improved clarity and readability.</p> <p>Address grammatical errors and awkward phrasing. Verify the proper use of punctuation and spacing throughout the text. Write the species names in <i>Italic</i> form throughout the text.</p> <p>By addressing these points, the overall quality and clarity of the manuscript can be significantly improved, enhancing its informativeness and making it easier for readers to grasp the significance of the study.</p>	
<p><u>Optional/General</u> comments</p>		

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

Reviewer Details:

<p>Name:</p>	<p>Hazrat Ali</p>
<p>Department, University & Country</p>	<p>University of Peshawar, Pakistan</p>