

Review Form 1.7

Journal Name:	Asian Journal of Research in Biochemistry
Manuscript Number:	Ms_AJRB_103802
Title of the Manuscript:	Phytonutrients and Anti-nutrient Composition of aqueous extract of fermented seeds of Prosopis Africana
Type of the Article	Original Research Article

General guideline for 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 guideline for Peer Review process, reviewers are requested to visit this link:

(<https://journalajrb.com/index.php/AJRB/editorial-policy>)

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PART 1: Review Comments

	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>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</p>	<p>Yes,</p> <p>Yes</p> <p>See the attachment</p> <p>Not appropriate, see the attachment</p> <p>Yes</p> <p>Yes, Additional references are given hereunder:</p> <p>1. Phytochemical and toxicological evaluation of prosopis Africana – www.ncbi.nlm.nih.gov.in</p> <p>2. Prosopis Africana – www.apps.worldagroforestry.org</p> <p>3. Biochemical changes during the fermentation of prosopis Africana- www.academic.oup.com</p> <p>4. Literature review on prosopis Africana and the use of essential oil – www.iosrjournals.org</p> <p>5. Asian journal of research in biology microbial and biochemical changes in the fermentation of africal locust beans –www.ikpress.org</p> <p>6. Steps in the traditional fermentation of prosopis Africana seeds to produce the okpege- www.researchgate.com</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>Fairly good</p>	
<p>Optional/General comments</p>	<p>As already mentioned in the attachment about the research article, how it has to be authored and what ingredients are required. This article has many shortfalls that are to be refurbished before going for publication.</p> <p>1. Abstract: The Abstract is fairly acceptable and needs no changes.</p> <p>2. Aim and Objectives: Not mentioned Suggestion: "This study was aimed at evaluating the phytochemical, proximate, vitamin and anti-nutrient compositions of aqueous extract of fermented seeds of Prosopis Africana" (Page No. 1 lines 2 & 3)</p> <p>3. Introduction: The introduction paragraph is short of the information that is needed and contains only existing literature material. Suggestion:</p>	

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	<p>This para has to be rewritten leaving the literature part and mentioning the information as mentioned in the attachment under introduction.</p> <p>4. Literature review: Not mentioned</p> <p>Suggestion: The second para of the introduction can be taken into literature paragraph and by adding necessary inputs on the subject from the existing literature available.</p> <p>5. Materials and Methods: Properly mentioned</p> <p>6. Sample preparation: The author should explain about the points raised below</p> <p>a. Under the fermentation of plant seed sample the author mentioned "The wrapped cotyledons were put in clean bowls covered with the same leaves for a period of four days (for fermentation to take place)"</p> <p>The author has not mentioned at what temperature this should be carried out – is it room temperature if so at how many degrees</p> <p>b. In the same para (2.2.1) the author mentioned, "The okpeye was made into ball of 3-5 diameter, arranged in trays and dried for 1-2 days under the sun. The product became dark after sun drying".</p> <p>When the author mentioned the sample the sample was made into a ball of 3.5 diameter, the author should mention that whether diameter is in inches or millimeters or what size?</p> <p>Repetition (In page no. 8 the author mentioned determination of glycosides) again under the same para the author mentioned determination of glycosides.</p> <p>Suggestion: Though the heading of the both the paragraphs are same the material content is different. The author should give out explanation why it was so and reconfirm the same.</p> <p>7. Results: In the results para he mentioned number of tables.</p> <p>In table no. 4 he mentioned about anti nutrient composition but, he failed to mention the nutrient composition. On which he wrote about in the article. In the nutrient composition is not tested/observed the author should mention the reasons behind it (2.3.3)</p> <p>The author in the introduction para page no. 2 1 st para in last two lines mentioned that "this study evaluated the nutritive and antinutritive composition of the composition of aqueous extract of fermented seeds of <i>Prosopis Africana</i>".</p> <p>Suggestion: The author should mention clearly the results of the study separately.</p> <p>From the reading of the article I could locate the results as</p> <p>a. This study showed that aqueous extract of <i>Prosopis africana</i> seed contains various compounds which are found useful for nutritional and medicinal purposes (Para No. 1 in abstract last two lines)</p> <p>b. The result of the proximate analysis of the fermented "The result of the proximate analysis of the fermented seeds of <i>Prosopis africana</i> in table 1 shows that it is high in moisture (50.51%)." (Discussion para lines 4 & 5)</p> <p>c. In discussion para (Page no. 18 1 st para) "The result of the quantitative and quantitative phytochemical analyses in Table 2 shows the presence of saponins, tannins, phenolics, steroids, glycosides, flavonoids, terpenoids, triterpenes and alkaloids".</p> <p>d. In page no. 20 under discussions (page no. 20 1 st para) "From the result of vitamin analysis, the fermented seeds of <i>Prosopis africana</i> (Okpeye) is rich in vitamins all of which have important role to play".</p> <p>8. Findings: Not mentioned</p> <p>A review of the article in conclusion para the author mentioned about the findings that should be brought separately.</p> <p>Suggestion: "In Conclusion, the findings from this study have shown that fermented seeds of <i>Prosopis africana</i> contained rich amount of nutrients and phytochemicals and could be a potential source of therapeutic compounds"</p> <p>9. Observation : Not mentioned</p>	
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	<p>Suggestion: “the minute amount of the selected anti-nutrients analysed in fermented seeds of Prosopis africana was generally low and would not cause any health concerns”</p> <p>10. Conclusion: The author in the conclusion mentioned only findings and observation which is incorrect.</p> <p>Suggestion: In this para the author should conclude by giving the aim and objective of the research work, the results thereon and how it was concluded with the research work.</p> <p>After reviewing many of the research papers I reviewed, I have come to the conclusion that the researchers are not following the minimum basic requirements that are required/to be looked into in writing a research paper.</p> <p>Following are some of the guidelines: Normally research paper is a basic format for writing academic research. The basic requirements are given below.</p> <p>1. Title Page: The Title Page is so important and will give information that helps editors, reviewers and also readers to identify about the manuscript and the author by looking into it. In addition it also should give about the field of research that this research paper is categorized. The Title of the article should strike a balance between precise and details reflecting the nature of the work that the author intends to write. In addition the author should give name and other academic details, affiliations if any, details of the coauthors if so, keywords etc.</p> <p>2. Abstract: Abstract is most important and it is the heart of any article and the author should be careful if writing an Abstract. If the Abstract is well presented it will help the researcher to create a detailed research paper outline and it reflects the work done by the researcher; in addition by looking into the abstract the editorial board are in a position to decide whether this manuscript is fit to be sent to the reviewers for their comments. Normally abstract should be 300 words or less than 300 words. The abstract should contain, a. What is the topic and why it is work study? b. Methods. In this para, the author should reflect the research work carried out and a brief description of the methods used, methods and methodology used. c. A brief description resulting whether that particular research work has resulted in getting any outcome of the aim and the objective of the research work. d. In the concluding para in the abstract, the author should discuss the significance of the results of his research work, the outcomes and also variations that are observed also should be discussed. In the same para the author should discuss in brief how the results address the topic under investigation and the issues that are designed to address and finally findings, limitations and future study. All the above mentioned details should be reflected in the abstract in brief not exceeding 300 words right from the aim and the objective till future study.</p> <p>3. Introduction: Next to abstract the important aspect in a research article is introduction. Introduction in any research article provides the reader a glimpse of the research work compared to general work and attracts the reader to have a glance about the research work. Also this para namely introduction establishes the context of the research being conducted by the researcher by summarizing current understanding and the background information of the research work, stating the purpose of the work in the form of hypothesis or research problem, briefly explaining the rational behind the research work, methodology and approach to the work to the research</p>	
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	<p>problem, highlighting the potential outcomes of the researcher study can also be revealed.</p> <p>A well written introduction is important because this introduction para will give a better impression to the reader of the research work carried out because this introduction gives a glimpse of the authors writing style, logical conclusions, the validity of the findings, the conclusions and the quality of the research work. Once a reader goes through the introduction of any research article should think highly of the researchers analytical skills, writing style and approach to the problem.</p> <p>In the introduction the author should start with presenting more general aspects of the research topic and slowly should narrow it down to more specific topical information and finally arriving the researcher's statement of purpose rational and the potential outcome of the research work done.</p> <p>Following are some of the guidelines given in writing the introduction:</p> <ol style="list-style-type: none">a. Establish an area of research by highlighting the importance of the research work (topic), making general statements, presenting an overview regarding the current research of the chosen subject.b. Identify a research niche by negating the existent proposition/assumption and/or accepting the proposition/assumption, formulating a research question/problem and finally come to the conclusion.c. Researcher always should have boundaries within which he should complete his research work, in addition the intention of this particular research work, explaining the key characteristics of the study, describing the important results and finally giving overall structure of the research paper. <p>4. Aim and Objective: Every research article the author should mention the aim and the objective of the research work clearly because the entire research work is based on the aim and objective.</p> <p>5. Literature Review: Another important paragraph in writing a review article is presently available from difference sources and the researcher should examine the compatibility of the research work with the existing literature work. Many of the authors were writing a research article, "Do the mistake of mixing the material/literature available on the subject matter with the introduction para." This is absolutely wrong because as already mentioned above there is a vast difference between introduction and literature review and there is no correlation between the two. Literature review should be confined to only discussing the present information/literature that is available on the chosen subject and also should give a comparison with the researchers work and the literature that is available on the topic. Hence, the authors of the research article should keep in mind and separate the paragraph of literature review, failing which the paper will be short of the required ingredients that are necessary in presenting a research article.</p> <p>6. Methods and Materials: The author should confine himself/herself in this para regarding the methods and methodology. The chosen method and methodology of the research work and should explain why this method/methodology is suitable for the research work under study. If is an empirical paper the author should inform/mention the empirical that are existing at the time of research work and the authors empirical details, by giving a comparative statement.</p> <p>7. Ethical Issues: The author should clearly mention if the research work is pertaining to humans/animals whether an ethical approval is obtained from the respective authorities and should declare it.</p> <p>8. Consent: If the research work involves personal details of the humans necessary consent should be obtained and declared in the article-failing which the article</p>	
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	<p>cannot considered for publication.</p> <p>9. Results: In any research article the researcher should submit the results in a tabulated form with all the figures necessary to the extent possible; in doing so the author should avoid duplication and ensure that the summary of the results are well documented and explained. The author should also explain any unexpected events that could affect the results and should mention all the observations made during the research work and an explanation for any missing data.</p> <p>10. Discussions: This para is purely meant for research work done and the problems, results, findings, future study should reflect in the discussion paragraph; in addition the discussion should also strengthen the hypothesis, summarizing the main results of the study and logical conclusions arrived by the researcher in proving the aim and objective of the study. In addition the author should also compare the results/outcome of the research work in other existing investigations in that particular field of research and should explain the difference if any.</p> <p>11. Limitations: The author should give all the details regarding a. Limitations of the study. b. Limitations of the samples and the methodology by explaining the inclusion and exclusion details.</p> <p>12. Future study: The author should also mention any further study in the subject matter to advance the research work and the available options.</p> <p>13. Conclusion: The conclusion para is nothing but reviewing all the main points that are discussed above but should not replicate the abstract as conclusion. A conclusion should elaborate on the importance of the research work and the future study is always necessary and advisable for the research scholar in writing a research article should not include figures and the empirical data in the conclusion.</p> <p>14. References: Under the references the author should give all the references that the author considered for this article by giving the name of the author/authors, name of the international/national journal, the volume day and date of the publication, by complying with the journals method of citation.</p>	
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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?	<u>(If yes, Kindly please write down the ethical issues here in details)</u>	

Reviewer Details:

Name:	C. L. Avadhani
Department, University & Country	Annamalai University, India