

Review Form 3

Journal Name:	International Journal of Biochemistry Research & Review
Manuscript Number:	Ms_IJBCRR_127535
Title of the Manuscript:	NUTRITIONAL AND ANTINUTRITIONAL EVALUATION OF THE PULP AND SEED OF Terminalia catappa (TROPICAL ALMOND) FRUIT AND PHYSICOCHEMICAL PROPERTIES OF ITS SEED OIL
Type of the Article	Original Research Article

PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
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 work is highly intriguing to publish in this journal after correcting.	
Is the title of the article suitable? (If not please suggest an alternative title)	Title should be modified.	
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.	I have mentioned in comments.	
Is the manuscript scientifically, correct? Please write here.	Yes	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	References are very old. Recent references should be inserted.	

Review Form 3

<p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>Grammar and spelling check should be done by certified authority.</p>	
<p>Optional/General comments</p>	<p>The work is highly intriguing to publish in this journal after correcting the following:</p> <ol style="list-style-type: none"> 1. The title “nutritional and antinutritional evaluation of the pulp and seed of terminalia catappa (tropical almond) fruit and physicochemical properties of its seed oil” should be rewritten. Here is antinutritional evaluation. Can you tell, what do you mean? Is there any antinutritional factor? 2. Abstract: (Study design: The experimental design was employed Place and Duration of Study: Agroecology and life science laboratory of the University of Buea between June 2023 and May 2024.)-should be one paragraph in methodology. 3. Introduction: should be increased and improved with correct grammar and spelling check. 4. Therefore, the main objective of this study was to determine the nutritional characteristics of seeds as well as the physicochemical characteristics of Terminalia catappa seed oil. Here, author had only shown nutritional evaluation but title of the manuscript shown antinutritional evaluation. It is not clearly understood. Clarify the objectives. 5. Sample preparation: references should be added and rewritten. 6. Figure should contain high resolution 7. Determination of Total Phenolics Content (TPC). The total phenolics content of the pulp and seed was determined using the Folin-Ciocalteu colorimetric method described by Chlopicka et al. [17]. Calibration curve should be added. 8. Are Phenolic compounds antinutrients? They are antioxidants. 9. Determination of Fatty acids composition The fatty acid composition was determined by conversion of oil to fatty acid methyl esters prepared by adding 950µl of n-hexane to 50mg of oil followed by 50µl of sodium methoxide using the method of AOAC [14]. The mixtures were vortexed for 5s and allowed to settle for 5 min. A volume of 1µl of the top layer was injected into a gas chromatograph (Model GC-14A, Shimadzu Corporation, Kyoto, Japan) equipped with a flame-ionization detector and a polar capillary column (B PX 70 0 .25), 0.32 mm internal diameter, 60 m length and 0.25µm film thickness (SGE Incorporated, USA) . The detector temperature was 240 °C and the column temperature was 110 °C held for one minute and increased at the rate of 8 °C.min⁻¹ to 220 °C and held for one minute. The run time was 32 min. The fatty acid Methyl ester peaks were identified by comparing their retention time with those of standards. Percent relative fatty acid was calculated based on the peak area of a fatty acid species to the total peak area of all the fatty acids in the oil sample. Fatty acid profiling (ΣSFA, ΣMUFA, ΣUFA, ΣPUFA, Σn-3/n-6 ratio, Σ omega-3, Σomega-6, ΣPUFA/ΣSFA ratio was done by summing different classes of fatty acids. The atherogenicity index (AI) and the thrombogenicity index (TI) were obtained using the formulas of Ulbricht & Southgate [21]. $AI = \frac{[(C12:0 + (4 \times C14:0) + C16:0)]}{(\Sigma MUFA + \Sigma \omega 6 + \Sigma \omega 3)}$ $TI = \frac{(C14:0 + C16:0 + C18:0)}{[(0.5 \times \Sigma AGMI) + (0.5 \times \Sigma \omega 6 + (2 \times \Sigma \omega 3) + (\Sigma \omega 3 / \Sigma \omega 6)]}$ The ratio of hypocholesterolemic and hypercholesterolemic (H/H) by the method of Santos-Silva et al [22] as; 	

Review Form 3

	<p style="text-align: center;">$H/H = \frac{(C18:1r1s9 + C18:2w6 + 20:4w6 + C18:3w3 + C20:5w3 + C22:5w3 + C22:6w3)}{(C14:0 + C16:0)}$</p> <p>It is difficult to understand without graphical representation. Calibration curve and recovery method should be added. You should also mention about mobile phase.</p> <p>10. Results and discussion should be separately written for clear understanding.</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)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

Name:	Esrafil
Department, University & Country	Mawlana Bhashani Science and Technology University, Bangladesh