

Review Form 3

Journal Name:	Asian Journal of Research in Biochemistry
Manuscript Number:	Ms_AJRB_129488
Title of the Manuscript:	Nutritional Analysis And Functional Properties Of Some Commonly Consumed Insects In Nigeria
Type of the 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 study explores the nutritional value and functional qualities of Nigeria's commonly ingested insects, providing insights for sustainable food supply and nutrition planning. It also explores the growing interest in entomophagy, bridging the gap between traditional practices and modern nutritional science. The study underscores the potential of insects as a nutritious food source to address micronutrient deficiencies in vulnerable populations, thereby enhancing public health. It contributes to food science and nutrition, influencing sustainable agriculture and food systems.	Noted
Is the title of the article suitable? (If not please suggest an alternative title)	Yes, it emphasizes the nutritional and functional properties of four edible insects.	Noted

Review Form 3

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>The abstract is comprehensive, but could benefit from a more concise opening sentence that clearly outlines the study's main purpose.</p> <p>The abstract provides a lot of data points, which while informative, may be overwhelming to readers. It's recommended to focus on the most significant findings and provide a brief statement about the research's potential impact.</p> <p>Opening sentence: Edible insects have played a vital role in human nutrition in Nigeria. This study investigated the nutritional value and functional properties of four commonly consumed insects: Rhynchophorus phoenicis larva, Oryctes rhinoceros larva, Acheta domesticus, and Macrotermes bellicosus.</p> <p>Method: Proximate composition, vitamin content, and functional properties were determined using standard analytical methods. Results: Statistical analysis revealed significant differences in lipid (8.3% - 28.7%), crude protein (31.9% - 38.2%), carbohydrate (3.1% - 31.9%), and ash content (2.9% - 14.1%) among the insects. Vitamin A values ranged from 2.2 to 4.2 µM, while vitamin C values were between 11.5 and 56.8 µM. Functional properties showed variability in water and oil absorption capacity, emulsion activity, foaming capacity, and stability.</p> <p>Conclusion/Summary: These results indicate that these insects have potential as nutrient-rich food sources and could form the basis for new food products with considerable nutritional value.</p>	Noted
Is the manuscript scientifically, correct? Please write here.	<p>Yes, but needs to use recent journals on edible insects to update its information.</p> <p>African edible insects as human food – a comprehensive review In: Journal of Insects as Food and Feed. S.A. Siddiqui et al., 2023; Regenerative edible insects for food, feed, and sustainable livelihoods in Nigeria: Consumption, potential and prospects. Pascal Osa Aigbedion-Atalor et al., 2024 Determinants of the use of insects as food among undergraduates in south-western community of Nigeria. Samuel Adelani Babarinde et al., 2023</p> <p>A. domesticus are not found in the holes</p>	Noted
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	<p>References are not sufficient, while some are not recent.</p> <p>Halloran et al., 2018; Cullere et al., 2019; Stull and Patz, 2020</p>	Noted and revised
Is the language/English quality of the article suitable for scholarly communications?	<p>Yes it is, but there are some subject-verb agreement errors which have been corrected.</p> <p>These insects/insect larvae; One of the prominent issues</p>	
Optional/General comments	<p>The introduction should clearly outline research questions and mention study limitations. The study could provide detailed information on insect collection and preparation methods, incorporate visual representations, and discuss practical applications.</p> <p>PLEASE SEE ATTACHMENT</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?	(If yes, Kindly please write down the ethical issues here in details)	