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Book Name:	Contemporary Research and Perspectives in Biological Science
Manuscript Number:	Ms_BPR_2505
Title of the Manuscript:	Colour and Morphometric Characteristics of Ukerewe and Bunda Indigenous Cattle Populations in the Lake Victoria Basin, Tanzania
Type of the Article	Book chapter

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)
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimumof 3-4 sentences may be required for this part.	This manuscript is important for the scientific community as it enhances understanding of genetic diversity and phenotypic variation within Tanzania Shorthorn Zebu (TSZ) cattle. These findings have broader implications for breeding programs and the sustainable management of cattle in tropical environments, contributing to biodiversity preservation and livestock resilience. However, the manuscript did not delve into the practical implications for farmers by identifying color and morphological traits from a nutritional and management perspective. It solely focuses on genetic and breeding research but leaves a gap in understanding how these morphological traits could help farmers optimize nutritional management and improve cattle production practices	
Is the title of the article suitable? (If not please suggest an alternative title)	The title looks good	
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.	Here are my sentence suggestions The study aimed to compare body color and morphometric characteristics of Indigenous cattle opulations in the Ukerewe and Bunda Districts in Tanzania's Lake Victoria basin area. All measurements were positively and highly ($P < 0.01$) correlated with the body weight estimated from eart girth except for ear length and muzzle circumference.	
Are subsections and structure of the manuscript appropriate?	Introductin section - Insufficient Background on Ukerewe and Bunda's Unique Environmental Conditions: The introduction mentions the isolation of the Ukerewe District but does not provide detailed information on the specific environmental, ecological, or management conditions that might influence the cattle's morphometric and physical characteristics. Understanding these local factors is important for interpreting differences between the cattle populations in Ukerewe and Bunda. - Unclear Significance of Study for Broader Genetic Conservation Efforts: While the introduction touches on the conservation of genetic resources, it does not clearly articulate how this specific study on TSZ cattle in Ukerewe and Bunda will contribute to broader conservation and breeding programs. Highlighting the broader implications of the study could better establish its importance. Discussion Section Lack of Proper Explanation of Color and Morphological Traits' Practical Implications: The discussion should more thoroughly explain the practical implications of color and	

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	morphological traits, beyond their relevance to breeding and genetics. This includes detailing how these traits impact foraging behavior and animal performance. Additionally, presenting these findings in layman's terms would be beneficial for farmers, helping them to better understand and apply the information.. For example: - o Small Dewlaps and Navel Flaps: ▪ Implication: Smaller dewlaps and navel flaps might indicate less fat deposition in these areas, suggesting differences in fat distribution and overall body condition. This could influence the animal's energy reserves and, consequently, its nutritional management needs. - o Bigger Heart Girth in Ukerewe Cattle: ▪ Implication: A larger heart girth may be associated with a larger body size or greater overall mass. This trait could imply that Ukerewe cattle have a larger digestive capacity, potentially enhancing their ability to consume and digest larger quantities of feed, thus improving feed efficiency and production potential. - o Shorter Horns in Ukerewe Cattle: ▪ Implication: Shorter horns might reduce metabolic costs associated with horn growth, potentially affecting the cattle's overall energy expenditure and nutritional needs. Additionally, shorter horns may lower the risk of injuries and related health issues, leading to improved overall health and productivity. - o Insignificant Differences in Other Body Measurements: ▪ Implication: The lack of significant differences in other physical measurements and external appendages, except for ear length and muzzle circumference, suggests that these traits might not directly impact nutritional efficiency or productivity. However, it highlights the relative uniformity in body shape and structure, which could simplify feeding and management practices across strains. - o Ear Length and Muzzle Circumference: ▪ Implication: Variations in ear length and muzzle circumference could affect sensory functions and foraging efficiency. For instance, longer ears might improve the animal's ability to detect environmental changes, while differences in muzzle circumference could influence feed intake types and quantities. These factors could impact overall nutritional intake and feed conversion efficiency	
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.	The manuscript demonstrates scientific robustness by thoroughly examining the morphometric and physical characteristics of cattle populations in Ukerewe and Bunda, supported by detailed data and analysis. The methodology employed is sound, employing appropriate statistical techniques to ensure the validity of the results. Additionally, the study integrates relevant genetic and environmental factors, enhancing its technical depth and providing a comprehensive understanding of the subject. The manuscript's adherence to rigorous scientific standards and its clear presentation of findings underscore its technical soundness and reliability	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :	Reference looks good	

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Minor REVISION comments	The language is suitable for scholarly communication	
Is the language/English quality of the article suitable for scholarly communications?		
Optional/General comments		

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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