

Review of: "Heritability and Genetic Correlations of Growth Traits Among Inbred Population of Nigerian Chickens"

Jacob Hamidu¹

¹ Kwame Nkrumah University of Science and Technology

Potential competing interests: No potential competing interests to declare.

The study is very innovative and deserves a publication in the journal. The authors have made very important observations and arguments to seek improvement in the breed. However, I have the following comments that the authors should try and address.

Abstract

Why did you not estimate heritability for weeks 3, 5 & 7?

Authors should define all the traits. Not all audiences will read the whole manuscript.

The significance of the low heritability value at weeks 6 and 8 need to made clear as well.

The name of breed needs to be mentioned in the abstract

Introduction

Paragraph 1, Change meat to chicken in line 4

Line 11, the word "it" should be plural. The authors should as well check and correct for grammar in the whole manuscript

Paragraph 2, line 13 to 15: I am not sure if the problem has to do with low gene frequency or lack of selection or attention.

Paragraph 3, line 13, two sentences are joined because of lack a period after selection.

Paragraph 4: Do you think it may be appropriate state how long it took to achieve this progress for the higher production of the exotic breeds of today?

There is no clearly stated objective of the study.

Results and Discussion

Heritability estimates of 0.22 and 0.20 cannot be termed as medium. Change to low. Or give a reference to support the choice to call it medium.

The negative genetic correlations are reported have being well compared with previous research but no significance is given on what the values mean to breeding and improving this local breed. Further explanation should be given to the

figures and what it means to improvement progress.

Conclusion

“The positive genetic correlations observed indicate that selection for one trait will result in a correlated response on the other trait compared in the study.” What significance has the negative correlation values of the body length got on improvement? It is a fact that chick length is more important than body weight in final broiler meat yield. This is because body weight alone is not a good indicator of chick quality although it does influence final body weight. So is the interest of the study on final body or meat yield? These should all be considered.