

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

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Potential competing interests: No potential competing interests to declare.

This study provides a solid foundation for understanding the genetic architecture of growth traits in NILC and highlights the potential for targeted breeding programs. With minor refinements and a broader scope, it could offer even greater insights into sustainable poultry breeding in Nigeria. The abstract provides a concise summary of the research objectives, methodology, and key findings. It effectively highlights:

1. The estimation of heritability and genetic correlations of growth traits in Nigerian inbred local chickens (NILC).
2. Significant findings, such as high heritability estimates for body weights at early growth stages (1-4 weeks) and high genetic correlations for some traits.
3. The potential application of these findings to selective breeding for genetic improvement.

However, the abstract could benefit from a clearer explanation of the practical implications of the negative genetic correlations observed in some traits (e.g., 8SL and 8CG).

Strengths of the Study:

1. The use of an Animal Model Design ensures robust estimation of genetic parameters.
2. The focus on a locally significant chicken population addresses a critical need for region-specific research.
3. The study contributes valuable data on heritability and genetic correlations, which are underexplored for NILC.

Weaknesses and Suggestions:

1. The study's duration (two months) might be too short to capture long-term growth trends and environmental influences.
2. Including reproductive traits alongside growth traits could provide a more comprehensive genetic evaluation.
3. These findings are mentioned but not sufficiently analyzed or discussed for their practical breeding implications.
4. While informative, comparisons with the U.S. poultry industry seem slightly out of context.

