

REVIEWER'S REPORT

Manuscript No.: JNAVES-017

Title: Effect of castration and dietary protein levels on carcass measurements and carcass composition of male desert goats.

Recommendation:

Accept as it is

Accept after minor revision.....

Accept after major revision

Do not accept (*Reasons below*)

Reviewer's ID: JPRAVES-052

Rating	Excel.	Good	Fair	Poor
Originality		✓		
Techn. Quality			✓	
Clarity		✓		
Significance		✓		

Detailed Reviewer's Report

General Comments

The manuscript investigates the effects of castration and dietary crude protein levels on carcass measurements and carcass composition of male Desert goats. The topic is relevant to animal production, meat science, and small ruminant nutrition, particularly in arid and semi-arid regions where Desert goats contribute significantly to rural livelihoods. The study provides useful information regarding carcass traits under different nutritional and management conditions. However, the manuscript contains minor deficiencies in scientific writing, experimental design description, statistical reporting, data presentation, and interpretation of results. Extensive revision is required before the manuscript can be considered for publication.

Content and Originality

Strengths

- The study addresses an important production issue for Desert goats in Sudan.
- The factorial evaluation of castration and dietary protein levels is relevant for goat production systems.
- The work contributes local information on carcass characteristics of indigenous goat breeds.

Concerns

1. The novelty of the study is limited because similar investigations on castration and dietary protein effects in goats and sheep have been widely reported.
2. The authors should clearly explain how the present study advances existing knowledge on Desert goat production.
3. The manuscript lacks a clear research hypothesis and scientific justification for selecting the three dietary protein levels.

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4. The biological mechanisms underlying the observed responses are insufficiently discussed.

Technical Quality**Minor Revision Required****1. Experimental Design**

- The sample size is relatively small ($n = 24$ animals), reducing statistical power.
- Only four animals per treatment subgroup were used, which may not adequately represent biological variation.
- Duration of the feeding trial is not clearly reported.

2. Methodology

- Details regarding animal management, housing conditions, health status, and adaptation period are missing.
- Castration procedures are inadequately described.
- Ethical approval information is not provided.
- The slaughter protocol requires additional details.

3. Statistical Analysis

- Statistical methods are poorly described.
- The statistical model used for factorial analysis is not presented.
- Degrees of freedom, F-values, and exact P-values are absent.
- Means are reported without confidence intervals.
- Some tables contain inconsistencies and unclear superscript notation.

4. Data Presentation

- Table numbering is inconsistent (Table 3 is missing while Table 4 appears directly after Table 2).
- Several values reported in carcass composition tables appear questionable and require verification.
- Standard deviations or standard errors are insufficiently reported.

5. Interpretation of Results

- The discussion largely repeats results instead of providing biological explanations.
- Comparisons with recent literature are limited.
- Some conclusions are not strongly supported by the presented data.

Language and Presentation**Minor Revision Required**

The manuscript contains numerous grammatical, typographical, and formatting errors throughout.

Examples include:

- Incorrect sentence construction.
- Frequent punctuation errors.
- Inconsistent capitalization.
- Improper scientific writing style.
- Repetition of statements.

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- Incorrect use of statistical notation.

Specific issues:

- Several sentences are difficult to understand due to poor English expression.
- Scientific names and units are not consistently formatted.
- Tables require substantial formatting improvement.
- The manuscript would benefit from professional English-language editing.

Structure and Organization

Strengths

- The manuscript follows a traditional scientific structure.
- Minor sections are present.

Concerns

1. The Introduction lacks a clear statement of objectives and research hypotheses.
2. The Materials and Methods section requires substantial expansion and clarification.
3. Results and Discussion should be separated more clearly.
4. The Discussion section relies heavily on repetition of numerical findings.
5. The Conclusion section contains inaccuracies. For example, it states that castration had no significant effect on external chest length despite earlier reporting significant differences.
6. A section discussing study limitations is absent.

References and Citations

Moderate Revision Required

Strengths

- References include studies relevant to goat nutrition and carcass characteristics.
- Both classical and applied literature sources are cited.

Concerns

1. Citation style is inconsistent throughout the manuscript.
2. Several references are outdated, with limited use of recent literature.
3. Reference formatting does not follow a uniform journal style.
4. Some citations are incomplete or improperly formatted.
5. More recent studies (last 5 years) on goat nutrition, carcass quality, and castration effects should be included.
6. DOI information is missing for most references.

Overall Recommendation

The manuscript addresses a relevant topic in goat production and provides potentially useful information on the effects of castration and dietary protein levels on carcass traits of Desert goats. However, minor weaknesses in experimental description, statistical analysis, data presentation, language quality, and scientific interpretation significantly reduce the quality of the manuscript. Extensive revision is necessary to improve methodological transparency and scientific rigor.

Final Decision

Minor to moderate Revision