

Paper: “**Reproductive Performance of *Glossina palpalis gambiensis* (Diptera: Glossinidae) when fed frozen or fresh bovine blood meals**”

Submitted: 01 November 2021

Accepted: 21 June 2022

Published: 30 June 2022

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Doi: [10.19044/esj.2022.v18n21p138](https://doi.org/10.19044/esj.2022.v18n21p138)

Peer review:

Reviewer 1: Blinded

Reviewer 2: Blinded

Reviewer 3: Cinaria Albadri
Trinity College Dublin University, Ireland

Reviewer F:
Recommendation: Revisions Required

The TITLE is clear and it is adequate to the content of the article.

Yes

The ABSTRACT clearly presents objects, methods, and results.

YES,

But some minor errors and modifications are suggested in the attached file.

1. Specify the p-value into "The emergence rate was affected by the duration of freezing"
2. What about the effect of the duration of freezing on the pupae mass?
3. The authors affirm that "The study indicated that freezing the blood meal for more than three months reduces tsetse flies fecundity".
The emergence rate alone means the fecundity???

There are a few grammatical errors and spelling mistakes in this article.

The manuscript will need an extensive English editing to make it easier to read and understand.

The study METHODS are explained clearly.

YES,

But some minor errors, modifications and comments are suggested in the attached file.

In "2.1 Biological material", the authors mentioned that "the feeding frequency was six times per week from Monday to Saturday".

While a recent study carried out by a CIRDES researchers shown that 4 feeding times per week was suitable than 6 regimes regarding the mortality and productivity (Camara, K., Ilboudo, K., Salou, E.W. et al. Evaluation of different blood-feeding frequencies on *Glossina palpalis gambiensis* performance in a mass-rearing insectary. *Parasites Vectors* 14, 46 (2021). <https://doi.org/10.1186/s13071-020-04559-4>).

Why the authors continuous to use 6 regimes to feed the colony?

In "2.2 Blood collection and processing" the authors mentioned that "All blood products retained after bacteriological testing were irradiated with (500 Gy: from 137 Cs source) for 1 hour and 40 minutes before being used for tsetse flies feeding. Generally, the suitable dose used to irradiate the blood is 1 KGy, why do you use less than that value?"

In "Data analysis":

- Please add reference of each model used for analysis
- The normality of different data need to be test before, please specify that
- The authors did not show the type of analysis performed for the PPIF and pupae weigh

The body of the paper is clear and does not contain errors.

YES,

But some minor errors, modifications and comments are suggested in the attached file.

Delete the additional values inside the figure 3

The CONCLUSION or summary is accurate and supported by the content.

YES,

But some comments are suggested in the attached file.

The list of REFERENCES is comprehensive and appropriate.

Yes,

Add "References" as sub-title before list all references

Please rate the TITLE of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the ABSTRACT of this paper.

[Poor] 1-5 [Excellent]

3

Please rate the LANGUAGE of this paper.

[Poor] 1-5 [Excellent]

2

Please rate the METHODS of this paper.

[Poor] **1-5** [Excellent]

4

*Please rate the **BODY** of this paper.*

[Poor] **1-5** [Excellent]

4

*Please rate the **CONCLUSION** of this paper.*

[Poor] **1-5** [Excellent]

4

*Please rate the **REFERENCES** of this paper.*

[Poor] **1-5** [Excellent]

4

Overall Recommendation!!!

Accepted, minor revision needed

Comments and Suggestions to the Author(s):

Reviewer I:

Recommendation: Revisions Required

The TITLE is clear and it is adequate to the content of the article.

May you consider rephrasing this part of the title "...frozen blood stored versus fresh bovine diet"

The ABSTRACT clearly presents objects, methods, and results.

Diet and blood meal refer to the same factor? If that is the case then for clarity select a consistent term.

"All diets were irradiated.....before use" -consider revising this sentence

Consider using descriptive terms to present results in the abstract.

There are a few grammatical errors and spelling mistakes in this article.

In the abstract, consider revising this part of the sentence "The study investigated to assess..."

There are other sentences with similar construction to this in other sections of the article

The study METHODS are explained clearly.

"...downgraded from the batches to be stored and incinerated." - Consider revising this part of the sentence

In the Storage of blood meals section: consider clarifying (the use of) constituted, constitution

In Experimental design section: It seems something was left out in the first sentence

Feeding test section: consider explaining "...renewed.."

In Biological Data Collection: CFQ means blood quality factor or blood meal nutritional quality?

Data Analysis: QFCs - this abbreviation has not been explained earlier in the text

The body of the paper is clear and does not contain errors.

Section 3.1: Consider revising "...were not similar..." and also commenting whether the difference was significant or not

Section 3.2: CFQ and QFC - are they different terms?

Section 3.3: Check whether the references to Table 1 and Figure 3 are correct

Table 1: consider using "...flies..." in the caption in place of "...fly..."; farmed tsetse - consider using the description using elsewhere in the article

Figures 3 and 4: Explain what is represented by the box and whiskers. In Figure 4 the letters to show significant that are referred to in the caption are missing.

The CONCLUSION or summary is accurate and supported by the content.

Consider revising the first sentence.

The list of REFERENCES is comprehensive and appropriate.

References are not presented according to "Author Guidelines"

Please rate the TITLE of this paper.

[Poor] **1-5** [Excellent]

4

Please rate the ABSTRACT of this paper.

[Poor] **1-5** [Excellent]

4

Please rate the LANGUAGE of this paper.

[Poor] **1-5** [Excellent]

4

Please rate the METHODS of this paper.

[Poor] **1-5** [Excellent]

5

Please rate the BODY of this paper.

[Poor] **1-5** [Excellent]

4

Please rate the CONCLUSION of this paper.

[Poor] **1-5** [Excellent]

3

Please rate the REFERENCES of this paper.

[Poor] **1-5** [Excellent]

Overall Recommendation!!!

Accepted, minor revision needed

Comments and Suggestions to the Author(s):

With the data that you have you should be able to add more information in the discussion.

Reviewer S:

Recommendation: Revisions Required

The TITLE is clear and it is adequate to the content of the article.

Title requires rephrasing (too long) and needs to be clear

The ABSTRACT clearly presents objects, methods, and results.

Abstract, Methods and Results are clearly presented

There are a few grammatical errors and spelling mistakes in this article.

The manuscript contains slight spelling and grammar mistakes throughout the text, that requires a review by the author.

The study METHODS are explained clearly.

Methods and materials are clearly defined.

Description of methods is well described according to the research's nature, purpose and design.

The body of the paper is clear and does not contain errors.

The paper is clear and well accordant with the scope of the journal. It puts into perspective what is subsequent, with plausible size for each part.

The purpose of the study is clear.

The results were explained in sequential order and the data presented in tables and

figures.

The discussion clearly summarized the results of the study and indicated similar previous studies to support the findings

The CONCLUSION or summary is accurate and supported by the content.

The conclusions are accurate and supported by the content. It contains the key findings of the study.

The list of REFERENCES is comprehensive and appropriate.

References are appropriate and comprehensive.

Please rate the TITLE of this paper.

[Poor] 1-5 [Excellent]

3

Please rate the ABSTRACT of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the LANGUAGE of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the METHODS of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the BODY of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the CONCLUSION of this paper.

[Poor] **1-5** [Excellent]

4

Please rate the REFERENCES of this paper.

[Poor] **1-5** [Excellent]

4

Overall Recommendation!!!

Accepted, minor revision needed

Comments and Suggestions to the Author(s):

- Title to be rephrased
- Limitations: Include limitations for this study, if any.
