

# Review of: "Clinical and Subclinical Bovine Mastitis: Staphylococcus aureus Isolation and Identification from Dairy Farms Located in and Around Hawassa Town, Southern Ethiopia"

Jeanette Wentzel<sup>1</sup>

<sup>1</sup> University of Pretoria

Potential competing interests: No potential competing interests to declare.

Good day,

Although I see the importance of the topic, I feel the manuscript needs a bit more work and is not ready for publication.

## General comment:

There is a lot of repetition in the manuscript.

Please go through the whole document and remove the duplications.

Gap within manuscript – the other pathogens causing mastitis should be mentioned. Ex: Streptococcus, Pseudomonas.

## Abstract

### Background:

- Replace “expensive disease” with “economic importance.”
- Remove “most.”
- Remove “recovered bacterial pathogen from mastitis milk” and replace with ‘*Staphylococcus aureus*’ is the most common cause of mastitis in dairy herds.

### Objective:

- Change the sentence to “Additionally, determine the bacteria associated with the occurrence of mastitis.”

### Methods:

- No comment.

### Results:

- A bacteriological study targeting *S.aureus* was conducted with all (n=127) milk samples collected from cows with either clinical or subclinical mastitis. The pathogen was found to be higher (47.8%) in subclinical than in clinical (41.6%)

mastitis cases.

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#### Conclusion:

- This study showed that mastitis was prevalent in dairy cattle **within** the study area, with more cases of *S.aureus* in subclinical mastitis.

#### Introduction

Paragraph 2:

- Various statements need references.

Paragraph 3:

- Various statements need references.

Paragraph 4:

- No comment.

Paragraph 5:

- No comment.

Paragraph 6:

- Please remove repetition from previous paragraphs.

Paragraph 7:

- Please remove repetition from previous paragraphs.

Paragraph 8:

- Statements need references.
- Please add the specificity and sensitivity of each test; this will add perspective to the tests used and the efficacy of the tests used, along with the reliability of the results.

Paragraph 9:

- Please rephrase the last sentence.

#### Materials and methods

#### Study area

- Please add references within the paragraph.
- Does the reference CSA, 2018, perhaps have more information available, e.g., number of reports, version of report?

#### Study Animals

- Please add the number of animals for (Holstein-Friesian and Jersey) and (Holstein-Friesian-Zebu crosses) in this paragraph.

#### Study Design

- No comment.

#### Sample Size Determination

- Did the study use the number of dairy cattle in the area in the sample size determination? Or the number of cattle? If all cattle were used, it will skew the sample size determination.

#### Study methodology

The flow of this whole section is repeated and does not flow logically. Please change the flow to the sequence of the sampling done.

Is the process not

1. Questionnaire and chat with owner, getting consent and information
2. Restrain the animal
3. Clean the udder
4. Clinical inspection of the udder
5. Milk sample collection
6. California Mastitis test (CMT)

Please remove repeats/duplications of statements within this section.

- The second sentence is incorrect. It is the “milk samples” that were subjected to bacteriological examination to isolate *Staphylococcus aureus*,
- Remove the word “furthermore.”

#### Clinical inspection of the udder

- Divide the paragraph into different sentences.

#### California Mastitis Test (CMT)

- Please add batch numbers and expiry dates of the reagents used.

#### Milk sample collection

- This paragraph should be after the udder inspection.
- The paragraph states that the teat was cleaned with tap water and then cleaned. While the next paragraph states: clean water, soap. Please clarify which one is correct?

#### Udder cleaning

- The paragraph contradicts the previous paragraph. Please clarify.
- Please add the information of the soap including: name, concentration, dilution used, ex.
- Why were samples stored and not processed on the same day? Please add reference to this statement.

#### Isolation and identification

- Repeat of previous section. Please remove.
- Please add the batch number and expiry date of all the reagents used.
- Was the cotton applicator sterile?
- Purple agar base? Please supply the name of the agar with the batch number and expiry dates.

#### Data collection and Analysis

- Please add references to the analysis used.

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#### Results

Is it possible to differentiate between the two types of cattle in Table 1 and 2? This will put the findings in perspective.

#### Prevalence and mastitis

- How many quarters were infected per animal? Is the data available?
- Can it be added to Table 1?

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#### Bacterial isolation

- Please add the quarter-level information to Table 2.

#### Risk factors associated with mastitis

- What is the reference age group referred to in the section?
- Rephrase the sentence. "Lastly, the most responsible variable for mastitis was farm hygienic status per day."

### Discussion

- Please remove “in cows” after 50.8%.
- Please rephrase the last paragraph and explain the significance found in the study?

### References

Please ensure that all references used in the text are in the reference list.

Stata Corp? Not in reference.