

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

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Potential competing interests: No potential competing interests to declare.

In this work, conducted from March 2021 to August 2021, the authors studied the prevalence of clinical and subclinical mastitis in dairy cattle from dairy farms in and around Hawassa town. A total of 250 lactating cows were examined by visual analysis and palpation of the udders and using the California Mastitis test. Furthermore, a bacteriological study targeting *S. aureus* was performed on all 127 milk samples collected from cows with clinical and subclinical mastitis.

The authors state that 50.8% of the cows had mastitis (4.8% clinical and 46% subclinical). The quarter-level prevalence was 27.4% (2.9% clinical and 24.5% subclinical mastitis). Logistic regression analysis showed a significant association among cows of different age groups, lactation stages, and farm hygienic status with the occurrence of mastitis ($p < 0.05$). *S. aureus* was isolated and identified in 60/127 (47.2%) of the tested milk samples (47.8% of milk samples from cows with subclinical mastitis and 47.8% with clinical mastitis).

In my opinion, although not innovative (other similar studies were already performed in the same area, as confirmed by the authors) and the authors only used conventional microbiological techniques (isolated strains were not sequenced or typed), I think this kind of study should be encouraged in these types of regions. The methods are adequate for the proposed objectives. I think the authors could highly improve this work if the isolated strains could be better characterized (eventually through collaboration with other universities).

Also, in my opinion, the manuscript can be improved:

Abstract- Methods section: The isolation of *Staphylococcus aureus* should have been mentioned in the methods section.

Abstract- Results section: The sentence "A bacteriological study targeting *S. aureus* was conducted with all ($n=127$) milk samples collected from clinical and subclinical mastitis cows" should not be in the results section.

Abstract-Conclusions: "case of *S. aureus* in subclinical mastitis"

At least on my computer, the underlined is superimposed.

Introduction

“However, the per capita consumption of milk in Ethiopia is as low as 17 kg per head, while the average figure for Africa is 26 kg per head (Abera et al., 2011)”

The reference does not support the sentence, and I suppose this consumption should be *kg/per capita/ per year*; please clarify. You have several other cases in your manuscript where the references do not support the sentence. Please use the correct references for each situation.

Materials and Methods

“Milk Sample Collection” and “Udder Cleaning” items

In my opinion, these two items should be merged into only one “Udder Cleaning and Milk Sample Collection,” and they should be reorganized.

Also, the information contained in the first sentence of “Isolation and identification” (“Udder cleaning was performed (...) 24 h until culturing the next day”) should be used in this new item (“Udder Cleaning and Milk Sample Collection”) and removed from the “Isolation and Identification” item. The authors repeat several times how the udder was cleaned before milk collection, not being consistent in the description (for example, I couldn’t be sure if teat disinfection with 70% alcohol was performed or not...), and also describe several times how milk was collected and samples were transported...

Isolation and Identification

I couldn’t understand how the isolation on 5% sheep blood agar was performed... with an inoculating loop? with an inoculating needle? with a swab? Did the authors perform several inoculations with more and less quantity of milk? I couldn’t understand this part of the item. Please clarify.

“Eventually, identification of the agent was done...”

What do the authors mean with eventually?

“Samples were considered positive for *S. aureus* (...) and showed rapid fermentation of maltose on PAB”.

You have to introduce the abbreviations (in this case, PAB) the first time they appear in the text.

Results

Table 3

All abbreviations used in the table should be explained in the table footnote.

Discussion

“In the present study, the overall prevalence (...) and 24.7%”

Please correct to 27.4%

“et al.” should be in italics

“versus” should be in italics

According to the microbiological findings of this study, the overall prevalence of *S. aureus* isolates was...”

At least on my computer, the underlined text appears with no space. Please confirm and correct, if necessary.