

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.

This manuscript deals with an important subject: mastitis in dairy cattle. The manuscript has some interesting results and is largely well written. I have some typographical changes, but since the manuscript does not have any line numbers, it is a bit difficult to indicate where the typos are. Please include line numbers next round.

I think the manuscript can be improved if you add some more information and become more specific in some respects. For instance:

It can be problematic to cover both clinical (CM) and subclinical mastitis (SCM), especially with few cases. I suggest you only present prevalence data on CM and then focus the risk factor (RF) analyses on SCM, since I believe RF will differ between CM and SCM. Moreover, you should be able to perform a RF analysis for S. aureus (SA) intramammary infection (IMI). You also mix up mastitis (inflammation, CMT) with IMI (infection, culturing). I also think you should have included more RF that in previous studies have been associated with SA (mainly associated with biosecurity). Finally, I think you should present data on all pathogens from the culturing.

Comments in detail:

Title: Include RF in the title also.

Abstract: Prevalence per se should be included in the objective (now it is only mentioned as associated with RF). You should follow the same order throughout the manuscript (for aims, Intro, MoM, Results, Disc, and Concl), i.e., Prevalence of mastitis, prevalence of SA IMI, RF associated with SCM, and RF associated with SA. In Methods, also include culturing and RF analyses. Some of this is mentioned under Results but can be moved to Methods. Is the difference between SA in CM and SCM significant? Otherwise, omit. The conclusion should correspond exactly to the aims and should include more things than mentioned here (RF, i.e.).

Key words: Better to have other words than those mentioned in the title.

Introduction:

Can be shorter and much more focused on your scope. It should be more specific and less generic. Your introduction is more of a textbook of mastitis than a background to your study. Please include more aspects of your setting, previous



studies, gaps, SA, RF, etc. You must convince the reader why this study is important and novel. You need to have a better structure for the Introduction (please see comment above, follow the same order). I have some more comments on the Introduction, but I will wait until you rewrite it and include line numbers.

MoM:

You mention the rain period from June to September, but how was the weather during the study period? Instead of cattle categories, maybe you could say herd size? How were the herds chosen? How many animals were examined/sampled per herd? Udder cleaning should be moved under "Milk Sample Collection" (no need to have a separate heading for udder cleaning). There are some repetitions in this section; please check and omit. No need to mention how you disinfect the teats twice. You need to clarify the analysis part: How were the RF analyses done? Association with all types of mastitis or CM and SCM separately? RF for SA IMI? Again, I have more comments, but will wait until I get a copy with line numbers.

Other RF that could have been included: cleanliness, more aspects of biosecurity like purchasing animals, calf suckling, milking order, milking hygiene and routines (like washing, teat dipping), and perhaps dry cow therapy (or at least dry cow routines).

Results:

Present the data in the same way throughout this section. Start with overall data both for mastitis prevalence and for SA IMI, and then present for CM and SCM, respectively. One decimal is enough. What is the hygienic status (do you mean hygienic routines or simply just cleaning the stable)? Did you include hygienic scoring of animals? If not, why? All your results mentioned in MoM and Discussion should be mentioned in this section. For the table, why did you leave out BCS? It must be clear when you have a significant result or not (i.e., SA in CM compared to SCM). Why didn't you present data on all pathogens since you did proper culturing on blood to start with? At least you could present aggregated results for streps, staphs, coliforms.

Discussion:

I assume it will need some rewriting after my revision, so I will read it more carefully next round. I also have some more detailed comments, but for that, I need line numbers.

Conclusion:

Should correspond to aims in detail. For the recommendations, please be more specific and link the advice to your results instead of some general recommendations. In the last sentence, I don't think these recommendations are based on your results.

References:

Could some of the papers from Mekonnen's thesis be included?https://dspace.library.uu.nl/handle/1874/365257

