

Review of: "The Effect of Fermentation on the Physicochemical Quality and the Presence and Levels of Pesticide Residue in Cow Milk"

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Potential competing interests: No potential competing interests to declare.

Overall Comment: This is very informative research, and I highly recommend it. However, I have a few concerns that I would recommend the authors consider and address.

Introduction

1. Paragraph 2: Line 6 - the addition of measurable figures from reports would make the statement greatly appreciated by readers and researchers (for example, giving death/poisoning rates or percentages from reports at global and developing countries). On the same line: since the authors indicated "there are reports," I am expecting references to more than one in this regard.
2. Paragraph 3: Line 4 - use **1,2,3,4,5,6-hexachlorocyclohexane** not **1,2,3,4,5,6-hexa-chlorocyclohexane** (remove the hyphen between hexa and chloro....).
3. Paragraph 4: Are there any records of estimated figures of losses and yield improvement margins from MoFA-Ghana data that you can include, even if it is within a certain years period?
4. Replace "**Burkina**" with the correct local word "**Brukina**".
5. Last but one paragraph: Line 3 - kindly write LAB in full at the first mention; put *Lactobacillus* and *Leuconostoc* in italics since they are genus names.

Methods

1. Write UDS in full.
2. Section 2.2: I would suggest you use room temperature but not "normal room temperature." Be consistent and use "mL" throughout.
3. Section 2.2.1: What informed the choice of 0, 12, & 24 hr periods? Add "(Spain)" to the name of your pH meter given for origin.
4. Section 2.2.3: Indicate the country of origin for the Chromameter details. It applies to all other equipment models stated in the work.
5. Section 2.3: I suggest that if it is not the authors' own optimised method used for the residues analysis, and was by ISO or standards by the GSA or literature, it has to be mentioned (quoting the procedure ISO number or GSA ref. no.). For example, what informed the dilutions, calibration levels, standards preparations, etc.? What gas chromatographic

procedure was it from?

6. Data analysis: Too brief.

Results & Discussion

1. Section 3.1: Paragraph 1: Line 8 - "...to the buildup of some organic acids and acetic acid resulting from the actions ...". I suggest you replace "and" in the statement with "such as" because acetic acid is also an organic acid.
2. Justify why...."The reduction in pH and increased TA of the milk samples with fermentation is important in ensuring the safety of the samples."
3. Section 3.2: Paragraph 1: Include why those studies had contrary results from your work. I suggest you add the countries from which these studies were conducted. This may help readers understand location-relatedness.
4. Section 3.2: Paragraph 4: Could absence detection be a result of the method of detection used? If so, include a statement on that and suggest an alternative available improved/current approach.

Conclusion

1. Include a recommendation in addition to your take-home message.