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PART 1:

Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	MS: 2012/AJEA/2177
Title of the Manuscript:	NATURE OF TOMATOES MICROFLORA UNDER STORAGE

General guideline for Peer Review process: *(Note: Title of different sections as proposed below may differ in case of review paper / case reports)*

- *Is the problem/objective of this study original and important? SCIENCEDOMAIN international strongly opposes the practice of duplicate publication or any type of plagiarism. However, studies which are carried out to reconfirm / replicate the results of any previously published paper with new dataset, may be considered for publication. But these types of studies should have a 'clear declaration' of this matter. If you suspect any unethical practice in this manuscript, kindly write it in the report with some proof/links.*
- *Materials & methods (Kindly comment on the suitability and technical standards of the methods. Sufficient details of the methods/process should be provided so that another researcher is able to reproduce the experiments described)*
- *Results & discussion (Kindly comment on: 1. Are the data well controlled and robust? 2. Authors should provide relevant and current references during discussion. 3. Discussion and conclusions should be based on actual facts and figures. Biased claims should be pointed out. 4. Are statistical analyses must for this paper? If yes, have sufficient and appropriate statistical analyses been carried out?)*
- *Conclusion (Is the conclusion supported by the data, discussed inside the manuscript? Conclusions should not be biased and should be based on the data, presented inside the manuscript only. Authors should provide adequate proof for their claims without overselling them)*
- *Are all the references cited relevant, adequate? Are there any other suitable current references authors need to cite?*
- *SDI believes in constructive criticism. Reviewers are encouraged to be honest but not offensive in their language. It is expected that the reviewer should suggest the authors on how they can strengthen their paper to make it acceptable. Comments of the reviewers should be sufficiently informative and helpful to reach a Editorial Decision. We strongly advise that a negative review should also explain the weaknesses of any manuscript, so that the concerned authors can understand the basis of rejection and he/she can improve the manuscript based on those comments. Authors also should not confuse straightforward and true comments with unfair criticism.*
- *We are very much reluctant to go against suggestions (particularly on technical areas) of the reviewers. Therefore, authors are requested to treat the suggestions of reviewers with utmost importance.*
- *This form has total 9 parts. Kindly note that you should use all the parts of this review form.*



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PART 2: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments		Objectives- - The report of the whole work has been rewritten to capture the aim and objective of this work. - The nature of microflora recovered can help to determine some food preservative method in this area. - The introduction section has been reduced concisely to 2 pages
Minor REVISION comments		Materials and methods. - Basic method of processing canned tomatoes has been included - The three replicate sample used is now reflected. Results. - The errors observed under result in tables I and 2 with other areas has been corrected. - Microorganisms generally encountered were identified. My further research on this food source will take more care of this. - The samples were generally stored in the refrigerator at 4⁰C to slow down biological activities. - The tables have been rearranged.



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<u>Optional/General</u> comments		Discussion and Conclusion. - The discussion and conclusion aspect has been re-written according to the some errors observed and correction pointed out. - References: Literatures cited under references is now well replaced as appropriate using standard learned journals and up to date articles.

In this manuscript the author studies the microorganisms present in raw tomatoes and compares with microorganisms present in canned tomato, in order to verify the effectiveness of the thermal treatment, applied during canning process, to destroy the microbial load.

Objetives.

- The objective of this work is not original, there are many previous works, on tomato and other vegetable products, that evaluate the effectiveness of the thermal treatments applied during canning. It is well established that heat destroys microorganisms and it is an appropriate method to preserve food.
- The only original aspect of this work is that, in this case, the authors analyze tomatoes from Ondo State, Nigeria.
- The introduction section is very extensive. On 6 pages, sometimes the author reports about tomato aspects that have no relation to the objectives of this work

Materials and methods.

- The methodology used in this work is simple, very basic, but totally correct from the scientific point of view.



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- But I think the number of samples considered is very small and unrepresentative. The author analyzes only two raw tomatoes samples and 3 canned tomato samples. The canned tomato samples came from three different areas of Ondo State, but only was taken one sample per area. Usually in scientific assays is necessary to have replications
- Samples of raw tomatoes and canned tomato had different origins. The canned tomatoes were processed from a different raw material, whose initial microbial contamination could be very different. They were processed in different factories and the intensity of the heat treatment applied in each plant could also be different. There is no correspondence or relationship between raw tomatoes and the canned tomatoes samples.
- The experimental design presented in this manuscript only reports about the microbial load of the raw tomatoes by one side and of the canned tomatoes by other side, but it is not possible to establish any relationship between them.

Results.

- Page 11, line 278-280. The data given by the author are not well understood.
- Line 281. According to the data presented in Table 1, the microbial load of 1×10^5 cfu/ml corresponds to sample CT3, but not to the sample CT1, as shown in the text.
- The same applies to 38×10^5 , in Table 1, this value corresponds to the sample CT2, but the text indicates that this value corresponds to the sample CT3.
- Table 1 shows the total microorganisms counts but not shown, in any case, the counts obtained for each group of microorganisms.
- Tables 2 and 3 show bacteria and fungi isolated and identified, but do not indicate if they were obtained from raw tomatoes or canned tomato.
- Tabla 4: The opened tomato cans were stored during five weeks. The storage conditions are not displayed in the materials and methods section
- The legend of table 5 is not complete.

Discussion and Conclusion.



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- Line 342 – 348: There is an increase in microbial counts throughout the storage period, why does this happen? because microorganisms initially present in the tomato can multiply? because, as the tomato cans are open, microorganisms come from the environment?

This information is not clear, neither the cause-effect relationship nor the discussion of the data obtained.

- Line 349: “In conclusion spoilage microorganisms isolated from raw (local) tomatoes are significantly much more than those isolated from the canned tomatoes “

These data are not in the text, the counts of spoilage microorganisms obtained, from the raw tomatoes or from the canned tomatoes, do not appear in any table.

- The paper concludes with a statement proven long time ago. It is well established that heat destroys microorganisms and is an appropriate way to preserve food.

References

- References section needs a major revision.