

Review Form 3

Journal Name:	Current Journal of Applied Science and Technology
Manuscript Number:	Ms_CJAST_129825
Title of the Manuscript:	Antimicrobial Effects of Copper and Copper Alloys on Bacteria Pathogens in Processed Canned Fish
Type of the Article	Original research Article

PART 1: Comments

	Reviewer’s comment	Author’s Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	This study highlights the significance of copper and its alloys as effective antimicrobial agents in reducing bacterial pathogens in canned fish. It provides a valuable contribution to enhancing food safety and extending shelf life, thereby promoting public health. The research introduces innovative solutions for the food industry and opens new opportunities for the application of copper in other food preservation contexts.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title of the article, "Antimicrobial Effects of Copper and Copper Alloys on Bacteria Pathogens in Processed Canned Fish," is clear and informative but could be refined for better readability and alignment with academic standards. Here is a suggested alternative: "Antimicrobial Activity of Copper and Copper Alloys Against Bacterial Pathogens in Processed Canned Fish." This revised title maintains the focus of the research while making it more concise and precise.	The suggested modification to the title has been effected.

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Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The abstract is comprehensive but could be improved. Weaknesses: <ol style="list-style-type: none">Lack of Quantitative Details: The abstract does not include specific data on bacterial reduction percentages for each alloy composition.Lack of Focus: There is unnecessary repetition, such as mentioning "fish and juice," which diverts attention from the main subject.Insufficient Scientific Impact: The broader significance of the findings for the scientific community and food industry is not emphasized. Suggestions: <ul style="list-style-type: none">Add concise quantitative data to highlight key results.Remove redundant details and focus solely on the study's main subject (canned fish).Emphasize the study's importance in improving food safety and extending shelf life.	Unnecessary repetitions have been deleted. Redundant details have been removed. The scope of impact has been expanded (e.g. paragraph 1)
Is the manuscript scientifically, correct? Please write here.	The manuscript appears scientifically correct, with a clear outline of the objectives, methods, and findings. However, a few aspects can be clarified or improved for better accuracy and scientific rigor: <ol style="list-style-type: none">Introduction: It would be beneficial to further explain the rationale behind using copper and its alloys, highlighting the existing literature on their antimicrobial properties and their potential applications in food preservation.Materials and Methods: The methodology of using different copper alloy compositions to assess microbial load reduction is clearly stated. However, it would be useful to provide additional information on the specific concentrations or amounts of copper alloys used and whether any controls were employed to assess baseline microbial contamination levels.Results and Discussion: The manuscript mentions a "significant decline" in microbial load after 6 hours, but it would be helpful to provide statistical analysis (e.g., p-values) to quantify this significance. Additionally, more details on the types of bacterial pathogens identified and how their resistance or susceptibility to the copper alloys varies would enhance the discussion.Conclusion: The conclusion is aligned with the results, but further insights into the practical applications and limitations of copper alloys in food preservation would be valuable, especially considering potential regulatory or safety concerns related to their use in food-contact materials. Overall, the study is promising, but some additional details and clarification would strengthen the manuscript.	<ol style="list-style-type: none">Rationale behind using Copper and its alloy have been included.Specific compositions of the copper and copper alloy used have been supplied (Lines 122-128).The result of the statistical analysis has been included.More insight into practical applications has been provided (point 'iii' under conclusion)
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references are sufficient but could be more recent. Adding studies from the last 5 years on the antimicrobial properties of copper alloys, especially in food safety, would strengthen the manuscript.	More recent literatures have been added..
Is the language/English quality of the article suitable for scholarly communications?	The language quality of the article is generally clear but requires some improvement in terms of grammar, punctuation, and sentence structure. Some sentences are lengthy or slightly awkward, and minor revisions are needed to ensure better flow and readability. It would benefit from a thorough language review to meet scholarly communication standards.	Reviewed done.
<u>Optional/General</u> comments	General Comments: The manuscript covers an important topic, but needs improvements in methodology clarity, data analysis, and discussion linkage to results. Suggestions: <ol style="list-style-type: none">Update references with more recent studies (last five years).Improve writing clarity and precision in some sections.Enhance figure and table explanations to connect better with findings. These changes would improve both scientific accuracy and readability.	<ol style="list-style-type: none">References have been updatedGeneral overview of the report has been carried out.Figures and Tables have been enhanced.

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PART 2:

	<u>Reviewer's comment</u>	<u>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)</u>
<u>Are there ethical issues in this manuscript?</u>	<u>(If yes, Kindly please write down the ethical issues here in details)</u>	<u>There's no ethical issue</u>