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| Journal Name: | [**Asian Journal of Environment & Ecology**](https://journalajee.com/index.php/AJEE) |
| Manuscript Number: | **Ms\_AJEE\_140304** |
| Title of the Manuscript: | **Integrative Analysis of Seasonal Bioaccumulation Patterns and Toxicological Risk Indices in Freshwater Fish Species of Vembanad Backwaters: Implications for Environmental and Public Health** |
| Type of the Article | **Original Research Article** |

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | **Author’s Feedback** (It is mandatory that authors should write his/her feedback here) |
| **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.** | The study is very important to the scientific community | We thank the reviewer for acknowledging the relevance of our work. The manuscript addresses a critical aspect of environmental health by assessing seasonal bioaccumulation and toxicological risk in edible fish species from the Vembanad backwaters, a Ramsar-listed wetland. |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | Yes | We appreciate the reviewer’s agreement and confirm that we intend to retain the current title, as it accurately reflects the content and scope of the study. |
| 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 very good and sufficient | Thank you for your positive feedback. No changes are proposed to the abstract, as it effectively summarizes the objectives, methods, key findings, and relevance of the study. |
| Is the manuscript scientifically, correct? Please write here. | I slightly disagree with the result, especially that of Target Hazard Quotient ( THQ).  Based on the methodology: which correctly states: if the Target value is less than 1, the exposed population is unlikely to experience an adverse health hazard and if the THQ is greater than 1, there is Potential Health Risk and from the results the values are all less than 1. So I disagree with your result for Pre-monson for C.malabaricus which states \* C. malabaricus exhibits the highest carcinogenic risk values among fish species during the pre-monsoon season for both adults (0.000313203) and children (0.000332466), indicating significant carcinogen exposure risk\* also \* S. argus exhibits the highest carcinogenic risk values among fish species during the monsoon season for both adults (7.41338E-05) and children (7.86932E-05), indicating potential health risks from its consumption. also \* L. calcarifer shows the highest carcinogenic risk values among fish species during the post-monsoon season for both adults (5.7229E-05) and children (6.07487E-05)\*  Please the researcher should kindly go through and make some adjustments. | Thank you for this valuable observation. We have revised the manuscript accordingly to clarify that although *C. malabaricus*, *S. argus*, and *L. calcarifer* exhibit the highest CR values among the studied species, these values are still within acceptable risk limits and do not indicate significant carcinogenic risk. The corrected statements now reflect accurate interpretation consistent with the threshold values provided in the methodology. |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | Yes the reference are sufficient and recent | We thank the reviewer for this comment. We have double-checked and ensured that all cited references are included and appropriately listed in the revised reference section. |
| Is the language/English quality of the article suitable for scholarly communications? | Very good English Language | We are grateful for this feedback. The manuscript has been carefully re-checked and revised for language clarity and minor grammatical issues. |
| Optional/General comments | Minor corrections are needed | We have thoroughly revised the manuscript to incorporate all suggested corrections, including clarification of risk interpretations and refinement of language. |

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| **PART 2:** | | |
|  | **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)* |
| **Are there ethical issues in this manuscript?** | *(If yes, Kindly please write down the ethical issues here in details)* | There are no ethical issues associated with this manuscript. |