Review Form2

Book Name:	Contemporary Research and Perspectives in Biological Science
Manuscript Number:	**Ms_BPR_2669**
Title of the Manuscript:	**Micronucleus assay and Hematological parameters study to analyse the effect of microplastics and heavy metals on different fish species of the river kathajodi Cuttack Odisha**
Type of the Article	**Book chapter**

PART 1: Review Comments

Compulsory REVISION comments	**Reviewer's comment**	**Author's Feedback***(Please correct the manuscript and highlight that part in the manuscript. 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. Why do you like (or dislike) this manuscript? A minimumof 3-4 sentences may be required for this part.		
Is the title of the article suitable? **(If not please suggest an alternative title)**		
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.		
Are subsections and structure of the manuscript appropriate?		
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimumof 3-4 sentences may be required for this part.		
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. **-**		

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Minor REVISION comments **Is the language/English quality of the article suitable for scholarly communications?**		
Optional/Generalcomments	Your article has potential, but there are areas where clarity, coherence, and structure could be improved. Below are some suggestions to refine and enhance the presentation: ### 1. **Title:** - **Current:** *Micronucleus assay and Hematological parameters study to analyse the effect of microplastics and heavy metals on different fish species of the river kathajodi Cuttack Odisha* - **Suggested:** *Micronucleus Assay and Hematological Study of Microplastic and Heavy Metal Effects on Fish Species in Kathajodi River, Cuttack, Odisha* - Shorten the title for better readability while maintaining focus on key aspects. ### 2. **Abstract:** - Clarify and condense information. The abstract should concisely summarize the background, methods, results, and conclusions. - **Suggestions:** - Avoid long sentences like "*Plastics, city sewage and industrial waste releasing in to the river for drainage propose*"—this can be rephrased to "*The river is contaminated by plastics, city sewage, and industrial waste.*" - Specify more clearly the results of the study, e.g., what levels of microplastics and heavy metals were found, and how they relate to hematological and genetic damage. - End the abstract with a strong conclusion on the ecological implications of your findings. ### 3. **Introduction:** - Expand on the significance of your study. You mention that "70% of river water has been polluted to a great extent" but it would help to provide a more focused problem statement for Kathajodi River specifically. - **Suggestions:** - Strengthen the background information on why microplastics and heavy metals are particularly harmful. - Clarify the rationale behind using fish as biomarkers and explain the choice of species more thoroughly. - Avoid overly long sentences by breaking them into smaller, more digestible points. ### 4. **Materials and Methods:** - This section needs more structure and clarity to ensure reproducibility. - **Suggestions:** - Clearly explain the evaporation and solvent extraction methods for heavy metals and microplastics. - Provide a step-by-step breakdown of how fish were collected and how blood samples were taken, so other researchers can replicate the study. - The hematological procedures should also be elaborated (e.g., why you chose the Giemsa staining method). - Ensure that measurements, units, and experimental conditions (e.g., temperature, pH, etc.) are explicitly clear. ### 5. **Results:** - Improve the presentation of tables by adding titles to each and ensuring units of measurement are clear. - **Suggestions:** - Highlight important trends and comparisons between the fish species. For instance,	

	explain why industrial areas had higher microplastic and metal concentrations compared to rural areas. - Clarify abbreviations like WBU, MCH, MCHC, etc., upon their first use. - Summarize findings in a narrative before or after the tables to guide readers through the results. - When presenting results, focus on linking the data with how it supports the study's objectives. ### 6. **Discussion:** - The discussion should integrate your findings with existing literature. Right now, the link to human health impacts is mentioned but should be better tied into the data you've gathered. - **Suggestions:** - Explain how your results contribute to the understanding of pollution's effects on aquatic ecosystems, particularly with reference to micronucleus formation and hematological changes. - Draw comparisons with similar studies on microplastics and heavy metals. - You could also explore more of the implications of the micronucleus assay findings and the genetic damages. ### 7. **Conclusion:** - The conclusion needs to summarize the significance of the findings more clearly and offer a call to action for remediation efforts. - **Suggestions:** - You might want to emphasize not just control actions and awareness programs, but also more concrete regulatory or technological recommendations based on your findings. - Reiterate the broader implications of your study on environmental health and the need for future research. ### 8. **Language and Grammar:** - There are several grammatical issues that need fixing, such as: - "*pH of water has changed in the last few years.*" → "*The pH of the water has fluctuated over the past few years.*" - "*Microplastics have the quality to absorb heavy metals to form dangerous compounds*" → "*Microplastics can absorb heavy metals, forming dangerous compounds.*" - Consistency in tense and clarity in word choice are needed throughout the paper. For example, "swage" should be corrected to "sewage." ### 9. **References:** - Ensure that all citations are properly formatted. Some references in the list seem to be missing parts (like the volume or page numbers). - **Suggestions:** - Follow a consistent referencing style (e.g., APA, MLA, etc.). Cross-check the citations for accuracy and ensure all sources referenced in the text are included in the reference list. ### 10. **Figures and Tables:** - Improve the clarity and presentation of the tables. Ensure that they are referenced properly in the text and that their significance is explained. - **Suggestions:** - Consider using more graphical representations (charts or graphs) of your data to make the results easier to digest.	

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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)*	

Reviewer Details:

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