## Review Form 3

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| Journal Name: | **Asian Journal of Environment & Ecology** |
| Manuscript Number: | **Ms_AJEE_122364** |
| Title of the Manuscript: | **ON AN ACCOUNT OF MOSS-DWELLING TESTATE AMOEBAE FROM VARIOUS BIOTOPES AROUND NAINITAL LAKE, UTTARAKHAND** |
| Type of the Article | **Original Research Article** |

## Review Form 3

**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)* |
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| **Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.** | **This manuscript is of significant importance to the scientific community, particularly in the fields of ecology and environmental science. It contributes valuable insights into the biodiversity of moss-dwelling testate amoebae in the Nainital Lake region, a relatively underexplored area. The study's findings highlight the role of these microorganisms as bioindicators, which is crucial for environmental monitoring and conservation efforts. I appreciate the manuscript for its comprehensive approach in documenting species diversity and its potential implications for understanding ecological changes and promoting sustainable conservation practices in a sensitive mountain ecosystem.** | |
| **Is the title of the article suitable?<br>(If not please suggest an alternative title)** | **The current title, "On an Account of Moss-Dwelling Testate Amoebae from Various Biotopes Around Nainital Lake Uttarakhand," is descriptive but could be more concise and focused. To improve clarity and impact, consider an alternative title like:**<br><br>**"Diversity and Environmental Significance of Moss-Dwelling Testate Amoebae in Biotopes Around Nainital Lake, Uttarakhand."** | |
| **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.** | **Revised Abstract Suggestion:**<br>**"The present research documents the diversity of moss-dwelling testate amoebae in various biotopes around Nainital Lake, Uttarakhand, and assesses their role as bioindicators of environmental change. Using the non-flooded Petri dish method, 39 species across 11 genera and 8 families were identified, all of which are new records for the region. These findings underscore the potential of certain testate amoebae species in biomonitoring and highlight the need for conservation efforts in this ecologically sensitive area. This study enhances our understanding of the biodiversity in the Nainital Lake region and provides a valuable reference for future ecological assessments and conservation strategies."**<br><br>**This revision would make the abstract more concise, informative, and aligned with the expectations for scientific abstracts.** | |
| **Are subsections and structure of the manuscript appropriate?** | **Overall Structure:**<br>**Revised Structure Suggestion:**<br>**Introduction**<br>**Literature Review (encompassing "Testate Amoebae as Bioindicators," "Global Diversity," and "Diversity in India")**<br>**Material and Methods**<br>**Results (with potential subsections as needed)**<br>**Discussion and Conclusion**<br>**References**<br>**This revised structure would improve the manuscript's logical flow, making it easier for readers to follow the progression from background information to the study's findings and their broader implications.** | |
| **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 minimum of 3-4 sentences may be required for this part.** | **The manuscript is scientifically robust and technically sound due to its rigorous methodology and clear focus on an underexplored area of ecological research. The use of the non-flooded Petri dish method for sample processing is a well-established technique in microbiology, ensuring reliable identification of testate amoebae species. The study's comprehensive documentation of 39 species, all new records for the region, highlights the thoroughness of the research. Additionally, the manuscript effectively integrates the findings with existing knowledge on testate amoebae as bioindicators, providing a solid basis for future ecological assessments and conservation efforts.** | |

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| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.**<br>**:** | **The references in the manuscript are generally sufficient, but they could benefit from the inclusion of more recent sources to ensure the study is aligned with the latest research trends. While many of the cited works are relevant and foundational, several references are relatively old, dating back to the 1990s and early 2000s. Including more recent studies would strengthen the manuscript by showing how the findings fit within the current scientific discourse.**<br><br>**Suggestions for Additional References:**<br>**Recent Studies on Testate Amoebae as Bioindicators:**<br><br>**Booth, R. K., & Sullivan, M. E. (2020). Testate amoebae as proxies for paleohydrology and paleoenvironmental change. Earth-Science Reviews, 204, 103153.**<br>**This paper discusses the use of testate amoebae as indicators of environmental change, with recent advancements in the field that could support the manuscript's findings.**<br>**Advancements in Microbial Ecology:**<br><br>**Oliverio, A. M., et al. (2020). The global-scale distributions of soil protists and their contributions to belowground systems. Science Advances, 6(2), eaax8787.**<br>**This study explores the global distribution of soil protists, which could provide a broader context for the diversity of testate amoebae observed in the manuscript.**<br>**Recent Developments in Ecological Monitoring:**<br><br>**Heger, T. J., & Mitchell, E. A. D. (2021). Recent trends in the use of testate amoebae as bioindicators in ecological and environmental monitoring. Ecological Indicators, 120, 106928.**<br>**This reference could be valuable for updating the literature review on the role of testate amoebae in environmental monitoring.** | |

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| Minor REVISION comments<br><br>**Is the language/English quality of the article suitable for scholarly communications?** | The language and English quality of the article are generally suitable for scholarly communication, but there are areas where improvements could enhance clarity, readability, and the overall scholarly tone. Here are some observations:<br>Strengths:<br>- Technical Terminology: The manuscript effectively uses appropriate scientific terminology, which is important for scholarly communication.<br>- Structured Sentences: The sentences are generally well-structured, with clear conveyance of ideas and findings.<br><br>Areas for Improvement:<br>1. Grammar and Punctuation: There are occasional issues with grammar, punctuation, and sentence structure. For example, some sentences are run-on or lack proper punctuation, which can affect readability.<br><br>2. Redundancy: In some instances, ideas are repeated or rephrased without adding new information. This can be streamlined to improve the flow of the manuscript.<br><br>3. Clarity and Conciseness: Some sentences could be made more concise. Reducing wordiness will make the manuscript easier to read and understand.<br><br>4. Formal Tone: While the manuscript is generally formal, there are a few areas where the tone could be slightly more polished to meet the highest standards of scholarly communication.<br><br>Example Revisions:<br>- Original: "The results show an impressive number of species of testate amoebae 39 species of testate amoebae span over 11 genera and 8 families that all are new for the region and stress the role of some species in biomonitoring and evaluation of the condition of environment in these peculiar biotopes."<br><br>Revised: "The study identified 39 species of testate amoebae spanning 11 genera and 8 families, all of which are newly recorded for the region. These findings underscore the role of certain species in biomonitoring and environmental assessment in these unique biotopes."<br><br>Conclusion:<br>The manuscript's language quality is adequate for scholarly communication, but careful editing to address grammar, redundancy, and clarity issues would enhance its overall quality. Polishing these aspects will ensure the manuscript is well-received by the academic community. | |
| **Optional/General** comments | The manuscript presents valuable research with significant implications for ecological monitoring and conservation. With some refinement in language, structure, and clarity, it could make a strong contribution to the field. | |

**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)* |
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| **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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| Name: | **Bireshwar Bera** |
| Department, University & Country | **ST. Joseph's College, India** |