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| Book Name: | **Innovative Solutions: A Systematic Approach Towards Sustainable Future** |
| Manuscript Number: | **Ms\_BPR\_** **3724.12** |
| Title of the Manuscript:  | **EXPLORING THE ANTIMICROBIAL POTENTIAL AND PHYTOCHEMICAL COMPOSITION OF OCIMUM TENUIFLORUM LEAF EXTRACTS: AN ANALYTICAL APPORACH** |
| Type of the Article | **Complete Book chapter** |

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| 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 minimum of 3-4 sentences may be required for this part.** | This manuscript holds significant value for the scientific community as it investigates the antimicrobial potential and phytochemical composition of *Ocimum tenuiflorum*, a plant widely recognized for its traditional medicinal uses. The study offers valuable insights into the pharmacological properties of this herb, demonstrating its broad-spectrum antimicrobial effects against both bacterial and fungal pathogens. The identification of bioactive compounds like alkaloids, flavonoids, and terpenoids further enriches our understanding of the plant's therapeutic potential. This research is crucial as it not only supports the growing interest in plant-based antimicrobial agents but also lays the foundation for future studies on their applications in medicine and as natural preservatives. The manuscript is well-structured and provides clear experimental results, making it an essential contribution to the field of ethnopharmacology and natural product research. |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | Yes |  |
| 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 of the article is fairly comprehensive as it provides an overview of the study's aim, methodology, key results, and conclusions. However, I suggest the following points for improvement to make it even more concise and informative:1. Clarification of Methodology: The abstract could briefly mention the specific techniques used to analyze the phytochemical composition (e.g., specific tests for alkaloids, flavonoids, etc.) to provide more context on the research methods.
2. Results Highlight: The results section could be more precise in terms of the significance of the antimicrobial activity. For example, mentioning the MIC and MBC/MFC values for both bacterial and fungal strains in a more structured way would give readers a clearer idea of the plant’s effectiveness.
3. Potential Applications: Adding a brief sentence on the potential therapeutic applications or real-world implications of the findings (e.g., use in drug development or as a natural preservative) would make the abstract more relevant to the scientific community.
4. Inclusion of Future Directions: A brief mention of the need for further research or the next steps in studying *Ocimum tenuiflorum* (e.g., in vivo studies, toxicity evaluation, or formulation development) would add depth to the abstract.
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| **Are subsections and structure of the manuscript appropriate?** | Yes |  |
| **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.** | This manuscript appears scientifically robust and technically sound, as it employs well-established and widely accepted methods for evaluating the antimicrobial potential of plant extracts. The use of qualitative phytochemical screening, agar diffusion method for antibacterial testing, and the poisoned food technique for antifungal activity ensures a comprehensive analysis of *Ocimum tenuiflorum*'s bioactive properties. The methodology for determining the Minimum Inhibitory Concentration (MIC) and Minimum Bactericidal Concentration (MBC) is appropriately chosen to assess the potency of the extracts, adding credibility to the findings. Furthermore, the clear presentation of results, including inhibition rates and MIC values, supports the validity of the study, demonstrating its technical accuracy and scientific integrity. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.****-** | Yes, the references is sufficient and recent. |  |
| Minor REVISION commentsIs the language/English quality of the article suitable for scholarly communications? | Yes |  |
| Optional/General comments |  |  |

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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)* |  |

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| Reviewer Details: |
| Name: | **Sudhanshu Kumar Jha** |
| Department, University & Country | **Bundelkhand University, India** |