

Review Form 3

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| Journal Name: | International Journal of Environment and Climate Change |
| Manuscript Number: | Ms_IJECC_122303 |
| Title of the Manuscript: | A COMPARATIVE STUDY OF PHYTOREMEDIATION OF HEAVY METALS IN SOIL USING BRASSICA JUNCEA, AND GREEN GRAM |
| Type of the Article | Original Research Article |

Review Form 3

PART 1: Review Comments

| Compulsory REVISION 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> |
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| <p>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.</p> | <p>This work focusses on a comparative study of phytoremediation using Brassica juncea and green gramme to remove heavy metals such as chromium (Cr) and cadmium (Cd) from contaminated soil. The novel aspect of this study is the incorporation of silica powder from coconut husk into the plants to improve their phytoremediation efficiency. This combination appears to improve heavy metal uptake, thereby increasing the process's effectiveness.</p> <p>Key Points Highlighting Novelty: Integration of Silica Powder: The use of silica powder derived from coconut husk to improve the heavy metal absorption capacity of Phyto remediating plants is a significant breakthrough. This method could potentially improve the efficacy of existing phytoremediation techniques. Comparative Analysis: The study compares the efficacy of Brassica juncea and green gramme in various conditions, revealing which plant may be more effective in specific situations.</p> | |
| <p>Is the title of the article suitable? (If not please suggest an alternative title)</p> | <p>A COMPARATIVE STUDY OF PHYTOREMEDIATION OF HEAVY METALS IN SOIL USING SILICA-INFUSED BRASSICA JUNCEA, AND GREEN GRAM</p> | |
| <p>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.</p> | <p>Yes.</p> | |
| <p>Are subsections and structure of the manuscript appropriate?</p> | <p>Yes</p> | |
| <p>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.</p> | <ol style="list-style-type: none"> 1. Reference table 4. The presence of Cd increases with the addition of bio amendments. 2. Change the titles of Tables 11, 12, 13, and 14. 3. The entire study focusses on Cr and Cd. However, in the conclusion, the author mentions three mentals. What is the third one, and what are the details? 4. Combine comparative tables into a single table, such as merging tables 2 and 4. 5. All parameters for two plants should be included in a single table. 6. Table 5 and 6 can be made as a single table. | |
| <p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :-</p> | <p>Yes. Include these references too in introduction.</p> <ol style="list-style-type: none"> 1. A. K. Mishra et al, Journal of Pharmacy Research, 2014, 8(9), 1233-1238. 2. Sosale S. M, Raju N. S. Heavy Metal Phytoremediation by Crop Species at Hebbal Industrial Area, Mysuru, India. Curr World Environ 2024;19(1). DOI:http://dx.doi.org/10.12944/CWE.19.1.36 3. Adzrin et al, Heliyon, 2024, 10, e29528. 4. Gaurav Saxena, etal. Phytoremediation of heavy metal-contaminated sites: Eco-environmental concerns, field studies, sustainability issues, and future prospects, Reviews of environmental contamination and toxicology. DOI: 10.1007/398_2019_24 <p>Include recent works in literature and rephrase introduction.</p> | |

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| Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications? | Reconsider the sentence framing. Particularly in titles of the tables. | |
| Optional/General comments | Major revision is required. A few tables should be merged. New citations will be included. | |

PART 2:

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| | 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? | <i>(If yes, Kindly please write down the ethical issues here in details)</i> | |

Reviewer Details:

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|----------------------------------|---|
| Name: | R. S. S. Srikanth Vemuri |
| Department, University & Country | Vignan's Institute of Engineering for Women, India |