

Review Form 3

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| Journal Name: | International Journal of Plant & Soil Science |
| Manuscript Number: | Ms_IJPSS_125837 |
| Title of the Manuscript: | Unveiling Genetic Diversity in Grain Amaranth through K-means Clustering and Principal Component Analysis |
| Type of the Article | |

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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| 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>This is an interesting study in the less utilized potential crop and the authors have collected a dataset on germplasm of grain amaranth. The paper is generally well written and structured. However, in my opinion the paper has some flaws with regard to some data interpretation and methodology and I feel this important dataset has not been utilized to its full extent.</p> <p>SEE ATTACHMENT</p> | |
| Is the title of the article suitable? (If not please suggest an alternative title) | Ok | |
| 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. | Please focus the abstract on your study and your results. In particular not as a general importance of the crop. The author has focused more on the importance rather than his own study. More generally, I suggest to focus the manuscript on the scientific results | |
| Are subsections and structure of the manuscript appropriate? | Results and discussion should be separate. There is no discussion in this article. Not justified with the previous results. Materials and methods should be properly written (Check the MS track changes). | |
| 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. | As this is nutritionally important but less utilized potential crop, the work on germplasm also gaining importance. To identify the trait specific germplasm for further utilization in breeding programme is very much important in this time. | |
| Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. | References are not sufficient. Please add more references if not in amaranthus, add from some other crop. Many papers are with clustering and PCA. | |

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| Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications? | Minor revision is needed as per the comments in the manuscript Language is good. | |
| Optional/General comments | The paper may be accepted after incorporation of suggestions made but not in the present form. | |

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

Reviewer Details:

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