

**Review Form 1.7**

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|--------------------------|--|
| Journal Name:            | <b>International Journal of Environment and Climate Change</b>   |
| Manuscript Number:       | <b>Ms_IJECC_108918</b>   |
| Title of the Manuscript: | <b>Analyzing the variability in Maize (Zea mays L.) genotypes using principal component analysis under varied ecosystems</b> |
| Type of the Article      |  |

**PART 1: Review Comments**

|  | <b>Reviewer's comment</b>  | <b>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)</b> |
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| <p><b>Compulsory</b> REVISION comments</p> <p>1. <b>Is the manuscript important for scientific community?</b><br/>(Please write few sentences on this manuscript)<br/>(Possible)</p> <p>2. <b>Is the title of the article suitable?</b><br/>(If not please suggest an alternative title)<br/>No. ....such as under irrigated, rainfed conditions.</p> <p>3. <b>Is the abstract of the article comprehensive?</b><br/>No, (As comment).</p> <p>4. <b>Are subsections and structure of the manuscript appropriate?</b><br/><b>Yes.</b></p> <p>5. <b>Do you think the manuscript is scientifically correct?</b><br/>-</p> <p>6. <b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b><br/>-</p> <p><b>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</b></p> | <p>Comment for the Ms_IJECC_108918, Analyzing the variability in Maize (Zea mays L.) genotypes using principal component analysis under varied ecosystems.</p> <p>1. <i>From "The present investigation is done to dissect out the traits contributing the grain yield by Principal Component Analysis." in the aim under the introduction section. The study objective of the article is unclear. The experiment is divided into two aspects [(22 genotypes and two growth conditions; irrigated and rainfed)]. Please rewrite the goal in accordance with these, mentioning the yield. By the way, in the side, PCA may only serve as a tool for analysis.</i></p> <p>2. Please include the full names of 22 genotypes (with cultivars or breeding lines?) in the material section. In the Material and table 2, write the full names of ASI and HSW. How many parameter measurements (replications) are there in the experiment?</p> <p>3. Please explain why the combination of PC1-PC3 and PC2-PC3 is in the MS.</p> <p>4. Rewrite the experiment to find out which cultivars/genotypes are related to/recommended for grain yield.</p> <p>5. Include an explanation/discussion of the results of a <u>corelation</u> between the genotype, two growth conditions within the parameters, and grain yield (as determined by PCA analysis). Then, in the MS, a revision may be more interesting in a new version of the abstract and conclusion.</p> <p>.....</p> |  |
| <p><b>Minor</b> REVISION comments</p> <p>1. <b>Is language/English quality of the article suitable for scholarly communications?</b></p>   | -  |  |
| <p><b>Optional/General</b> comments</p>  |  |  |

**PART 2:**

|  | <b>Reviewer's comment</b>   | <b>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)</b> |
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| <p><b>Are there ethical issues in this manuscript?</b></p> | <p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p> |  |

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**Reviewer Details:**

|                                  |                                     |
|----------------------------------|-------------------------------------|
| Name:                            | <b>Suravoot Yooyongwech</b>         |
| Department, University & Country | <b>Mahidol University, Thailand</b> |