

Review Form 1.6

Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	Ms_IJPSS_83006
Title of the Manuscript:	Assessment of genetic variability and diversity in rice cultivars of North Bank Plain Zone of Assam for traits associated with grain yield and adaptation under moisture stress
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	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)
Compulsory REVISION comments	<p>Abstract The objectives were clearly stated. However the materials and methods was very scanty. The authors should briefly give the treatment and experimental design in the abstract. Reading the abstract alone should be able to give readers an idea of how the evaluation was done. For instance, "54 rice genotypes were arranged in an alpha lattice design with x replications and assessed fortraits under moisture stress conditions."</p> <p>Introduction</p> <ol style="list-style-type: none"> 1. The authors did not do extensive review of literature. 2. The authors made several categorical statements without supporting with references. 3. The whole of the introduction section had only three citations. They need to seriously improve this section with a review of literature on the problem they want to solve and past studies that have been conducted on rice as far as those problems are concerned. 4. The objective stated at the end of the introduction is a deviation from the one stated in the opening statement of the abstract. 5. The authors indicated that they were assessing genetic variability and diversity of 54 rice genotypes with respect to yield and traits associated with moisture stress tolerance. 6. However in the introduction, the authors sought to assess the 54 genotypes for diversity with respect to some root traits which are related with moisture stress adaptation 7. The authors need to harmonise the objective in the document. <p>Materials and methods</p> <ol style="list-style-type: none"> 1. The authors need to perform principal component analysis to determine the trait that drives the genetic variability among the genotypes studied. 2. They can also perform correlation analysis to determine how associated the traits are in terms of identifying secondary traits for use in indirect selection <p>Results and discussion</p> <ol style="list-style-type: none"> 1. in some cases, the authors only compare their findings with other authors who reported similar findings without giving reasons for their findings or possible causes that accounted for the observations they made 2. for instance, the authors did not give the implications of having higher PCV and GCV on selection 3. the authors should include standard deviation of the mean values of each trait in Table 2 4. it is difficult to obtain 0.00 as the EV of root to shoot ratio, PV, GV and EV for root length density. 5. The authors should be consistent with the decimal places of the values in Table 2. In some cases, the values have been limited to two decimal places whilst others have been kept at three decimal places. 6. Instead of having Table , the authors should perform principal component analysis to determine which trait is contributing to the greater proportion of the variability. 	
Minor REVISION comments	The authors should improve the literature citation within the introduction and also acknowledge them appropriately	

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Optional/General comments	This is a very good study with interesting findings. However, the literature review wasn't detailed enough. The authors need to beef up the discussion section with relevant literature that gives more detailed explanations of their findings and the implications of that information in future breeding activities regarding the germplasm used. It is not enough to say that similar results were obtained by other studies. The authors need to give the reasons for some of the findings and their implications in plant breeding.	
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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?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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