

Review Form 1.7

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| Journal Name: | International Journal of Plant & Soil Science |
| Manuscript Number: | Ms_IJPSS_106957 |
| Title of the Manuscript: | Genetic Variability and Correlation Studies for Yield and Yield Related Traits in Rice (<i>Oryza sativa</i> L.) |
| Type of the Article | Original Research Article |

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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) |
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| <p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p> | <p>=The higher value of phenotypic coefficient of variation (PCV) compared to the corresponding genotypic coefficient of variation (GCV) for all the studied traits indicated that there was an influence of the environment.</p> <p>=Grain yield per plant, number of total tillers per hill, number of spikelets per panicle, and number of panicles per hill. High heritability coupled with high genetic advance was observed in all the characters which reflected that the direct selection of these characters based on phenotypic expression by simple selection method for yield improvement would be more reliable.</p> <p>=Grain yield per plant showed significant and positive association with days to 50% flowering, plant height, biological yield per plant, number of panicles per hill, number of total tillers per hill, number of spikelets per panicle, days to maturity, harvest index and panicle length indicating selection of these characters for yield improvement may be rewarding.</p> <p>=Both at phenotype and genotype level days to 50% flowering, plant height, number of tillers per hill, number of panicles per hill, number of spikelets per panicle, days to maturity, biological yield per plant and harvest index had positive direct effects on grain yield per plant indicating their importance during selection in yield improvement program.</p> <p>=Moreover, the information generated from this study, can be exploited in future rice breeding program.</p> <p>The title of the article is suitable</p> <p>The abstract of the article is comprehensive</p> <p>Subsections and structure of the manuscript are appropriate</p> <p>The manuscript is scientifically correct</p> <p>The references are sufficient and recent</p> | |
| <p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p> | <p>English quality of the article is suitable for scholarly communications</p> | |
| <p>Optional/General comments</p> | <p>=The present investigation consists of 25 Rice genotypes used for the experiment was conducted during <i>Kharif- 2019</i> in Randomized Block Design with three replications at field Experimentation center, Department of genetics and plant Breeding. Sam Higginbottom University of Agriculture Technology and Sciences, Prayagraj (Allahabad).</p> <p>=The aim of the present study was to estimate genetic parameters of 13 yield attributing traits to study Genetic Variability, heritability, genetic advance and correlation coefficient analysis and path analysis with a view to select better yield attributes in rice.</p> <p>= From the present investigation it is concluded that among 20 genotypes of rice, RNR-1446 was</p> | |

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| | <p>found superior followed by MTU-1271 for grain yield per plant over the check (NDR- 359). High PCV, GCV recorded for Biological yield per plant, High Heritability recorded for Grain yield per plant.</p> <p>=High Genetic Advance was recorded for Number of spikelets per panicle indicating the predominance of additive gene effects. Correlation at both Genotypic and phenotypic level, Grain yield per Plant showed a a positive significant association with biological yield per plant, Grain yield per plant, Test weight. In path analysis, at both phenotypic and genotypic level were depicted by grain yield per plant, biological yield per yield, no of panicles per hill.</p> <p>=These are the characters provide broad spectrum of variability in segregation and may be used as parents in the future hybridization programme to develop desirable genotypes for grain yield improvement in Rice genotypes</p> | |
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PART 2:

| | Reviewer's comment | Author's comment <i>(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)</i> |
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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> | |

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