



SDI Review Form 1.6

Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	Ms_AJEA_24071
Title of the Manuscript:	Genetic variability for water logging and salinity tolerance in pigeonpea (Cajanus cajan (L.) Millsp.) under in vitro and in vivo conditions
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:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



SDI Review Form 1.6

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	Because in material and methods section is too complicated, I do not read result and discussion sections. some knowledge need to complete material and methods section. It is indicated in below: 1. why is in vitro study repeated two year? 2. how is it determined that 200 ml solution is enough for submerged? 3. is it enough for submerged for 7 days? 4. what is the temperature during submerged? 5. it is not informed whether seed germinated or not during the submerged period. This station should be explained. 6. it is not understand that germination test stop in 7 days. 7. vigour index is wrong term, I thing that seedling weight vigour index is true. Also, how index classes are determined? 8. in vivo screen study: what is the weather during to pot treatment (if pot in field??)	1. The in vitro study was repeated for two years for confirmation of results of first year. 2. The volume was standardized before start of the experiment. 3. Generally water logging, if occurred at sowing, remain for 6-7 days, hence 7 days submergence is enough. 4. The temperature during submergence was 25±1°C. 5. During submergence, seeds of some genotypes germinated (data not provided). 6. As per ISTA (International Seed Testing Association), the first germination is taken after 4 days. For pigeonpea 7 days are enough for germination. 7. It is changed to seedling vigour index in the text and tables. 8. The in vivo study was under taken during normal cropping season in the



SDI Review Form 1.6

	9. Why water logging and salt treatments was applied after 30 days of sowing? And which growth stage of plant in this time? 10 . Why treatments were applied for 5 days? 11. in experimental design and statistical analysis section: it is said that The analysis of variance (ANOVA) was performed on single year data as well as on pooled data of two years using statistical analysis, but year was not seen in equation. If especially, pot screen carry out in field conditions, year must be here in equation. 12. it is not understand how The correlation coefficients were worked out . it is known that n must be ≥ 8 for correlation. 13. in correlation table, $**p=0.01$ is written but it is wrong. All of this reasons Major revision is favoured.	field under protected conditions. 9. Generally, rainy season starts about one month after pigeonpea sowing, hence it was decided to give water logging and salinity treatment 30 days after sowing. At this time plants were at vegetative growth stage. 10. After heavy rains, generally water stagnation occurred for 4 to 5 days at farmer's fields; hence treatments were applied for 5 days. 11. The equation is corrected in the text. 12. Correlation coefficients were worked out on 28 genotypes; hence the 'n' is 28. 13. Changed as "Significant at 1% level".
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		