

Review Form 1.7

Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_119273
Title of the Manuscript:	Correlation and path analysis in cowpea (<i>Vigna unguiculata</i> (L.) Walp.)
Type of the 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)
<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>=Genotypic correlations exceeded phenotypic correlations, underscoring genetic influence over environmental factors. Key findings included plant height's positive correlation with branches per plant and days to first flowering, while negatively correlating with nodes on main branches and pod diameter.</p> <p>=Traits such as number of pods per plant and average pod weight showed strong positive correlations with pod yield, highlighting their importance in breeding programs.</p> <p>=Path coefficient analysis revealed significant positive direct effects on pod yield per plant from traits including plant height, branches per plant, and average pod weight. Indirect effects through traits like days to first flowering and non-reducing sugars also contributed to pod yield.</p> <p>=These insights into trait correlations and effects are crucial for developing superior cowpea genotypes with enhanced yield and agronomic traits.</p> <p>=The findings emphasize the importance of genetic variability in breeding programs, enabling the selection of superior genotypes to improve cowpea productivity.</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>=This study, conducted at Babasaheb Bhimrao Ambedkar University, Lucknow, India, over 2020-21 and 2021-22, aimed to examine genetic variability, heritability, and genetic advance among 30 diverse cowpea genotypes. The research employed a Randomized Block Design (R.B.D.) with three replications, assessing twenty-six quantitative traits.</p> <p>=The pod yield per plant had positive and highly significant correlation with number of green pods per plant, no. of pods per plant, pod diameter (cm), average pod weight (g), no. of seeds per pod, weight of 100 seeds (g), T.S.S., total sugars (mg/g fw), reducing sugar ((mg/g fw) and non-reducing sugars (mg/g fw) both at genotypic and phenotypic levels in both the years (first year and second year).</p> <p>=This showed that most of the contributing traits had significant positive traits on economic trait.</p> <p>=At both the genotypic and phenotypic levels in both years <i>i.e.</i>, 2020-21 and 2021-22, the direct and indirect effects of the traits No. of nodes on main branches, days taken for first flowering, days to 50% flowering, no. of cluster per plant, no. of peduncles per plant, pod length (cm), protein content, T.S.S., non-reducing sugars and pod yield (q/ha) revealed most of the metric traits were</p>	

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	associated with economic yield. =Selection will be rewarding for a breeding program including these traits.	
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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>
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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