

**Review Form 1.7**

Journal Name:	<b>Journal of Experimental Agriculture International</b>
Manuscript Number:	<b>Ms_JEAI_116259</b>
Title of the Manuscript:	<b>ASSESSMENT OF GENETIC DIVERSITY IN MUNGBEAN (<i>Vigna radiata</i> L.)</b>
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><b>Compulsory</b> REVISION comments</p> <ol style="list-style-type: none"> <li>1. <b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</li> <li>2. <b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</li> <li>3. <b>Is the abstract of the article comprehensive?</b></li> <li>4. <b>Are subsections and structure of the manuscript appropriate?</b></li> <li>5. <b>Do you think the manuscript is scientifically correct?</b></li> <li>6. <b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></li> </ol> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>The manuscript is important for scientific community, Mungbean (<i>Vigna radiata</i> L.) Wilzeck is one of the most important edible legume crops. 33 mungbean genotypes, including three check varieties, were recorded on fourteen quantitative characters. The data were subjected to Mahalanobis D2 statistics ( Mahalanobis, 1936), and genotypes were grouped into different clusters following Toucher's. A total of six clusters were formed. Cluster VI contains the highest number of genotypes (17), followed by clusters I, II, and V with 7, 4, and 3 genotypes, respectively. Clusters III and VI are monogenotypic. The inter-cluster distance was highest between clusters I and VI (250.89) and lowest between clusters I and III (57.74), whereas the intra-cluster distance was highest in cluster IV (63.97) and lowest for clusters III and VI (0.00), which have only one genotype. Cluster III records the highest mean for seed yield per plant, number of pods per plant, and lowest days to maturity, and Cluster VI also records the second highest mean for seed yield per plant, highest seed germination%, speed of germination, and seed viability. The maximum contribution towards genetic diversity was determined by the number of primary branches per plant (12.12%), followed by the number of secondary branches per plant. Genotypes belonging to clusters III and VI may be taken for a hybridization 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 appropriate.</p> <p>The manuscript is scientifically correct.</p> <p>References are sufficient and recent.</p>	
<p><b>Minor</b> REVISION comments</p> <ol style="list-style-type: none"> <li>1. <b>Is language/English quality of the article suitable for scholarly communications?</b></li> </ol>	<p>English quality of the article is suitable for scholarly communications.</p>	
<p><b>Optional/General</b> comments</p>	<p>The experiment was carried out in a randomized block design during kharif 2021-2022 at the Genetics and Plant Breeding Farm, (in Deva University of Agriculture and Technology ??), add latitude and longitude).</p> <p>The experiment material consists of 33 mungbean genotypes, ( a table describing the genotypes would be desirable).</p> <p>Figure 3: Correct <u>Mahalnobis Euclidean disatnce</u></p>	

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**PART 2:**

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

**Reviewer Details:**

Name:	<b>Leonardo Ornella</b>
Department, University & Country	<b>Spain</b>