

## Review Form 1.6

Journal Name:	<a href="#">International Journal of Plant &amp; Soil Science</a>
Manuscript Number:	Ms_IJPSS_88185
Title of the Manuscript:	Genetic studies of important agronomic traits of sweetpotato ( <i>Ipomoea batatas</i> (L.) Lam) genotypes evaluated under different agro-ecological conditions
Type of the 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:

(<https://www.journalijpss.com/index.php/IJPSS/editorial-policy> )

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**PART 1: Review Comments**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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)
<b>Compulsory</b> REVISION comments	<p>Comments            Author has conducted experimented keeping in mind the important traits and objectives for the improvement of sweetpotato and presented important information after analysis of data. Author is suggested to improve manuscript grammatically. Following points have been raised up section wise during manuscript review:</p> <p>Title can be modified as            'Assessment of genetic parameters for important agronomic traits in sweetpotato (<i>Ipomoea batatas</i> (L.) Lam) germplasm in two agro-ecological regions of Nigeria'</p> <p><b>Abstract</b>            Sentence 'Root yield ranged 0.00 – 29.33 tons/ha at Umudike and 0.30 – 27.74 tons/ha at Otobi with nine genotypes having root yield &gt; 20 tons/ha and five having same yield level at Otobi.' instead mention genotypes which performed well in both locations separately and at individual location separately.</p> <p><b>Introduction</b>            Author is suggested to add recent production statistics of sweet potato. It is available for year 2020 on FAOSTAT.</p> <p><b>Materials &amp; Methods</b>  <b>Sentence</b> 400 kg of NPK 15:15:15 was applied to the field – is not clear. Mention per hectare recommended fertilizer or nutrient dose</p> <p><b>Data Collection</b>            If marketable root size is <math>\geq 100g</math>, then size of unmarketable roots should be <math>&lt; 100g</math>, not <math>\leq 100g</math></p> <p><b>Data Analyses</b></p> <ul style="list-style-type: none"> <li>• Write formulae of different components calculated in proper format instead of running text for more clarity. For eg</li> </ul> <p><b>Instead of writing</b> 'Environmental variance, <math>\delta^2e = MSe</math>; Genotypic variance, <math>\delta^2g = (MSg - Mse)/r</math>; Phenotypic variance, <math>\delta^2p = \delta^2g + \delta^2e</math>; Broad sense heritability, <math>H_B = \delta^2g / \delta^2p</math> (where: MSe = mean square of error; MSg = Mean squares of genotypes; and r = number of replications)'.  <b>Write as</b>            Environmental variance (<math>\delta^2e</math>) = MSe            Genotypic variance (<math>\delta^2g</math>) = (MSg – Mse)/r            Phenotypic variance (<math>\delta^2p</math>) = <math>\delta^2g + \delta^2e</math>            Broad sense heritability (<math>H_B</math>) = <math>\delta^2g / \delta^2p</math>            Where MSe = mean square of error; MSg = Mean squares of genotypes; and r = number of replications</p> <ul style="list-style-type: none"> <li>• For analysis of percent incidence of SPVD data, the percent data is required to be transformed either by using arc sine transformation or square root transformation before analysis.</li> <li>• Disease severity data will be again in percent, it is calculated as below:            Sum of all disease rating x 100/ Total no. of rating x maximum disease grade            Author is suggested to do necessary corrections in SPVD data and then do analysis to get better results.</li> </ul> <p><b>Results and discussion</b></p> <ul style="list-style-type: none"> <li>• In table 3 and 4, mention the data of both replication in one table to reduce the no of tables. Use short forms for different traits like done in other tables.</li> </ul> <p>In Table 3 and 4, mention the significance at one level only. Author has mentioned *, ** and *** for <math>p &lt; 0.05</math>, <math>p &lt; 0.01</math> and <math>p &lt; 0.001\%</math>, respectively, but in table there is only *** as results significant at <math>p &lt; 0.001\%</math> will also be significant at <math>p &lt; 0.05</math> and <math>p &lt; 0.01</math></p>	

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	<ul style="list-style-type: none"> <li>• <b>Sentence</b> 'While all the genotypes with yield &gt;20 tons/ha also had number of marketable roots <math>\geq</math> 20, none of the genotypes with &gt; 20 tons/ha yield and &gt; 20 number of marketable roots had up to 20 unmarketable roots except Agege,' is very long and not clear.</li> <li>• In SPVD severity scale, mention which score is considered as resistant like 0= Immune, 1- Resistant, 2= moderately resistant and so on 5= highly susceptible, to make results more clear and informative.</li> <li>• Table 5 and 6, mention/highlight significant superior genotypes for different traits.</li> <li>• In table 7, PCA data is presented, it is not clear that which location data was used to do PCA and why PCA was not performed for both locations? Author is suggested to look into this and do necessary corrections.</li> <li>• Number of tables are more, it is suggested to reduce the number of tables by merging two tables like Table 8 and 10 can be put together in landscape format and table 9 and 11 can be in one table.</li> <li>• No need to mention <math>V_e</math> (Env variance) in table 8 and 9. In some tables author has given short names for traits like MKTNO = Number of marketable storage roots, same pattern can be followed in all tables and data of two locations can also be put in one table.</li> <li>• Author is suggested to give proper justification for very high values of PCV and genetic advance for some traits.</li> </ul>	
<b>Minor</b> REVISION comments		
<b>Optional/General</b> comments		

**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><u>(If yes, Kindly please write down the ethical issues here in details)</u></i>	

**Reviewer Details:**

Name:	Anju Pathania
Department, University & Country	DAV University, India