



SDI Review Form 1.6

PART 1:

Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	MS: 2012/AJEA/2206
Title of the Manuscript:	Farmers' agronomic and social evaluation of the productivity, yield and cooking quality of four cassava varieties

General guideline for Peer Review process: (Note: Title of different sections as proposed below may differ in case of review paper / case reports)

- *Is the problem/objective of this study original and important? SCIENCEDOMAIN international strongly opposes the practice of duplicate publication or any type of plagiarism. However, studies which are carried out to reconfirm / replicate the results of any previously published paper with new dataset, may be considered for publication. But these types of studies should have a 'clear declaration' of this matter. If you suspect any unethical practice in this manuscript, kindly write it in the report with some proof/links.*
- *Materials & methods (Kindly comment on the suitability and technical standards of the methods. Sufficient details of the methods/process should be provided so that another researcher is able to reproduce the experiments described)*
- *Results & discussion (Kindly comment on: 1. Are the data well controlled and robust? 2. Authors should provide relevant and current references during discussion. 3. Discussion and conclusions should be based on actual facts and figures. Biased claims should be pointed out. 4. Are statistical analyses must for this paper? If yes, have sufficient and appropriate statistical analyses been carried out?)*
- *Conclusion (Is the conclusion supported by the data, discussed inside the manuscript? Conclusions should not be biased and should be based on the data, presented inside the manuscript only. Authors should provide adequate proof for their claims without overselling them)*
- *Are all the references cited relevant, adequate? Are there any other suitable current references authors need to cite?*
- *SDI believes in constructive criticism. Reviewers are encouraged to be honest but not offensive in their language. It is expected that the reviewer should suggest the authors on how they can strengthen their paper to make it acceptable. Comments of the reviewers should be sufficiently informative and helpful to reach a Editorial Decision. We strongly advise that a negative review should also explain the weaknesses of any manuscript, so that the concerned authors can understand the basis of rejection and he/she can improve the manuscript based on those comments. Authors also should not confuse straightforward and true comments with unfair criticism.*
- *We are very much reluctant to go against suggestions (particularly on technical areas) of the reviewers. Therefore, authors are requested to treat the suggestions of reviewers with utmost importance.*
- *This form has total 9 parts. Kindly note that you should use all the parts of this review form.*



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PART 2: Review Comments

	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>
<u>Compulsory</u> REVISION comments	- Line 109. The authors should mention where (for what kind of environment) the improved varieties were developed. - Lines 111-118. Authors should make clear if border plants were left as border or actually harvested as part of the experimental plots. - Lines 111-118. Authors should provide information on the origin of the stems from improved varieties. Where they produced in the same conditions as the traditional ones? Where they transported from a different region? How was the transportation done? Any chance that transport may have damaged or reduced the physiological health of the stems? Where all stems stored in the same conditions and for the same period of time? - Lines 120-124. More details on the way quality assessments of the roots was made are necessary. How were the panels organized. Did people know the origin of the roots while doing the evaluation ("blind" test)? - In every table the meaning of SED and LSD must be explained in a foot note. SED and LSD values should be provided for each column. - Line 198. I suspect that high dry matter in the stem will be due to higher starch content and, therefore, it is not necessarily true that they will contain more N. Authors should provide a references clearly demonstrating that high DM in stems results in higher N content. Otherwise this statement should be deleted and the argument that there is	The environment for which the improved varieties were developed included the area where the current study was carried out. This has now been indicated The border plants were not harvested as part of the experimental plots. The stems of the improved varieties were obtained from an Agricultural Station about 7 km from the community where the study was carried out. All the stems were stored under the same environment prior to planting. This has now been elaborated M&M section in the revised version The evaluation panel did not know the origin of the roots and this have been included in the revised version. The SED and LSD are now explained in a foot note and provided in each column Agreed. It is not the high dry matter content of the stem per say but rather cassava stems rather contains about 1.0-1.3% N and therefore varieties with high dry stem biomass will contain high amount of N



SDI Review Form 1.6

	more removal of N dropped. 7. Table 3. It seems to me that the title should be “....interaction on total dry biomass of various...”. Units should be specified (is it % or t/ha⁻¹?). Units for harvest index in Table 4 (0 to 1) should also be added. 8. Lines 277-278. It seems to me that K removal will depend more on root production rather than harvest index. 9. To be fair, in the Conclusions the authors should try to properly evaluate if the improved varieties were somewhat affected by factors already mentioned in this review. Is Wenchi Municipality among the target environments considered while developing the improved varieties? Was the sanitary / physiological status of the stems IDENTICAL for the local varieties than for the improved ones? If there were differences the authors should mention them in this section. Acknowledging this does not necessarily invalidate the results of the analysis but provide a more accurate assessment of the relative values of improved versus landraces as well as the need to properly target the development of improved varieties to the clearly defined environments.	The title of Table 3 has been changed to “Effect of variety and fertilizer interaction on total dry biomass (ton/ha) of various plant parts” as suggested by the reviewer Yes. I agreed with the reviewer and this has been changed in the ms. All the suggestions made by the reviewer has been put into consideration in the revised version
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Minor REVISION comments	1. In the abstract two times the word “tuber” should be replaced by “roots” or “tuberous roots” 2. Line 84. It should read “...originally a semi-deciduous...” 3. Line 113. It should read “...received no fertilizer, 4 t/ha⁻¹ poultry manure...” 4. Line 165. It should read: “... was also improved from 3.3 to 1.7...” 5. Line 198. I suspect that high dry matter in the stem will be due to higher starch content and, therefore, it is not necessarily true that they will contain more N. Authors should provide a references clearly demonstrating that high DM in stems results in higher N content. Otherwise this statement should be deleted and the argument that there is more removal of N dropped. 6. Line 206. The authors could probably clarify if leaves need to be incorporated into the soil for them to really have an effect on soil fertility or leaving them just on the ground is enough? 7. Line 220. The relationship between harvest index and root yield holds true only within an “ optimum” range. 8. Line 261. It should read: “...Owing to this, farmers usually...” 9. Line 277. It should read: “...in this study have the tendency...”	The word tuber has now been replaced with roots. The letter ‘a’ has been inserted Agreed and the correction has been effected Agreed. Change effected in the ms. It is not the high dry matter content of the stem per say but rather cassava stems rather contains about 1.0-1.3% N and therefore varieties with high dry stem biomass will contain high amount of N. Reference has been provided. Yes leaves need to be incorporated where feasible to obtain optimum results. Yes. I agree with the reviewer Changes effected Change effected
Optional/General comments	This is an interesting article and I enjoyed reading it.	

I request that authors provide additional information to make sure that the landraces did not have any advantage (except genetic ones) over the improved varieties. I am a breeder and in my review I may have had a somewhat biased scepticism that the landraces were better than the improved varieties. However, I truly think that the request of added information is necessary and will enhance the quality of the manuscript”