



SDI Review Form 1.6

Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	2014_AJEA_9843
Title of the Manuscript:	ANALYSIS OF AFLP MARKERS FOR SCREENING RESISTANCE TO COMMON BEAN ROOT ROT (<i>Pythium</i> spp.)
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>)



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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)
Compulsory REVISION comments	Line 32-36: The justification provided here does not concur with the objective of the study.....to evaluate the potential of AFLP markers to differentiate resistant and susceptible <i>Pythium</i> root rot phenotypes. There is totally no link connecting the problem statement and justification with the objective. The section is poorly written. The author should properly research on the topic. Line 39-42: The statement is misplaced and should be excluded from introduction and put in an appropriate section may be under conclusion. Line 46: Describe the methods used to determine the levels of resistance as resistant, moderately resistant, and susceptible lines. Did they use any marker???? Line 49: $\frac{3}{4}$ of sterilized soil.....what quantity of soil is this?????. Why did the authors not just pick the leaves for DNA extraction from the small holder farmers instead growing the in a controlled environment?????. I think this may be misleading. Such studies need samples from natural fields.	This section has been reworked as indicated in the text We have placed it in conclusions. The pathogenicity tests of the bean lines have been previously described in Otsyula et al 2005. No MAS techniques were employed then. We have corrected the statement. For reproducibility purposes, all bean seeds were raised under similar environment. The study site and the laboratory for the molecular experiments were far apart. The student from Masinde Muliro university I Western Kenya had



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	Line 49-54: were the leaves bulked for all the bean lines for DNA extraction???. That would be misleading. Did the authors design the 7 primers? If not then citation should be given. What were the PCR conditions?? Line 59: electrophoresis using a sequencer??? Is that statement correct????. Line 49-93: The entire study design is poorly written and should be re-done to show how the objectives were achieved including the protocol 102-120: These results should show whether AFLP can be used to differentiate resistant and susceptible lines. The results should be clearer. Line 122-134: these are not part of results and were not described in the materials and methods. Results section is poorly written and does not reflect the output of the	to collect bean samples from KARI- Kakamega and the farmers and perform the molecular analysis in the lab at Bangor University, North Wales United Kingdom. Leaves were not bulked, the student used the common beans provided from Kenya Agricultural Research Institute and together with samples collected from farmers' seed stockists and market centers in Kenya, and they were planted in the green house of Bangor university farm in North Wales. The primers were not designed by the authors because of limited time of study. We have acknowledged the source The statement is wrong. We have corrected it. The protocol step wasn't achieved due to lack of publicly available primer sequence of PYAA₈₀₀ for order, despite efforts of requesting from the author. This is preliminary work to be advanced. We have explained that it is a potential marker that can be used to delineate resistant and susceptible dry bean varieties. From the breeder who did the convectional breeding exercise clearly stated that the Kenyan GLP 585 was susceptible variety though records placed it as being moderately resistant. We did not capture the gel photos because the DNA samples were run in a sequencer not the gel electrophoresis method. We have corrected the
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	objectives. What are the authors describing here??? Where are the gel photos showing the AFLP fragments? The results shown here do not describe the work done by the authors. Line 136-178: the authors are not discussing the results of their work. Discussion is poorly written, the authors are describing studies that they have not done. That is not correct!!! Line 188-195: the authors should discuss their work not other peoples work. Line 196-214: the authors should make conclusion from their own results. This section is poorly done and should be totally be redone. The title of this work does not reflect what is reported.	sentence. Discussion has been redone as suggested Conclusions have been redrawn based on the objectives THE TITLE HAS BEEN CHANGED TO READ ANALYSIS OF AFLP MARKERS FOR SCREENING RESISTANCE TO COMMON BEAN ROOT ROT (Pythium spp.)
<u>Minor</u> REVISION comments	None	
<u>Optional/General</u> comments	The paper requires major corrections. The authors should work closely with a molecular scientist.	