



SDI Review Form 1.5

PART A:

Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	MS: 2012/AJEA/1714
Title of the Manuscript:	Genotype by Environment (G x E) Modeling of the Variable Initiation of Parthenocarpy <i>sensu stricto</i> in <i>Musa</i> : Elucidation of the Environmental Components of Variable Expressivity of Parthenocarpy in a Facultative apomictic <i>Musa acuminata</i> Subspecies Microcarpa Model System.

(Note: Title of different sections as proposed below may differ in case of review paper)



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PART B: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part and write here 'Corrected' if not agreed, give suitable justifications)
General comment:	Manuscript needs professional English editing. As written it may be difficult its reading. The author(s) use(s) a wordy, verbose language. A straight to the point write-up will facilitate understanding of this manuscript	Some of the words have been synthesized and edited to convey message to ease understanding.
Specific comments:	Author(s) should define acronyms at first use and thereafter always write then unless starting a paragraph The species names should be written following the known rules The names cited in text lack consistency: author(s) wrote them either in small caps or with big and small letters	The acronyms have been defined in the text before its subsequent use of reference. For example the Days to Rachis Emergence (DTRE), Genome X Environment (G x E), Vegetative parthenocarpity Expressivity (VPE) and others were defined.
Title and abstract	Long title with buzzwords that do not seem to be used rightly. The abstract should clearly state the research rationale, establish hypothesis and indicate what biological questions this research aims to address. Keyword list should follow alphabetical order	The long title seems to be long as indicated by the reviewer, but we decided to use it that way in order to explain other aspect of G X E modelling as related to parthenocarpity in Musa. Keyword list corrected in alphabetical order
Introduction (Is the problem/objective of this study original, important and well defined?)	Lines 80 to 91 do not belong to this section but as a concluding remark in the Discussion section	Corrected
Are all the references cited relevant, adequate? Are there any other suitable current references authors need to cite?		
Materials & methods (Kindly comment on the suitability of the methods. Sufficient details of the methods should be provided to allow peers to evaluate and/or replicate the work)	Onne is note a proper rainforest cite but a degraded forest margin The Materials and methods section include repetitive text. It may be shortened The seasons of recording data or the cycle of production (plant crops, ratoon 1, ratoon 2...) are more important for measuring traits in a perennial crop such as <i>Musa</i> Predicting phenotypes as per the method used does not seem to be robust because it will require data for modelling and independent data for verifying such a model, which should be based on best linear unbiased predictors (BLUP)	Over the years Onne has been characterized and classified as rainforest zone in the humid agro ecological center of Nigeria by IITA. Several researches have been conducted by PhD, MSc, and undergraduate research fellows. Repetitive text have been removed Of course, the comments indicated by the reviewer is a good point that will require further research, but does not



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		necessarily rule out the model used for predicting phenotypes as per the method of phenotyping assay for the developmental genetic characterization used, but further study using independent data may be robust and feasible and offer fruitful direction in variable expressivity based on BLUP. We will consider this option in the future design of this work to ensure continuation in this study for further prediction.
Results & discussion (Kindly comment on: 1. Are the data well controlled and robust? 2. Authors should provide relevant 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?)	As noted above (M&M) this referee has doubts if the appropriate data recorded and analyses done for some of the statements made in both sections, especially the Discussion that seem to be very speculative and trying to extrapolate results to other species that are not even related to <i>Musa</i>	It is NOT speculative <i>per se</i> , but we are trying relating the study to what has been done before with respect to expressivity of parthenocarpy versus "Pickelhauben" and G x E dependence using tomato whereby fruit malformation was observed in genetic background, and also to relate the genetic alteration of tomato via auxin synthesis. The purpose was to give us a background gaining into a wider scope of future research on <i>Musa</i> species
Are there any ethical or competing interest issues?	None to the best of my knowledge	No competing interest or ethical issues
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)	No as indicated above	
References	Vuylsteke 1990 missing in list	Correction effected as indicated