



SDI Review Form 1.6

Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	2014_AJEA_10400
Title of the Manuscript:	EFFECT OF DIFFERENT RATES OF YARALEGUME FERTILIZER ON SOYBEAN {GLYCINE MAX (L.) MERRIL} INOCULATED WITH RHIZOBIUM
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:

(<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 comments (if agreed with reviewer, corrects the manuscript and highlight <i>that part in the manuscript. It is mandatory that authors should write his/her feedback here</i>)
<u>Compulsory</u> REVISION comments	• Analysis of variance should not be one way, but it should be two way or general analysis of variance since there were two main factors that have been designed with complete factorial combinations • All the graphs were not statistically supported, rather the author plot using numeric mean. The bars also not representative bars. I think the author has got the bars while he plot using the excel that give the bars by default. Therefore, ANOVA SHOULD BE SERIOUSLY REFINED. • Methods of leaf area calculation are not the correct procedure. I have indicated in his methodology • Economic analysis should be considered for the whole variable cost as well as the dominance analysis Abstract • Please indicate the research gabs in one or two sentences and then objectives • Line 13-14 (parameters to total grain yield) remove it	Analysis has now been corrected to two-way Anova in the text. The graphs indicate standard errors, so the errors bars were not generated automatically by excel as you seem to suggest. Leaf Area has now been removed from the paper based on authors own decision. The variable cost not considered were not different in terms of each treatment The abstract has now been updated.



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	- Line 14 (~~obtained~~) - Line 54 (replace impact by effect) - Line 58-60; the experimental site should be clearly indicate, particularly land history (whether it is crop rotation, intercropping, or inclusion of legume crops) since the effect of inoculants are highly depended on the existence of the indigenous strains. ONE YEAR DATA IS NOT A RELIABLE FOR FINAL RECOMMENDATION. IT IS BETTER IF YOU INCLUDE ATLEAT ONE MORE YEAR DATA. - Line 75-76< please re-arrange the sentences - Line 99-100: Determination of your leaf area is not CORRECT. You have to measure with other leaf area meter or you have to adjust with the correction factor if you measure using meter. PLEASE FOLLOW THE FOLLOWING FORMULA (Leaf length and its maximum width was measured in cent meter and its area was calculated using the formula $[(A \times \text{Length} \times \text{Width}) + (B \times \text{Length}) + (C \times \text{Width})]$, where A, B and C are constants with value of 0.736, - 1.831 and 2.81, respectively as described by Cao <i>et al.</i> (1988). The constants were derived	Soil conditions, geographic locations and the cropping history of the experimental site have now been provided in the text. Leaf Area has now been removed from the paper based on authors own decision
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	from area measurement on a number of leaves of soybeans using the Li-Col model 3000 (Li- COR, inc) leaf area meter • Line 109; replace severed with separated • Line 111: is the nodule you collected were identified as effective or non effective? Total nodules you collected may not be effective nodules. Please specify • Line 116; please specify with the pods were sun dried to 11 or 13%. Don't you the term 'about' since this indicate doubt • Line 120; WHY U USED ONE WAY ANOVA? Since your experiment was designed by 2X4 complete factorial arrangements. PLEASE REFINER YOUR ANALYSIS USING TWO WAY OR GENERAL ANALYSIS OF VARIANCES • Line 125-126; what is your scientific justification? • Line 128-129; please re-arrange the sentences • Line 144, please replace phosphorus fertilizer with yaralegume fertilizer in the whole of this	All the comments have been effected in the text and indicated in yellow. Comments effected in the text Yaralegume fertilizer is the brand name (trade name) of the P fertilizer used and this now clear in the text under the
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	documents • Line 148 replace tallest with the tallest; the current study with other research findings of many authors [19,20] • Line 149; many authors also noted that----- • Line 159-169; please consider ways to calculate leaf area before running to the ANOVA • Lines 176-177; this sentence indicates that both main effects and the interaction are significant, but how can the readers know? Please include the ANOVA table (probability levels that indicate level of significance for each parameters) • Line 206; replace greatest with the gratest • Line2012; Author/s (29) demonstrated ----. Similar results by another authors also indicated that -----[30 and 31]. • Line 229; “ if all nodule are active “indicates that the author did not identify the effective and non effective nodules. Please consider only the effective nodule number per plant for	materials and methods. The authors wish to maintain the P fertilizer. Comments effected in the text Data now presented in tables with LSD values provided
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	your final report and CHECK THE CORRELATION BETWEEN NODULE NUMBERS AND FINAL GRAIN YIELD • Line 247, “replace but whereas” with “whereas” • LINE 278-279; the sentence indicated that both main and interaction effects of the two factors showed a significant effect, but your figure showed the interaction effects. please check it	LSD provided now in tables in the text
<u>Minor</u> REVISION comments	Sequential citation was considered as per the guideline Colour of the graphs should be economical for final printing	Comments effected
<u>Optional/General</u> comments	The manuscript is the original research work. However, it only a one year data that is difficult to recommend for the end users since it lacks reliability.	The authors think one year data can be recommended based on how and where the research was conducted.