Review Form 3

Journal Name:	**International Journal of Plant & Soil Science**
Manuscript Number:	**Ms_IJPSS_121898**
Title of the Manuscript:	**Effects of Native Rhizobia on Soybean [Glycine max (L.) Merrill] Production and Soil Properties in Daloa, Center-West of Côte d'Ivoire**
Type of the Article	**Original Research Article**

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PART 1: Review Comments

Compulsory REVISION comments	**Reviewer's comment**	**Author's Feedback** *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	**The manuscript is important because it evaluates under field conditions the effectiveness of rhizobia strains isolated from the soils of the Côte d´Ivoire. The article demonstrates the superiority of native strains over a commercial rhizobium strain. This is important because it facilitates the development of commercial inoculants that will be effective in Ivory Coast soils. The development of this type of Ivorian inoculant will contribute to having a nationally produced agricultural input to obtain high yields in a crop of such importance as soybeans.**	
Is the title of the article suitable? (If not please suggest an alternative title)	**The title is suitable and it describe the topic of the article.**	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	**The abstract is understandable and describes the essential content of the article. It is suggested, both in the summary and throughout the article, when referring to NPK synthetic fertilizer, write 12-22-22. Usually that is the way to describe a complete formula like the one used in the research.**	
Are subsections and structure of the manuscript appropriate?	**The sections of the document are appropriate. However, very few paragraphs are used throughout the document. Materials and methods lack information necessary for the repeatability of the research and results and discussion would be better if the presentation and discussion of yields were independent of the results of the number and weight of the pods (separate paragraphs).**	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	**The manuscript is scientifically correct. However, I suggest making some modifications to improve its quality. Materials and methods. It should indicate the type of soil present in the experimental area using the WRB-IUSS classification and not refer to the soils of the region in general. If rainfall ranges between 1400-1600 mm, how is possible an average of 1300 mm? The sowing date, duration of the experimental period, and climatic season during the experimental period must be included. This will help later to discuss a part of the results. You must enter the bacterial concentration of each inoculant (strain), describe the way the inoculant was applied and its physical state (solid or liquid). What dose of synthetic fertilizer was applied? At what time in the crop cycle? In each plot, what was the effective area and the border area? It is not clear whether the first soil test was done 30 days before planting or 30 days before harvest. It should state the depth of soil sampling and describe the collection within the area of each plot. Before performing an ANOVA, it must be checked if the ANOVA assumptions are met. Results and discussion. It is repeated twice that whitish nodules were found in the negative control plants. Tables 1 and 2 show the means for each treatment followed by ± number. What is that number, standard deviation, confidence interval, other? In table 1 you should review the letter of the number of nodules, it seems that there is an error in the letter assigned to T0. In the discussion of the results in Table 2, the authors cite Abdel-Fattah et al. [25] but, the nutrient contribution of synthetic fertilizers depends on the amount (dose) applied and the chemical formula. One factor that can influence the result is the low utilization coefficient of synthetic fertilizers, especially in regions with high rainfall. In this experiment, the treatment with the addition of synthetic fertilizer (TN) presented better results (yield) than some treatments with inoculation of native strains and that is not discussed. In the discussion of the effect of treatments on some soil properties, the reasons why strain RSC508 increases pH values should be better explained. The explanation offered is neither**	

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	clear nor convincing. **In the discussion of the result relative to the available P, the explanation can be complemented by relating this result to the rainfall that occurred during the experimental period. Furthermore, the reasons why, despite adding P in the TN treatment, the final available P content was low, are not explained. What happened, washing, chemical and/or biological immobilization, other?**	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. **-**	**Check the writing style of the references, they do not match each other.** **Only 4 references (10.5%) are from the last 5 years (2019-2024) and 15 references (39%) are from the last 10 years (2015-2024).** **Several references prior to the year 2000 are used, which are essential as they describe the methods used in the research (materials and methods).** **I suggest increasing the number of references from recent years for the discussion of the results.** **Include WRB soil classification:IUSS Working Group WRB. 2022. World Reference Base for Soil Resources. International soil classification system for naming soils and creating legends for soil maps. 4th edition. International Union of Soil Sciences (IUSS), Vienna, Austria.**	
Minor REVISION comments **Is the language/English quality of the article suitable for scholarly communications?**	Yes, but in the introduction and conclusions there are two words with a typing error: Introduction. Effecient, must be efficient Conclusions. Inffective, must be infective	
Optional/General comments	It's a magnificent job. I suggest repeating the experiment in the same soil-climatic condition and in other different areas to expand the agronomic efficiency data of the native strains.	

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?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

Name:	**Gloria Marta Martín Alonso**
Department, University & Country	**National Institute of Agricultural Sciences, Cuba**