Review Form 1.7

Journal Name:	**Journal of Experimental Agriculture International**
Manuscript Number:	**Ms_JEAI_118542**
Title of the Manuscript:	**Mixture effect of rock phosphate and triple superphosphate on maize yield in acid soils of Cote d'Ivoire**
Type of the Article	**Original Research Article**

Review Form 1.7

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 **1. Is the manuscript important for scientific community?** **2. Is the title of the article suitable?** **3. Is the abstract of the article comprehensive?** **4. Are subsections and structure of the manuscript appropriate?** **5. Do you think the manuscript is scientifically correct?** **6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.** **(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)**	1. Studies involving analysis of the soil and its components, especially with the purpose of improving the agricultural productivity, are important for the sustainability and environmental preservation (soil conservation). The article deserves to be revised and re-submitted for publication. 2. yes 3.yes 4.yes, but is necessary to include item 2.5.5 Statistical analysis (To see manuscript revised) 5. yes 6. yes, however, I have suggestion of additional references (To see 'PART 6: Reviewer's Comments')	
Minor REVISION comments **1. Is language/English quality of the article suitable for scholarly communications?**	The article is not formatted according to the journal's rules. Authors should review the rules and rewrite the article within the Template.docx (MS Word Template). To consult "General G The text is well written, following the rules of grammatical structure.	
Optional/General comments	PART 6: Reviewer's Comments: 1. The text needs to be formatted in accordance with the standards. Download MS word paper template 2. Several suggestions and text corrections are presented directly in the manuscript (Ms_JEAI_118542.docx) 3. In item 2.1 (Study area) a map of the study area with coordinates for location must be included, as well as a smaller map of the macro-region 4. In item 2.4 (Setting up the experimental design), the summary of the treatments applied must be presented in table form, including the concentrations of RP, TSP, urea and NPK 5. Add item 2.5.5 (Statistical analysis) 6. In items 3 (Results) and 4 (Discussion) in the manuscript, some questions are suggested to enrich the discussion. Consult the manuscript directly (Ms_JEAI_118542.docx) 7. I missed a better explanation about crop yields in each treatment, especially between treatments T4 and T5. Tables 3 and 4 showed that the efficiency and yield of the T5 treatment were better than the T4 treatment, especially between the years 2020 and 2021. But from the point of view of the concentration of TSP and RP, what is the explanation for this behavior? Based on the 80% RP - 20% TSP ratio of the T3 treatment, the question arises: Shouldn't the 60% RP - 40% TSP ratio in the T4 treatment have a better performance than the 20% RP - 80% TSP ratio of the T5 treatment? Was there less availability of phosphorus absorption in the T4 treatment? If so, why? Because influence of pH or soil moisture!? This should be discussed in the results and/or discussion. 8. As a suggestion, it would be interesting to add the Student t test to the results to compare the average of the treatments and confirm the efficiency of the T3 treatment. 9. As a suggestion, I advise you to read the following manuscripts (To see General comments). General comments About the solubilization of Rock phosphate The determination of carbonate, iron and aluminum contents in Rock phosphate (RP) must be considered, since, especially the concentration of Al3+ can interfere with soil pH and, therefore, with the solubilization and release of phosphorus. On the contrary, high levels of calcium and	

	organic matter can accelerate the dissolution rate of PR. The solubilization of phosphate rock under the effect of organic acids, especially citric, oxalic and tartaric, has demonstrated good efficiency (>75%). Thus, the type of organic coverage applied in the PR-TSP mixture can contribute to a greater release of P into the soil, increasing fertilization. Most combination fertilizers contain calcium and are used on slightly acidic soils and acidic soils. On this subject, I recommend the following readings: Allah Ditta et al. 2018. Rock phosphate-enriched organic fertilizer with phosphate-solubilizing microorganisms improves nodulation, growth, and yield of legumes. Communications in Soil Science and Plant Analysis. https://doi.org/10.1080/00103624.2018.1538374 Gitari, J. N., and J. G. Mureithi. 2003. Effect of phosphorus fertilization on legume nodule formation and biomass production in Mount Kenya region. East African Agricultural and Forestry Journal 69:183–87. doi:10.4314/eaafj.v69i2.1819. Final consideration The topic presented is of great relevance to agriculture and the environment, as it allows optimizing productivity in restricted areas, without having to deforest native areas for cultivation. I suggest that a thorough review of the manuscript be carried out and that it be resubmitted for publication in JEAI.	

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:

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