

### ReviewForm3

JournalName:	<a href="#">AsianJournalofSoilScienceand PlantNutrition</a>
ManuscriptNumber:	Ms_AJSSPN_126023
TitleoftheManuscript:	EffectofSalinityonInorganicPhosphorusFixationinSaraandBajoaSoilSeriesofGangesTidalFloodplains
Typeofthe Article	

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### PART1:ReviewComments

<b>Compulsory</b> 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)
<p><b>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.</b></p>	<p>This manuscript seeks to determine the influence of salinity on soil phosphorus availability to plants in two sets of soils in the Ganges floodplain. The manuscript may have important local and regional interest if the results are used to provide new knowledge to farmers on putative ways to fertilize more efficiently their lands under salinity (something missing in the discussion and conclusions). Furthermore, at a general level, the manuscript may be of interest to the scientific community working on saline soils around the world. However, I believe that the conclusions of this manuscript are not sufficiently worked out to have a real impact on the scientific community. The manuscript would greatly benefit from rewriting the discussion and conclusions, seeking to go further and not just explaining the results obtained.</p>	
<p><b>Is the title of the article suitable? (If not please suggest an alternative title)</b></p>	<p>Yes, it can be suitable.</p>	
<p><b>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.</b></p>	<p>The abstract is understandable, but it lacks the inclusion of the initial hypotheses and the discussion of the results, as well as adding some conclusions. As for the methodology, a more exhaustive explanation of the materials and methods used would also be useful.</p>	
<p><b>Are subsections and structure of the manuscript appropriate?</b></p>	<p>Yes, both the subsections and the manuscript are appropriate.</p>	
<p><b>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.</b></p>	<p>From my point of view, this paper needs a lot of work before it can be published. Overall, it would be greatly improved by improving the discussion of the results and the conclusions. Below I add some comments for the authors.</p> <ol style="list-style-type: none"> <li>1. The introduction has some paragraphs with very similar information that could be regrouped and rewritten to shorten the introduction and perhaps, add other information relevant to the manuscript. The "repeated" parts deal with the importance of P for plants. On the other hand, I believe that information on the current use of the soils studied in this paper could be included. Are they cultivated? Which crops are used? What kind of owners use those lands? Why were those soils chosen for this work? Answering these questions, could considerably enrich and improve the introduction and the manuscript as a whole.</li> <li>2. The introduction lacks the starting hypotheses which are crucial for a scientific document. Please, try to include your hypothesis.</li> <li>3. The introduction mentions that P fractionation method is used for saline and cultivable soils, but this is not completely true. P fractionation is a very common methodology used for any type of soil in any environment. Currently there are quite a few works using this methodology in forest soils, for example, since P is also a limiting nutrient for trees, affecting the fertility of forest soils and thus, the productivity of plantations. In my opinion, making a broader introduction of the methodology used, would help to understand its importance and its intense use in the scientific community. This would have an impact on the robustness of the manuscript.</li> <li>4. The citation and reference of Walkely &amp; Black 1934 is missing. Although a subsequently transformed methodology is used, the original methodology from which it is based should be cited.</li> <li>5. In the following paragraph, at the end of the section in M&amp;M: "Some Physical and Chemical Analysis of Soils", punctuation marks are missing and/or need to be corrected.              "The total phosphorus content in the soil was analyzed using the vanadomolybdate yellow color method, on the other hand, the total nitrogen of the sample was measured using the micro Kjeldahl method, as outlined by Jackson (1973), The complexometric titration method was used to determine water soluble plus exchangeable calcium and magnesium (Schwartzbach et al., 1946) Water soluble plus exchangeable sodium (Na) content of the root and shoot sample was also measured by the Flame emission spectroscopic (FES) method." Further</li> </ol>	

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	<p>more, the last sentence talks about root and shoot samples, but nowhere else in the manuscript is there anything that refers to those samples. Should that sentence be deleted? Is there missing information about those samples? Please correct this.</p>	
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	<p>6. A table of the results of the physical-chemical analyses carried out on both types of soil would help a lot to understand the results and to follow the article well. A table indicating pH, EC, texture, original salinity of the soils, soil classification, etc.</p> <p>7. It is essential to know the initial salinity of the soils studied, especially if they are cultivated, in order to understand how salinity can affect nutrients and therefore crops. If the soils studied already have a high salinity and there are crops with good production, what problem would there be with the soil P? That is why I think it is essential to complete the information on the soils and on the crops along the manuscript.</p> <p>8. In the first sentence of the "Incubation Experiment" section, I think it is not necessary to indicate the laboratory where the experiment was carried out.</p> <p>9. The figures are difficult to understand due to mistakes. Sometimes the names of the axes are missing and there are extra words that make understanding difficult ("cientos"). Please, review it.</p> <p>10. In the first paragraph of the "Results and Discussion" section, you should include some references, please.</p> <p>11. The last sentence ("The values of different discrete forms of inorganic P at various time intervals are presented in Fig 1.") in the first paragraph of the "Inorganic Phosphorus Fractions in Soil" section, indicates that Figure 1 shows the values of the different forms of inorganic P at different time intervals. However, Figure 1 shows "Changes in Fe Al-P content in Bajoa series under different salinity treatments". Please, correct this inconsistency.</p> <p>12. When explaining the results for RS-P content, it is said that with a salinity of 2 dS/m the P content increases in the Bajoa series (the same occurs in the Sar series for 2 and 4 dS/m). It would be very useful to try to explain this variation in the discussion of the results.</p> <p>13. The conclusions are poor. The article needs to improve the discussion in order to have more powerful conclusions. In addition, soil pH values are given in the conclusions for the first time. I consider that these values should not appear in the conclusions, but rather previously in the results of the manuscript (together with the rest of the information from the physicochemical analyses), in order to be able to discuss much better all the other results obtained.</p>	
<p><b>Are there references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p>	<p>They are ok. Perhaps some newest references could be included.</p>	
<p>Minor REVISION comments</p> <p><b>Is the language/English quality of the articles suitable for scholarly communications?</b></p>	<p>Yes, English quality is suitable.</p>	
<p><b>Optional/General</b> comments</p>		

**PART 2:**

	<p><b>Reviewer's comment</b></p>	<p><b>Author's comment</b> (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)</p>
<p><b>Are there ethical issues in this manuscript?</b></p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

**Reviewer Details:**

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