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Journal Name:	Asian Soil Research Journal
Manuscript Number:	**Ms_ASRJ_48555**
Title of the Manuscript:	**Effect of silicon and phosphorus additions and their interactions on wheat plants grown on a clay soil**
Type of the Article	**Original Research 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:

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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	The work described in this paper is of great importance in the light of sustainable soil fertility management and crop production. The paper describes the influence of phosphorus and silicon, and their interaction on wheat performance on a clay soil in Egypt. The results obtained from the experimentation are interesting and are worth publishing. However there are some concerns that need to be addressed in order to improve on the quality and soundness of the paper. My first observation is that the introduction of the work is too brief. Secondly, from the topic of the paper, I expected to have an overview of the interaction between silicon and phosphorus in soil, the mechanisms involved in the various interactions, their combined effects or interaction on soil physico-chemical properties and their effects on plant growth (either positive or negative impact). Thus, the introduction should be ameliorated by including these aspects because they will help the reader to understand the relationship between these interactions in the soil system and crop growth. This is also very important for the author because it will permit them to discuss their results with much certitude in a logical manner. Some documents that can help the author include the following (but not exhaustive): 1) See the PhD thesis by Roy A. C. (1969). Phosphorus-Silicon interactions in Soils and Plants. https://scholarspace.manoa.hawaii.edu/bitstream/10125/11337/uhm_phd_7009981_r.pdf 2) Agostinho, F., Tubana, B., Martins, M., & Datnoff, L. (2017). Effect of different silicon sources on yield and silicon uptake of rice grown under varying phosphorus rates. *Plants*, *6*(3), 35.. https://www.mdpi.com/2223-7747/6/3/35/htm 3) Suehisa, R. H., Younge, O. R., & Sherman, G. D. (1963). *Effects of silicates on phosphorus availability to sudan grass grown on Hawaiian soils* (Vol. 44, No. 56). Hawaii Agricultural Experiment Station, University of Hawaii. https://core.ac.uk/download/pdf/77238585.pdf 4) Using silicon fertilizers to improve soil phosphorus availability and uptake by winter wheat in high-phosphorus soils. https://projects.sare.org/sare_project/GNE15-111/?ar=2016 5) Phosphorus-silicon interactions in soils and plants. http://agris.fao.org/agris-search/search.do?recordID=US19810616157	

6) Kostic, L., Nikolic, N., Bosnic, D., Samardzic, J., & Nikolic, M. (2017). Silicon increases phosphorus (P) uptake by wheat under low P acid soil conditions. *Plant and Soil*, *419*(1-2), 447-455..

7) Greger, M., Landberg, T., & Vaculík, M. (2018). Silicon Influences Soil Availability and Accumulation of Mineral Nutrients in Various Plant Species. *Plants*, *7*(2), 41.

Many grammatical errors (spelling, punctuations, etc.) have been identified in the write-up. Most of them have been corrected and highlighted in red. The authors are encouraged to correct these errors and others that have not been mentioned.

Some technical issues have been raised in the paper. The major ones are the following;

Line 91: Why is tap water used to maintain the soils at field capacity? Tap water is generally known to contain some chemical elements such as residual chlorine. Is it not possible that tap water can modify the chemical properties of the soil, thereby influencing nutrient interactions?

Lines 174 – 175: “This may be due to some sort of synergetic interaction between them”. This statement really needs to be supported with some references, reason why it is necessary to outline a brief literature review on the interaction between silicon and phosphorus in soil and their combined effect on crop growth, as already indicated above.

Lines 194 – 195: Is correlation coefficient (r) the same as regression coefficient or coefficient of determination (R^2)? It should be noted that some correlations between variables may be very strong (highly significant), yet they have small r values. Check the methodology in lines 107 – 108. Please note that the degree of correlation between two variables is not expressed using the R^2 value. In this study, which correlation was used? (Spearman, Kendall, pearson, etc.).

Lines 204 – 206: Same comments as above.

Referencing

It appears that the referencing has not been made following Asian Soil Research Journal style. Please see the author guidelines for the referencing style of this journal.

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Minor REVISION comments		
Optional/General comments		

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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