Review Form 3

Journal Name:	International Research Journal of Pure and Applied Chemistry
Manuscript Number:	**Ms_IRJPAC_130873**
Title of the Manuscript:	**Determination of the Potassium (K) Uptake Potential of Water Leaf (Talinum Triangulare) Using Computer Simulated Models of Heterogeneous Condition.**
Type of the Article	

PART 1: 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. A minimum of 3-4 sentences may be required for this part.	This manuscript holds significant importance for the scientific community as it enhances our understanding of potassium (K) dynamics in plant growth, particularly in heterogeneous soil conditions. By focusing on Water Leaf (Talinum triangulare), a commonly consumed vegetable, the study addresses a critical gap in nutrient management strategies that can optimize plant health and productivity. The findings provide valuable insights into how soil nutrient heterogeneity impacts K uptake, thereby offering potential applications in agricultural practices to improve yield and nutritional quality.	
Is the title of the article suitable? **(If not please suggest an alternative title)**	Yes	

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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.	It is okay, only minor spelling and punctuation errors to be corrected.	
Is the manuscript scientifically, correct? Please write here.	Based on the provided excerpts from the manuscript, the study appears to be scientifically sound in several ways: 1. **Methodology**: The experimental design, including the use of control, homogeneous, and heterogeneous soil potassium treatments, is appropriate for investigating potassium uptake in Talinum triangulare. The details about sample preparation and potassium analysis methods add rigor to the methodology. 2. **Data Analysis**: The use of statistical tools such as ANOVA and mixed model ANOVA indicates a robust approach to data analysis, allowing for the assessment of significance in the measured variables. This enhances the credibility of the results reported. 3. **Attention to Heterogeneity**: The investigation of soil potassium heterogeneity is a relevant and critical aspect of plant nutrition, particularly for crops with high potassium demand, making the study timely and applicable. 4. **Results Interpretation**: The interpretation of results regarding potassium concentrations in roots and shoots, as well as the acknowledgment of the lack of significant differences among treatments, shows a balanced understanding of the findings. However, while the information provided suggests scientific correctness, a thorough evaluation of the entire manuscript is necessary to confirm the validity of the conclusions drawn. This evaluation should consider the reproducibility of the experiments, the choice of statistical methods, and any potential biases in data interpretation. Overall, based on the excerpts, the manuscript appears to be conducted with scientific rigor.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.		
Is the language/English quality of the article suitable for scholarly communications?	Minor English errors were highlighted and should be corrected, some paragraphs were irrelevant and duplicated in this manuscript, which should be check mated.	
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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