

**Review Form 3**

Journal Name:	<b>Journal of Applied Life Sciences International</b>
Manuscript Number:	<b>Ms_JALSI_122839</b>
Title of the Manuscript:	<b>Potassium Heterogenous distribution in soil and its uptake by Zea mays I.</b>
Type of the Article	

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**PART 1: Review Comments**

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>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.</p>	<p><b>Title and Abstract:</b></p> <ul style="list-style-type: none"> <li><b>Title:</b> The title accurately reflects the focus of the study. However, you may want to consider specifying the type of soil or the geographic region if this is relevant to the findings.</li> <li><b>Abstract:</b> The abstract provides a concise overview of the study's purpose, methods, and key findings. However, it could be improved by including specific data or results to highlight the significance of the study. Consider briefly mentioning any practical implications or recommendations for agricultural practices.</li> </ul> <p><b>2. Introduction:</b></p> <ul style="list-style-type: none"> <li>The introduction does a good job of setting the context for the study, emphasizing the importance of potassium (K) in plant nutrition and its uneven distribution in soils. However, the introduction could benefit from a more detailed discussion of how this heterogeneity affects crop productivity, particularly in maize.</li> <li>It might be helpful to clearly state the study's objectives or hypotheses toward the end of the introduction to guide the reader through the research focus.</li> </ul> <p><b>3. Materials and Methods:</b></p> <ul style="list-style-type: none"> <li><b>Soil Sampling and Analysis:</b> The description of soil sampling methods is generally clear. However, it would be useful to include more details on the spatial distribution of sampling points to better understand the heterogeneity in K distribution. Also, mention any controls or standards used in the soil analysis.</li> <li><b>Plant Growth Conditions:</b> The conditions under which Zea mays was grown are described adequately. Clarify whether the experiment was conducted in the field or under controlled conditions (e.g., greenhouse), as this impacts the interpretation of results.</li> <li><b>Potassium Measurement and Analysis:</b> The methods for measuring K content in soil and plant tissues are appropriate. However, include any assumptions or limitations related to the analytical techniques used.</li> </ul> <p><b>4. Results:</b></p> <ul style="list-style-type: none"> <li>The results are well-organized and presented with appropriate use of figures and tables. However, some figures would benefit from more detailed captions that explain key points without needing to refer back to the text.</li> <li>The variation in K distribution across different soil layers and its uptake by maize is clearly described. However, consider discussing any observed trends or patterns in more depth, particularly in relation to soil properties (e.g., texture, pH).</li> </ul> <p><b>5. Discussion:</b></p> <ul style="list-style-type: none"> <li>The discussion effectively interprets the results, linking K heterogeneity to its availability and uptake by maize. However, the discussion could be strengthened by comparing your findings with similar studies in different crop systems or soil types.</li> <li>Consider exploring the implications of your findings for soil management practices. For example, how might farmers adjust fertilization strategies to account for uneven K distribution? Additionally, discussing the potential environmental impacts of K management could add depth to this section.</li> </ul>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>		
<p>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.</p>		
<p>Are subsections and structure of the manuscript appropriate?</p>		
<p>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.</p>		
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>		

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	<p><b>6. Conclusion:</b></p> <ul style="list-style-type: none"> <li>The conclusion provides a good summary of the main findings, but it would benefit from a clearer articulation of the practical applications of the research. For instance, how can these findings be used to improve K management in maize cultivation?</li> <li>Consider suggesting future research directions, particularly studies that might explore the long-term effects of K heterogeneity on crop yield or soil health.</li> </ul> <p><b>7. References:</b></p> <ul style="list-style-type: none"> <li>The references are relevant and current, but ensure they are formatted according to the journal's guidelines. It might also be useful to include more recent studies that explore similar themes in different agricultural contexts or with other crops.</li> </ul> <p><b>8. Overall Quality:</b></p> <ul style="list-style-type: none"> <li>The manuscript is well-written, with a logical structure and clear presentation of findings. Minor revisions are needed to enhance the depth of analysis and to more explicitly connect the results to broader agricultural practices and implications.</li> </ul>	
<p><u>Minor</u> REVISION comments</p> <p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>		
<p><u>Optional/General</u> comments</p>	<p><b>General Comments</b></p> <p><b>Comments:</b></p> <ol style="list-style-type: none"> <li>The manuscript has some grammatical errors and typos.</li> <li>Some sections lack clarity and coherence.</li> </ol> <p><b>Suggestions:</b></p> <ul style="list-style-type: none"> <li>Proofread the manuscript carefully to correct grammatical errors and typos.</li> <li>Ensure each section flows logically and is easy to understand.</li> </ul>	

**PART 2:**

	<p><b>Reviewer's comment</b></p>	<p><b>Author's comment</b> <i>(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)</i></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>	

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