

Review Form 1.7

Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	Ms_IJPSS_100721
Title of the Manuscript:	Effect of potassium and boron on growth and yield of cowpea
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:

(<https://www.journalijpss.com/index.php/IJPSS/editorial-policy>)

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)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</p>	<p>1) The effect of potassium and boron on the growth and yield of cowpea in India is significant. Potassium, as a crucial macronutrient, plays a vital role in various physiological processes of cowpea plants. Adequate potassium availability promotes efficient water and nutrient uptake, enhances photosynthesis, and improves overall plant vigor. This nutrient helps in the development of strong stems, healthy leaves, and robust root systems, thereby enabling the plants to better withstand environmental stresses such as drought and disease. Furthermore, potassium influences flower and fruit development, which directly impacts the yield of cowpea. It supports proper pollination, fertilization, and seed formation, leading to a higher number of pods and ultimately increased crop productivity. Inadequate potassium levels can result in reduced flower and fruit production, leading to diminished yields. Similarly, boron, though required in smaller quantities as a micronutrient, plays a critical role in cowpea growth and yield. Boron aids in cell division, sugar transport, and carbohydrate metabolism, which are essential for plant growth and development. It contributes to the formation and elongation of cells, ensuring proper root growth and nutrient absorption. In cowpea, boron also influences flower development and pollination, affecting the fruit set and yield. Insufficient boron levels can lead to abnormal flower structures, reduced pollen viability, and poor seed set. Adequate boron availability improves reproductive processes, resulting in an increased number of pods and improved crop productivity. Considering the importance of potassium and boron for cowpea growth and yield, it is crucial for farmers in India to ensure optimal nutrient management practices.</p> <p>2) Yes, it is suitable. 3) Yes, it is comprehensive. 4) Yes. 5) Yes, it is scientifically correct. 6) Yes, are sufficient are recent.</p> <p>The conclusion part is very short. A more extend conclusion section is needed highlighting the results and the importance of this study. Also, a map of the pilot areas bar chart comparing the results is suggested for better visualization of the results of this work.</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	Yes	
<p>Optional/General comments</p>	It's a well written manuscript with a proper methodological approach.	

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?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

Name:	Paraskevas Charalampos
Department, University & Country	Institute for Bio-Economy and Agri-Technology, Centre for Research and Technology of Hellas, Greece