

Review Form 3

Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_128378
Title of the Manuscript:	Micronutrients Status in Hasanganj and Auras blocks of Unnao district in Uttar Pradesh, India
Type of the Article	Original Research Article

General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: 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>
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.	The findings of this manuscript provide critical insights into the status of essential micronutrients in the soils of Hasanganj and Auras blocks in Unnao district, Uttar Pradesh, India. It highlights the significant deficiencies of zinc, boron, copper, and other key micronutrients, which directly impact crop productivity and soil fertility. This study is valuable for the scientific community as it underscores the necessity of balanced nutrient management practices and the adoption of soil-specific fertilizer recommendations to ensure sustainable agricultural practices. The data generated could serve as a baseline for future research and policy interventions aimed at improving soil health and food security.	
Is the title of the article suitable? (If not please suggest an alternative title)	alternative suggestion: "Assessment of Micronutrient Deficiencies in Agricultural Soils of Hasanganj and Auras Blocks, Unnao District, Uttar Pradesh: Implications for Sustainable Farming."	

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<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>The abstract of the article is fairly comprehensive, summarizing the key aspects of the study, including the location, methodology, and main findings related to micronutrient deficiencies. However, it can be improved to provide a more balanced overview and emphasize the significance of the findings. Here are my suggestions for improvement:</p> <p>Suggestions for Additions:</p> <ol style="list-style-type: none"> 1. Context and Importance: Add a brief statement on why studying soil micronutrient status is critical for agricultural productivity and food security. 2. Implications of Findings: Include a sentence about the potential impact of these deficiencies on crop productivity and the importance of addressing them through balanced nutrient management. 3. Conclusion: Conclude with a sentence on the broader implications of the study for sustainable agriculture and future research directions. <p>Suggestions for Deletions/Edits:</p> <ol style="list-style-type: none"> 1. Redundancy: The abstract mentions "zinc and boron deficiency" multiple times in similar contexts. This can be streamlined for brevity. 2. Technical Details: The depth of sampling (0–15 cm) is a methodological detail that might not be critical for the abstract unless necessary for clarity. 3. Repetitions: Avoid repeating phrases such as "the study was carried out to judge the status of micronutrient levels," as it can be rephrased more concisely. <p>Revised Abstract</p> <p>This study evaluated the status of essential micronutrients in the soils of Hasanganj and Auras blocks in Unnao district, Uttar Pradesh, India, during 2020–2021. A total of 200 surface soil samples from five villages in each block were analyzed for zinc, boron, copper, manganese, and iron content. The findings revealed significant deficiencies, particularly in zinc (39.5%) and boron (32.5%), with potential implications for crop productivity and soil health. The study emphasizes the urgent need for balanced nutrient management and soil-specific fertilizer recommendations to address these deficiencies and support sustainable agricultural practices. These results provide a valuable baseline for future research and policy interventions aimed at improving soil fertility and food security.</p>	
<p>Is the manuscript scientifically, correct? Please write here.</p>	<p>The manuscript appears to be scientifically sound, as it employs standard methodologies for soil sampling and micronutrient analysis, and presents the findings clearly. However, a few areas warrant attention to ensure the manuscript's rigor and scientific correctness:</p> <p>Strengths:</p> <ol style="list-style-type: none"> 1. Methodology: The use of standard tools like the PUSA Digital Soil Test and Fertilizer Recommendation Kit and an atomic absorption spectrophotometer ensures reliable data collection. 2. Findings: The manuscript provides detailed results on micronutrient deficiencies and their distribution in the study area, which are significant for agricultural practices. 3. Literature References: It draws upon relevant studies to contextualize findings, enhancing its scientific validity. <p>Potential Concerns and Suggestions:</p> <ol style="list-style-type: none"> 1. Clarity in Statistical Analysis: <ul style="list-style-type: none"> ○ The manuscript does not mention if statistical tests were conducted to validate differences between the two blocks or within the datasets. Including such analysis would enhance scientific robustness. 2. Discussion Depth: <ul style="list-style-type: none"> ○ The discussion could further explore the implications of the findings for crop selection, fertilizer policy, or economic impacts on local farming. 3. Terminology Consistency: <ul style="list-style-type: none"> ○ Some sections list zinc deficiency as 39.5%, while others mention similar figures without clear consistency. Ensure all percentages align throughout the manuscript. 4. Graphical Representation: <ul style="list-style-type: none"> ○ While figures are referenced, providing clear and well-labeled graphs or tables for micronutrient levels and deficiencies can better support conclusions. 5. Environmental and Policy Context: <ul style="list-style-type: none"> ○ Broader discussions on how these findings relate to regional or national agricultural policies could be included for a more comprehensive outlook. 	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>Yes, the references are sufficient but few recent references of 2024 or 2023, should be added. All the reference should be arranged as per format of journal. May be added the below given reference:</p> <ul style="list-style-type: none"> ✓ Kumar, Ajeet., Chattopadhyay, S. and Meena, S.K. (2023) Soil Fertility Assessment of Sugarcane Growing Villages in Samastipur District of Bihar. <i>Environment and Ecology</i>. 41 (2): 759-764, April-June 2023. ISSN 0970-0420. NAAS Score: 5.25. https://hal.science/hal-04676939. ✓ Meena, S.K., Kumar, Ajeet., Meena, K.R., Sinha, S.K., Rana, L., Singh, A.K., Parewa, H.P. and Meena, V.S (2024). Advanced and Emerging Techniques in Soil Health Management. Pages: 343-362; In: Bhatia, R.K., Walia, A. (eds) <i>Advancements in Microbial Biotechnology for Soil Health. Microorganisms for Sustainability</i>, vol 50. Springer, Singapore. https://doi.org/10.1007/978-981-99-9482-3_15. ✓ Kumar, Ajeet (2015) Spatial Distribution of Macro and Micro Nutrients in soils of Saharsa district of Bihar. <i>An Asian Journal of Soil Science (An International Refereed Research Journal)</i>. 10 (2): 276-282, (December, 2015). e ISSN No. 0976-7231; ISSN NO. 0973-4775; SI. No.:109; NAAS Journal ID: A 109; NAAS Score: 3.19. https://hal.science/hal-04676717. ✓ Singh, S. K., Pal, S., Singh, P., Tiwari, S., Kashiwar, S. R., and Ajeet Kumar (2022) Spatial Variability of Soil Chemical Properties in Patna, Vaishali and Saran Districts Adjoining the Ganga River, Bihar, India. <i>International Journal of Bio-resource and Stress Management, IJBSM March 2022, 13(3): 283-291</i>, Print ISSN 0976-3988 Online ISSN 0976-4038, https://doi.org/10.23910/1.2022.2654 	

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Is the language/English quality of the article suitable for scholarly communications?	Major Revision is required Language of English is not suitable for scholarly communications, up gradation is required	
<u>Optional/General</u> comments		

PART 2:

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

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