

**Review Form 3**

Journal Name:	<b>International Journal of Plant &amp; Soil Science</b>
Manuscript Number:	<b>Ms_IJPSS_121934</b>
Title of the Manuscript:	<b>Foliar application of nano urea for enhancing nutrient uptake, fruit quality, productivity and profitability of Brinjal (Solanum melongena L.) cultivation in the western undulating zone of Odisha</b>
Type of the Article	<b>Research article</b>

## Review Form 3

### PART 1: Review Comments

<b>Compulsory</b> REVISION comments	<b>Reviewer's comment</b>	<b>Author's Feedback</b> (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p><b>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.</b></p>	<p>This manuscript is important for the scientific community as it provides valuable insights into the potential benefits of integrating nano urea with conventional urea in brinjal cultivation, particularly in a region-specific context like the Western Undulating Agro-climatic Zone of Odisha. By demonstrating that a 50% reduction in inorganic nitrogen, supplemented with nano urea, can significantly enhance yield and economic returns without compromising fruit quality or soil health, the study offers a promising approach to sustainable agriculture. I appreciate the manuscript for its practical relevance and its contribution to advancing precision nutrient management in crop production, which is crucial for improving productivity and environmental sustainability.</p>	
<p><b>Is the title of the article suitable? (If not please suggest an alternative title)</b></p>	<p>"Boosting Nutrient Uptake and Profitability in Brinjal Cultivation: The Impact of Nano Urea Foliar Application in Odisha's Western Undulating Zone"</p>	
<p><b>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.</b></p>	<p>Rewriting of abstract is required and the highest values can also be mentioned in abstract. My suggestion for rewriting it: This study examined the effects of integrating nano urea with conventional urea on brinjal cultivation in the Western Undulating Agro-climatic Zone of Odisha. The research was carried out at the Regional Research and Technology Transfer Station (OUAT) in Bhawanipatna, Kalahandi, Odisha, during the rabi season of 2022-23. The results indicated that the application of 50% of the standard recommended dose (SRD) of nitrogen combined with a nano-urea foliar spray at 3–4 weeks after transplanting, at a concentration of 8 ml/L, resulted in the highest leaf area index, SPAD readings, nutrient uptake, and yield in brinjal. This was followed closely by the treatment involving 75% SRD of nitrogen with nano-urea spray at 6 ml/L. Specifically, treatment T9, which involved a foliar application of nano urea with a 50% reduction in inorganic nitrogen fertilizer, led to a 27% increase in brinjal fruit yield compared to the SRD of NPK and achieved the highest benefit-cost (B:C) ratio of 1.55. Furthermore, the study found no significant impact on fruit quality parameters or post-harvest soil properties as a result of nano urea application.</p>	
<p><b>Are subsections and structure of the manuscript appropriate?</b></p>	<p><b>Yes</b></p>	
<p><b>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.</b></p>	<p>The study employed appropriate, well-documented, and repeatable experimental methods. The study provides sufficient detail in the methods and procedures so that other researchers can replicate the experiment if needed. The results are clearly presented, with the findings being significant, either statistically or practically, in relation to the research question.</p>	
<p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p>	<p>Yes</p>	

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Minor REVISION comments		
<b>Is the language/English quality of the article suitable for scholarly communications?</b>	Yes, but once cross reading is required by scholar.	
<b>Optional/General</b> comments	Mention the experimental design, check et al to make italic in whole document. You can improve the quality of graphs mentioned, overlapping should be avoided. Check the numbering.	

### **PART 2:**

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

### **Reviewer Details:**

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Department, University & Country	<b>Sardar Vallabhbhai Patel University of Agriculture and Technology, India</b>