

Journal Name:	Asian Journal of Agriculture and Allied Sciences
Manuscript Number:	Ms_AJAAS_12631
Title of the Manuscript:	Agronomic and Economic Performance of Potato (<i>Solanum Tuberosum</i> L.) in Response to Nitrogen and Phosphorous supply at Bekoji, Southeastern Ethiopia
Type of the Article	

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.	This paper examines the agronomic and economic responses of potato to different nitrogen and phosphorus rates in the Ethiopian highlands. This study offers essential site-specific fertilizer recommendations to improve potato yield in Ethiopia, which is experiencing severe soil fertility challenges due to nutrient depletion. The economic study, specifically employing partial budget approach, provides real benefits for farmers and policymakers pursuing cost-effective strategies for potato farming. The findings substantially enhance sustainable agriculture and food security in resource-constrained areas.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title is explicit and correctly represents the manuscript's content. Nonetheless, it may be marginally enhanced for improved clarity: "Assessment of Agronomic and Economic Outcomes of Potato (<i>Solanum Tuberosum</i> L.) in Relation to Nitrogen and Phosphorus Fertilization in Bekoji, Southeastern Ethiopia"	

<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 provides information but requires enhanced clarity and conciseness.</p> <p>Present the principal agronomic findings succinctly, such as particular increases in tuber yield. Incorporate quantitative data for the most effective treatment to enhance the economic analysis. No significant interaction effects were observed for the majority of parameters. Refrain from reiterating sentences that encapsulate the conclusion. The optimal marketable tuber yield was obtained with 138 kg N and 92 kg P₂O₅ ha⁻¹. Nevertheless, a partial budget analysis indicated that the most profitable treatment was 92 kg N and 92 kg P₂O₅ ha⁻¹, yielding a marginal rate of return of 644.68%.</p>	
<p>Is the manuscript scientifically, correct? Please write here.</p>	<p>The manuscript demonstrates scientific rigor and technical validity. The experimental design, a 4x4 factorial in a randomized complete block design with three replications, is suitable, and the statistical analyses, including ANOVA and partial budget analysis, are applied correctly. The findings are substantiated by data, and the discussion aligns with the current literature.</p> <p>The economic evaluation of the study increases its practical relevance. Utilizing two cropping seasons enhances the reliability and validity of the results. Suggestions: Discuss the implications of elevated fertilizer application rates on environmental sustainability. The lack of significant effect of phosphorus application on certain parameters can be attributed to various factors, including soil nutrient availability, existing phosphorus levels, and the specific crop or plant response to phosphorus. Additionally, environmental conditions and application methods may also play a role in the observed outcomes.</p>	

Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references are adequate and pertinent. Nevertheless, the majority are dated prior to 2019. Integrating recent studies (post-2020) regarding nitrogen-phosphorus interactions in potato production would improve the literature review.	
Is the language/English quality of the article suitable for scholarly communications?	<p>The manuscript is generally well-written; however, it contains several minor grammatical and stylistic errors that require attention.</p> <p>“Potato production and productivity in Ethiopia are much below...” → “Potato production and productivity in Ethiopia are considerably below...”</p> <p>The soil at the experimental site is classified as Nitosols.</p> <p>Recommendation: Conduct a comprehensive language edit focusing on grammar, sentence structure, and conciseness. A professional proofreading service can improve clarity and flow.</p>	
<u>Optional/General</u> comments	<p>The findings of the study are encouraging for smallholder farmers in Ethiopia and comparable agro-ecological regions. Emphasizing the scalability and integration of these recommendations into regional agricultural policies would enhance the paper's impact.</p> <p>Examine the long-term impacts of nitrogen and phosphorus application on soil health and fertility.</p> <p>A graphical summary, such as treatment effects on yield and net benefit, would improve data presentation.</p>	

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>	

Reviewer Details:

Name:	Muhammad Anas
Department, University & Country	The University of Agriculture, Pakistan