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Journal Name:	Asian Journal of Soil Science and Plant Nutrition
Manuscript Number:	Ms_AJSSPN_123926
Title of the Manuscript:	Growth, development, yield attributes and yield of French bean (<i>Phaseolus vulgaris</i> L.) as influenced by doses and methods of nitrogen application
Type of the 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: 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>
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.	This manuscript presents important findings on enhancing nitrogen use in the cultivation of French beans, which is essential for increasing crop yields and promoting sustainable farming methods. The extensive examination of various nitrogen levels and application techniques offers practical, research-supported guidance for farmers, which could result in more effective fertilizer utilization and improved crop performance. The detailed evaluation of different growth factors and yield characteristics is commendable, as it provides a comprehensive understanding of the impact of nitrogen on the development of French beans throughout various growth stages.	
Is the title of the article suitable? (If not please suggest an alternative title)	The current title, "Growth, development, yield attributes and yield of French bean (<i>Phaseolus vulgaris</i> L.) as influenced by doses and methods of nitrogen application," is comprehensive and accurately reflects the content of the study. It clearly indicates the crop being studied (French bean), the main factors being investigated (doses and methods of nitrogen application), and the key parameters being measured (growth, development, yield attributes, and yield). However, if you're looking for a more concise alternative that still captures the essence of the research, you might consider: "Optimizing Nitrogen Application for Enhanced French Bean (<i>Phaseolus vulgaris</i> L.) Growth and Yield"	

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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 is generally comprehensive, covering the key aspects of the study. However, there are a few areas where it could be improved for clarity and completeness. Here are my suggestions:</p> <p>Additions:</p> <ol style="list-style-type: none"> 1. Include the location of the study, as this can be important for context. 2. Mention the specific variety of French bean used (Selection 9). 3. Add a brief statement about the statistical design used (factorial randomized complete block design). 4. Include a note on the statistical significance of the results. <p>Deletions/Modifications:</p> <ol style="list-style-type: none"> 1. The sentence about protein content in French beans could be removed as it's not directly related to the study's findings. 2. Simplify some of the detailed numerical results, focusing on the most significant findings. <p>Revised abstract suggestion:</p> <p>"A field experiment was conducted in Meghalaya, India, to study the effect of different doses and application methods of nitrogen on the growth, yield, and yield attributes of French bean (<i>Phaseolus vulgaris</i> L., variety Selection 9). The experiment comprised four nitrogen doses (0, 30, 60, 90 kg ha⁻¹) and two application methods (full basal and 2/3 basal + 1/3 split) in a factorial randomized complete block design with four replications. Growth parameters and yield attributes showed significant increases with increasing nitrogen doses. Maximum plant height (39.35 cm) and number of branches per plant (3.56) were observed with 90 kg N ha⁻¹. The highest grain yield (762.32 kg ha⁻¹) was also achieved with 90 kg N ha⁻¹, compared to the control (146.25 kg ha⁻¹). Split application (2/3 basal + 1/3 top dressing) generally outperformed full basal application. The findings suggest that French bean cultivation with 90 kg N ha⁻¹, applied as 2/3 basal and 1/3 top dressing at the active branching stage, optimizes growth and yield."</p> <p>This revised abstract maintains the core information while improving clarity and conciseness.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The organization and subsections of the manuscript are generally suitable and adhere to a conventional scientific layout. However, there are several areas where enhancements could be beneficial:</p> <p>Strengths:</p> <ul style="list-style-type: none"> • The key sections (Introduction, Materials and Methods, Results and Discussion, Conclusion) are included and arranged in the proper sequence. • The Introduction effectively establishes the context and justification for the research. • The Materials and Methods section is thorough, facilitating potential replication of the study. • The Results and Discussion section is extensive, addressing multiple facets of the research. <p>Areas for Improvement:</p> <ul style="list-style-type: none"> • The Results and Discussion section might benefit from being divided into two distinct sections. This separation would allow for a clearer presentation of the results followed by their analysis. • It may be advantageous to include a "Limitations and Future Research" subsection prior to the Conclusion. This addition would recognize any limitations of the study and propose areas for future exploration. • The "Materials and Methods" section could be enhanced with subheadings for key components 	

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	<p>such as experimental design, plant material, treatments, data collection, and statistical analysis.</p> <ul style="list-style-type: none"> • In the Results and Discussion section, adding subheadings for various parameters (e.g., Plant Height, Number of Branches, Yield Attributes, etc.) could enhance readability. • The Conclusion is relatively brief and could be expanded to discuss the broader implications of the findings and provide recommendations for farmers or future studies. • An "Acknowledgments" section could be included to express gratitude to any individuals or organizations that contributed to the research. • It is important to ensure that all tables are correctly cited within the text and positioned appropriately within or following the relevant sections. <p>In summary, although the existing structure is functional, implementing these modifications could improve the manuscript's organization and clarity, making it easier for readers to understand the study's outcomes.</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>This manuscript showcases scientific robustness and technical integrity in several critical areas:</p> <p>The experimental design is meticulously crafted, utilizing a factorial randomized complete block design with four replications. This setup enables reliable statistical analysis while effectively minimizing potential biases.</p> <p>The research encompasses various nitrogen application rates and methods, facilitating a thorough investigation into the nutrient's effects on the growth and yield of French beans. This methodology allows for nuanced insights into optimal fertilization strategies.</p> <p>The researchers assess a broad spectrum of growth parameters and yield attributes throughout the plant's life cycle, providing a comprehensive evaluation of nitrogen's influence at different developmental stages. Such extensive data collection enhances the credibility of the conclusions drawn.</p> <p>Results are presented alongside appropriate statistical analyses, including standard error and critical difference values, which bolster the findings' reliability and support accurate interpretation of the data's significance.</p> <p>The discussion section adeptly situates the results within the framework of existing scientific literature, illustrating how this study enhances and contributes to the current understanding in the field of agricultural science.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p> <p>-</p>	<p>The references provided in the manuscript are generally sufficient and relevant to the study. However, there are some areas where improvements could be made:</p> <p>Strengths:</p> <ol style="list-style-type: none"> 1. The reference list includes a good range of sources covering various aspects of French bean cultivation and nitrogen application. 2. There's a mix of older foundational studies and more recent research, providing both historical context and current insights. <p>Areas for improvement:</p> <ol style="list-style-type: none"> 1. The majority of references are from before 2020. Including more recent studies (2020-2023) would strengthen the manuscript's currency. 2. Consider adding references on sustainable nitrogen management practices in legumes, which 	

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	<p>could provide broader context for the study's implications.</p> <p>3. Including some references on climate change impacts on legume cultivation and nitrogen use efficiency could enhance the manuscript's relevance to current agricultural challenges.</p>	
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<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language and English quality of the article is generally suitable for scholarly communication, but there is room for improvement. Here's a balanced assessment:</p> <p>Strengths:</p> <ol style="list-style-type: none"> 1. The overall structure follows a logical flow expected in scientific writing. 2. Technical terms are used appropriately throughout the manuscript. 3. The content is comprehensible and conveys the research findings effectively. <p>Areas for improvement:</p> <ol style="list-style-type: none"> 1. There are occasional grammatical errors and awkward phrasings that could be polished. For example, "The experiments consist of a total of 7 treatments laid out in factorial randomized complete block design" could be rephrased as "The experiment consisted of 7 treatments arranged in a factorial randomized complete block design." 2. Some sentences are overly long and complex, which can hinder readability. Breaking these into shorter, clearer sentences would improve comprehension. 3. There are a few instances of inconsistent tense usage, particularly when describing the methodology and results. Maintaining consistent use of past tense for these sections would enhance clarity. 4. Some paragraphs, especially in the Results and Discussion section, are quite dense. Introducing more paragraph breaks could improve readability. 5. There are occasional redundancies that could be eliminated to make the writing more concise. 6. The use of passive voice is sometimes excessive. While passive voice is common in scientific writing, judicious use of active voice where appropriate could make the writing more engaging. 	
<p>Optional/General comments</p>	<p>Based on the information provided in the manuscript, there don't appear to be any obvious competing interest issues.</p> <p>The content appears to be original research. There are no obvious signs of plagiarism, though a full comparison with other literature would be needed to confirm this definitively.</p> <ul style="list-style-type: none"> • Scientific Merit (8/10): The study boasts a well-structured design, featuring a clear methodology and comprehensive data collection. The results are pertinent and significantly contribute to the field of French bean cultivation and nitrogen management. • Structure and Organization (7/10): While the manuscript adheres to a standard scientific format, there is room for improvement in organization, especially within the Results and Discussion section. • Language and Clarity (7/10): The manuscript is generally understandable; however, enhancements are needed in grammar, sentence structure, and overall clarity. • Relevance and Contribution (8/10): The study provides valuable insights into nitrogen application for French bean cultivation, which is relevant for both agricultural science and practical farming applications. • References and Context (7/10): The reference list is adequate but could be improved by including more recent sources and providing a broader context for the research. • Data Presentation (8/10): The data is presented effectively in tables, although some formatting improvements could enhance readability. 	

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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:

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