

Review Form 1.7

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| Journal Name: | International Journal of Environment and Climate Change |
| Manuscript Number: | Ms_IJECC_111186 |
| Title of the Manuscript: | Impact of Nitrogen fertilizer on growth and yield of groundnut (<i>Arachis hypogaea</i> L) genotypes in northeast climate of Afghanistan |
| Type of the Article | |

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PART 1: Review Comments

| | 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> |
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| <p><u>Compulsory</u> REVISION comments</p> <ol style="list-style-type: none"> 1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript) 2. Is the title of the article suitable? (If not please suggest an alternative title) 3. Is the abstract of the article comprehensive? 4. Are subsections and structure of the manuscript appropriate? 5. Do you think the manuscript is scientifically correct? 6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p> | | |
| <p><u>Minor</u> REVISION comments</p> <ol style="list-style-type: none"> 1. Is language/English quality of the article suitable for scholarly communications? | | |
| <p><u>Optional/General</u> comments</p> | <p>Major comments</p> <ol style="list-style-type: none"> 1. The study provides a clear overview of the experimental setup, including the location, design, and layout of the field experiment. It would be beneficial to include more specific details, such as the duration of the summer season and any environmental factors that might have influenced the study. 2. Consider providing a brief justification for choosing the Kunduz University agronomic farm as the experimental site, highlighting any unique characteristics or relevance to the study. 3. Clarify the term "LA" in "LAI (4.75)" and "LAI (5.20)" for better understanding, as it is not explicitly defined in the provided text. 4. It is advisable to include information on the statistical methods used for data analysis. Specify the statistical tests applied to determine the significance of the observed effects, and include the level of significance used (e.g., $p < 0.05$). 5. While the results highlight the superiority of the spreading genotype in various growth and yield parameters, it would be valuable to provide insights into why this particular genotype outperformed the bunch genotype. Discuss any inherent traits or characteristics of the spreading genotype that contributed to its higher productivity. 6. The reported values for plant height, branches per plant, LAI, and other parameters are specific and informative. However, consider providing standard deviations or errors to convey the precision of the measurements and enhance the robustness of the findings. | |

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| | <p>7. When discussing the impact of nitrogen fertilizer, elaborate on the rationale for choosing 45 kg N/ha. Provide a brief literature review or justification for this specific nitrogen application rate and discuss its relevance to groundnut productivity in the northeast of Afghanistan.</p> <p>8. It would be beneficial to discuss the practical implications of the findings. How can farmers in the northeast of Afghanistan benefit from this information? Are there any recommendations for optimizing groundnut productivity in this region based on the study results?</p> <p>9. The conclusion summarizes the main findings effectively. However, consider rephrasing the sentence for clarity: "Therefore application of 45 kg N/ha along with groundnut spreading genotype is the best combination for groundnut productivity in the northeast of Afghanistan."</p> <p>10. Proofread the text for grammatical and typographical errors to enhance overall clarity and professionalism.</p> <p>11. It is commendable that the study compared the spreading and bunch genotypes, providing valuable insights into their performance. However, consider discussing any observed trends or differences in the growth parameters that were not statistically significant, as these may still be of interest to readers.</p> <p>12. The comparison of nitrogen fertilizer effects on different growth parameters is insightful. However, clarify if the effects of nitrogen fertilizer on plant height, branches/plant, LAI, and dry matter were consistent across both spreading and bunch genotypes or if there were genotype-specific responses.</p> <p>13. Proofread the text for clarity and consistency in terminology, especially in the context of the nitrogen application rates (e.g., "Nirogen" should be corrected to "Nitrogen").</p> <p>14. The reported significant effects of groundnut genotypes on pod weight, pod yield, and biological yield are key findings. Provide numerical values or percentages to quantify the observed differences between spreading and other genotypes, offering a clearer understanding of the magnitude of the effects.</p> <p>15. It is mentioned that certain parameters such as pods/plant, kernel/pod, 100 kernel weight, and shelling % were not affected by groundnut genotypes. Consider discussing the implications of these non-significant results and whether there are any trends or patterns worth noting.</p> <p>16. The nitrogen fertilizer effects on yield attributes and overall yield are well-documented. Clarify if the reported values for pods/plant, kernel/pod, pod weight, 100 kernel weight, pod yield, and biological yield are consistent across both spreading and bunch genotypes or if there are genotype-specific responses.</p> <p>17. In the context of nitrogen application, provide a brief rationale for choosing the specific rates (45 kg N/ha and 30 kg N/ha) and discuss their relevance to groundnut productivity. Consider addressing whether there were any observed negative effects or diminishing returns at higher nitrogen levels.</p> <p>18. Ensure clarity in reporting by specifying whether "100 seed weigh weight" is a typographical error, and correct it to "100 seed weight" if needed.</p> <p>19. Proofread the text for grammatical accuracy and consistency in terminology. Ensure that there are no typographical errors or inconsistencies in the presentation of data.</p> <p>In summary, the study provides valuable insights into the effects of groundnut genotypes and nitrogen fertilizer on productivity. Addressing the mentioned points would enhance the clarity,</p> | |
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| | completeness, and interpretability of the reported results. | |
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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> |
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| 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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