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| Journal Name: | [**Journal of Experimental Agriculture International**](https://journaljeai.com/index.php/JEAI) |
| Manuscript Number: | **Ms\_JEAI\_139064** |
| Title of the Manuscript: | **Optimizing Maize Productivity under the Sandalwood-based Agroforestry System: Impact of Secondary Hosts and Tree Spacing** |
| Type of the Article | **Original Research Article** |

**PART 1: Comments**

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|  | **Reviewer’s comment**   |  |  | | --- | --- | | **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer** | | | **review.** |  | | **Author’s Feedback** (It is mandatory that authors should write his/her feedback here) |
| **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 study offers valuable insights into a relatively underexplored area of agroforestry, focusing on optimizing maize productivity in sandalwood-based systems through variation in host species and tree spacing. Given the growing interest in sustainable land use systems, the findings are relevant for researchers, agroforestry practitioners, and policymakers. The regional focus on Maharashtra adds useful location-specific information. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | The title is relevant and informative. To improve clarity, consider a minor rewording:  Suggested title: ***Optimizing Maize Yield in Sandalwood-Based Agroforestry Systems: Effects of Tree Spacing and Secondary Hosts*** |  |
| **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.** | The abstract provides a general overview of the study’s objectives, methodology, and key findings. However, it would benefit from greater clarity and completeness in terms of content. While the effects of spacing and host species are mentioned, the abstract does not present specific quantitative results or indicate the statistical significance of the findings. Including key numerical outcomes would help convey the strength of the results more effectively.  The conclusion of the abstract should also more clearly state the main recommendation of the study. For example, it could explicitly highlight that wider spacing (6×6 m) combined with Sesbania grandiflora as a host species was the most effective combination for optimizing both sandalwood growth and maize productivity. This would help readers quickly understand the practical implications of the research. |  |
| **Is the manuscript scientifically, correct? Please write here.** | The manuscript is generally scientifically sound, with a clear research objective and a suitable experimental design. However, several aspects of the methodology and interpretation should be clarified to improve scientific accuracy and transparency:   * The **replication strategy** should be more clearly explained. While it mentions a split-plot design with three replications, details about how plots were randomized and how the host species were assigned within main plots are not explicitly stated. * The authors should clarify whether **standardized agronomic practices** (e.g., fertilizer application, irrigation scheduling, pest management) were uniformly applied across treatments for maize, as these factors could influence yield independently of tree spacing or host species. * The soil data presented (e.g., pH, nutrient levels) are informative, but it would help to specify whether these values represent baseline conditions before treatment or post-experiment analysis. * For **statistical analysis**, although results mention significance levels and CD (P=0.05), the software or statistical method used (e.g., ANOVA, post-hoc tests) is not specified.   Clarifying these points would strengthen the rigor and reproducibility of the experimental design.    In the result section, there is a discrepancy between the narrative description and the statistical findings. For example, in Section 3.1 (Growth parameters of Sandalwood), the manuscript refers to certain differences as “significant,” while Table 1 clearly indicates “NS” (not significant) for all parameters under spacing, host species, and their interaction. These statements should be revised to reflect the actual statistical outcomes, using terms like “numerically higher” or “trending higher” instead of implying statistical significance. Additionally, the discussion could benefit from a deeper comparison with recent literature to strengthen interpretation. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | The manuscript includes several relevant and up-to-date references. To strengthen the discussion section, the authors might integrate recent studies on maize performance in mixed agroforestry systems or tree-host interactions. |  |
| **Is the language/English quality of the article suitable for scholarly communications?** | The language throughout the manuscript can be improved to enhance clarity and precision. While the scientific content is clear, several sentences contain awkward phrasing, and grammatical issues. The following examples illustrate areas where revisions would be helpful:   * **Original:** “...the all spacing’s...” **Suggested:** “...all spacings...” * **Original:** “Across tree spacing, the plant height and Dry matter accumulation at various growth stage included 30DAS (102.34 cm & 25.81 g/plant)... was recorded maximum in tree spacing of S3 (6×6 m)...”   **Suggested:** “Across different spacings, the highest plant height and dry matter accumulation at all growth stages were recorded under the 6×6 m spacing (S3).”   * **Original:** “In contrast, tree host of sandalwood illustrates the yield attributes and yield of the maize crop.”   **Suggested:** “In contrast, the different sandalwood host species influenced the yield attributes and grain yield of the maize crop.”   * **Original:** “The metrological data of experimental area during experiment...”   **Suggested:** “Meteorological data from the experimental area during the study period...”  Improving the language in these areas will help ensure the manuscript communicates its findings clearly and professionally. |  |
| **Optional/General** comments | * While the manuscript focuses on maize performance within a sandalwood-based agroforestry system, it would benefit from a brief limitations section. For instance, the findings are based on a single growing season and may not capture year-to-year variability in climatic conditions or crop response.   Additionally, the study is site-specific (Jalna district, Maharashtra), and the results may not be directly transferable to other agroecological zones without further validation. Acknowledging such limitations would improve the transparency of the research and offer helpful context for readers and future studies. I suggest including this paragraph at the end of the Discussion section, just before the Conclusion, to appropriately frame the study’s scope.   * A brief mention of the economic analysis or cost-benefit implications would add practical value to the study. |  |

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| **PART 2:** | | |
|  | **Reviewer’s comment** | **Author’s comment** *(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)* |
| **Are there ethical issues in this manuscript?** | *(If yes, Kindly please write down the ethical issues here in details)* |  |

**Reviewer details:**

**Hsu Yemon Kyaw, Oregon State University, USA**