

REVIEWER'S REPORT

Manuscript No.: IJAR-54904

Title: Evaluation of the resistance to water stress of the two (2) agroforestry species in nurseries
Gmelina arborea and Jatropha curcas in Faranah

Recommendation:

Accept as it is

Accept after minor revision.....

Accept after major revision

Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality		x		
Techn. Quality		x		
Clarity		x		
Significance	x			

Reviewer Name: Dr. Hari Prashad Joshi

Detailed Reviewer's Report

Recommendation: Accept after Minor Revisions

This manuscript presents a well-designed and clearly presented study on the resistance of *Gmelina arborea* and *Jatropha curcas* to water stress under nursery conditions. The research addresses a topic of significant importance for agroforestry and reforestation in drought-prone regions. The experimental design is sound, the statistical analysis is robust, and the results are logically presented and discussed in the context of existing literature.

The findings are valuable, demonstrating clear species-specific responses to water regimes, with *J. curcas* showing stronger stem development and *G. arborea* exhibiting better foliage retention under stress. The strong correlations identified, particularly the trade-off between growth rate and collar diameter, provide insightful physiological interpretations.

The manuscript is suitable for publication after the following minor revisions are addressed:

Abstract: The abstract should be slightly refined for clarity and impact. The phrase "the correlation patterns confirm the significant impact" is vague. Instead, state the key correlation findings directly (e.g., "A strong negative correlation was found between growth rate and collar diameter...").

Clarity and Language: While generally clear, the manuscript would benefit from a thorough proofread to correct minor grammatical errors and improve sentence flow. For example:

"Contrary, the leaf surface and growth rate were not significant..." should likely read "In contrast, the effect on leaf surface was not significant..."

"The findings guide the choice of species..." is a bit weak; consider "These findings can inform species selection for..."

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Results Section:

Figure 1: The caption "Effect of water stress on the Germination" is incomplete. It should specify what is being shown (e.g., "...on the germination rate (%) of *G. arborea* and *J. curcas*").

There is a repetition of the same sentence about leaf necrosis on lines 121-124. Please remove the duplicate.

The description of Figure 3's results (lines 165-179) is somewhat convoluted. The narrative could be streamlined to more clearly state which species and treatment led to the highest/lowest values for each parameter.

Figures and Tables:

Ensure that all treatments (E1V1, E2V3, etc.) are clearly defined in the figure captions or in a footnote for readers who may not refer back to the methods section.

The quality and readability of the figures in the provided file are low. Please ensure all figures are high-resolution and have legible axis labels and data points in the final version.

This is a solid piece of research that makes a valuable contribution. With these minor corrections, it will be an excellent publication.