



ISSN NO. 2320-5407

ISSN(O): 2320-5407 | ISSN(P): 3107-4928

# International Journal of Advanced Research

Publisher's Name: Jana Publication and Research LLP

www.journalijar.com

## REVIEWER'S REPORT

**Manuscript No.: IJAR-57831**

**Title: Analyse des effets combinés du biochar et de l'urée super granulée sur l'efficacité d'utilisation de l'azote et les pertes de nutriments dans les systèmes rizicoles irrigués de l'Ouest du Burkina Fas**

**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's ID: JPR-171**

### *Detailed Reviewer's Report*

This study evaluates the combined effects of biochar and deep-placed urea supergranules (USG) on nitrogen use efficiency and nutrient leaching in irrigated rice in Burkina Faso. The topic is relevant for improving fertiliser management in West African rice systems. However, major revisions are required.

First, the experimental design is a pot trial, not a field study. The authors repeatedly refer to "treatments" and "yield" (kg grain per kg N) but do not clearly state that these are pot-scale estimates. Extrapolating agronomic efficiency values (24–28 kg grain per kg N) to field conditions without caution is misleading. Second, the results section lacks standard errors or confidence intervals for the reported efficiency values; only p-values are given. Third, Figures 1–4 are poorly labelled (e.g., "T1=Témoin" but no clear legend on the figures themselves; "iviation" instead of "lixiviation"). Fourth, the correlation analysis (Figure 5) is presented without reporting the number of observations or the statistical significance thresholds beyond stars. Fifth, the conclusion states that "biochar did not significantly reduce nutrient leaching" but the discussion earlier suggests partial effects – the conclusion should be consistent. Sixth, the manuscript contains numerous language and formatting issues (e.g., inconsistent use of French/English in figure captions, missing spaces). The authors must revise the interpretation to reflect the pot-scale nature of the study, provide full statistical details, correct figures, and harmonise language. A major revision is required before resubmission.