

REVIEWER'S REPORT

Manuscript No.: IJAR-58607

Title: Effect of intercropping sesame (*Sesamum indicum* L.) and cowpea (*Vigna unguiculata* L.) on their agronomic performance under rainfed conditions in Bambey, Senegal

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 manuscript presents a well-designed field experiment investigating sesame-cowpea intercropping in Senegal's groundnut basin, with valuable findings showing LER of 1.94 and 48% land savings. However, major revisions are required. The methodology is generally sound, but several critical issues need attention. The statistical analysis section refers to "XLSTATs" and "XISTATS" inconsistently, and the LSD test application requires clarification the authors should specify whether ANOVA assumptions (normality, homogeneity of variance) were verified. The results presentation is problematic: Figures 5-7 are referenced but lack complete captions, and Figure 5's caption contradicts the text statement that intercropping significantly reduced height ($P < 0.01$) while the caption suggests no significant effect at most dates. This discrepancy must be resolved. The discussion is notably weak, occupying only one paragraph that merely restates findings rather than interpreting mechanisms (e.g., why cowpea was more aggressive than sesame, or how resource competition/light interception influenced growth). The conclusion overstates benefits by claiming yields are "equivalent" despite numerical differences (sesame: 739 vs 642 kg/ha), though not statistically significant. The authors should also discuss practical implications for smallholder farmers and potential limitations of this two-year study under variable rainfall conditions. References require formatting correction and completion of incomplete citations.

With strengthened discussion, resolved caption inconsistencies, and clarified statistical approach, this work will make a meaningful contribution to intercropping research in West Africa.