

REVIEWER'S REPORT

Manuscript No.: IJAR-58555

Title: EFFECT OF CO-INOCULATION WITH Rhizobium tropici AND Azospirillum brasilense IN OFF-SEASON COWPEA CULTIVATION IN WESTERN BAHIA

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 investigates the effects of co-inoculation with *Rhizobium tropici* and *Azospirillum brasilense* on cowpea productivity in Brazil's Cerrado region. The research addresses an important topic with practical implications for sustainable agriculture. However, several significant issues require major revision. The methodology section lacks critical details regarding bacterial strain specifications, inoculant concentrations, application methods, and environmental conditions during the trial. The statistical analysis is incomplete, as the authors present ANOVA results but fail to provide F-statistics, degrees of freedom, or any measure of effect size. Additionally, the claim of a 32.21% productivity increase with co-inoculation requires more rigorous statistical validation, as the presented data in Table 4 lacks standard deviations or confidence intervals. The manuscript is structurally disorganized, with repetitive content across sections and inconsistent formatting of tables and figures. The discussion section merely reiterates results without providing critical interpretation or engaging with contradictory findings in the literature. The conclusion, while stating that co-inoculation is beneficial, does not provide specific practical recommendations regarding application rates, timing, or economic feasibility. With substantial revisions addressing these methodological and analytical gaps, this manuscript could make a meaningful contribution to the literature on biological nitrogen fixation.