

The manuscript entitled, “**Analysis of fitness and stability of yield traits in upland cotton under different vintages**”, presents a comprehensive evaluation of fitness and stability of yield traits in upland cotton, emphasizing the environmental influence on parent selection and hybrid performance.

The study effectively presents the study's purpose, methodology, and key findings, but could be streamlined for clarity and impact. Article can be accepted after minor improvements.

However, while the research offers significant insights, several areas require refinement for enhanced clarity, scientific rigor, and impact.

However, following improvements are required for publication,

- ❖ The “abstract” is dense with technical terms and specific results (e.g., "combination 15 (cm3× Xinluzhong59)") that might overwhelm readers or distract from the main message.
- ❖ While the influence of the environment is emphasized, the abstract does not specify which environmental factors (e.g., temperature, rainfall) had significant effects.
- ❖ Include key statistical metrics to enhance credibility and clarity.

The "Materials and Methods" section is robust and provides a solid foundation for the study, though it could benefit from improved readability and better justification for methodological choices.

- ❖ Heavy use of technical terms (e.g., GCA, SCA, SSg, SSge) without sufficient context may alienate non-specialist readers.
- ❖ The formulas and analysis methods are introduced but lack examples or interpretation of their application to the study data.
- ❖ Issues like inconsistent numbering (e.g., "85 Overview of the study area") and improper symbols (e.g., "ÿ") reduce the section's professional presentation.
- ❖ Heavy reliance on terms like “general cooperativeness” and “special co-ordination” without sufficient explanation may confuse readers unfamiliar with the methodology.
- ❖ Potential limitations of the study, such as the restricted two-year timeframe or location-specific factors, are not addressed.
- ❖ The “discussion” does not explore how findings might generalize to other cotton-growing regions or contribute to global breeding strategies.
- ❖ The “conclusion” does not place the findings in a wider agricultural or global context, limiting its broader relevance.
- ❖ While eight combinations are recommended, their specific advantages or contexts for use (e.g., particular environments or breeding goals) are not clearly detailed.

- ❖ Suggest follow-up studies, such as exploring molecular mechanisms, broader geographical trials, or long-term environmental interactions.

The article is well-organized, but minor revisions in grammar, structure, and conciseness will enhance its clarity and impact. The recommendations align well with the findings, showcasing a balanced approach to conservation and sustainability.

The article is well-structured and provides a strong rationale for the study, though it could benefit from a more critical evaluation of historical references and a clearer focus on the practical implications

Regards;

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