

REVIEWER'S REPORT

Manuscript No.: IJAR-59323

Title: Contraintes et potentialités de valorisation technologique et alimentaire de la 2 banane plantain en Guinée forestière.

Recommendation:

Accept as it is

Accept after minor revision.....

Accept after major revision

Do not accept (*Reasons below*)

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

Reviewer's ID: JPR- 115 Dr Thirunahari Ugandhar

Detailed Reviewer's Report

Reviewer Comments

1. The manuscript addresses an important and relevant topic on the technological and food valorization of plantain banana in Forest Guinea. However, the title should be revised for grammatical clarity and consistency with the scope of the study.
2. The scientific name *Musa paradisiaca* should be verified and presented according to current accepted botanical nomenclature.
3. The abstract is informative but lengthy. It should be revised to clearly present the objective, methodology, major findings, and conclusion. Some numerical results should be reduced for better readability.
4. The introduction requires stronger literature support. Recent studies on plantain production, post-harvest losses, processing technologies, nutritional composition, and industrial valorization should be incorporated.
5. Several statements in the Introduction and Discussion are not supported by appropriate references. Relevant citations should be added throughout the manuscript.

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6. The sampling methodology needs greater clarification. The authors should explain the basis for selecting 300 respondents, the sampling procedure, inclusion criteria, and how representativeness of the ten sub-prefectures was ensured.
7. The use of snowball sampling for producers and purposive sampling for processors and consumers may introduce selection bias. This limitation should be acknowledged and discussed.
8. The manuscript states that SPSS v17 was used for significance testing, but the statistical tests and corresponding results are not clearly presented. The authors should specify the tests used, degrees of freedom, p-values, and significance criteria.
9. There are some inconsistencies in the numerical data. For example, the education table reports 16 respondents (26%) for the secondary category among processors, although 16/100 corresponds to 16%. All percentages and totals should be carefully rechecked.
10. The manuscript should clarify the distinction between production, processing, consumption, and marketing percentages, as some percentages may be interpreted as mutually exclusive when they may not be.
11. The results and discussion sections should be better integrated. The authors should compare their findings with previous studies from Guinea and other West African countries.
12. The section describing the industrial derivatives of plantain is promising but requires more scientific depth. Potential products such as plantain flour, starch, beverages, fermented products, bioethanol, animal feed, and other value-added products should be discussed with appropriate references.
13. The technological processes described for flour and other products should include important processing parameters, such as drying temperature/time, moisture content, milling conditions, packaging, and storage stability, where applicable.
14. The nutritional and functional properties of plantain should be supported by quantitative information and recent scientific literature, particularly regarding starch, resistant starch, dietary fibre, minerals, vitamins, and bioactive compounds.
15. The manuscript should provide a more detailed discussion of post-harvest losses and major constraints, including transportation, storage, market access, processing equipment, energy availability, quality control, and access to finance.
16. The role of women in plantain processing and commercialization (96%) is an important finding and deserves deeper discussion in terms of income generation, employment, entrepreneurship, and value-chain development.
17. Figure 1 (study-area map) should include a clear legend, scale bar, north arrow, geographic coordinates, and source of the map.

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18. Figure 2 should have high-resolution images with consistent labeling, and the captions should be standardized. The terminology “banane fruite” should be corrected to “banane frite”.

19. Several grammatical, typographical, and formatting errors are present throughout the manuscript. The paper requires thorough English/French language editing and proofreading before publication.

20. The manuscript contains incomplete or missing references in several places. The reference list should be checked carefully to ensure that every in-text citation has a corresponding reference and vice versa.

21. The conclusion is generally appropriate but should be made more specific and evidence-based, highlighting the major findings, practical recommendations, study limitations, and future research priorities.

22. The authors should clearly state the limitations of the study, particularly the relatively small sample size, non-probability sampling methods, geographical restriction to N'Zérékoré, and reliance on questionnaire-based responses.

Recommendation

Major Revision

The study has good potential and addresses an important issue for food security, rural livelihoods, and agro-industrial development in Guinea. However, substantial revisions are required regarding methodological clarity, statistical analysis, data consistency, literature support, scientific nomenclature, language, and deeper discussion of technological valorization before the manuscript can be considered for publication.