

# Review of: "Enhancing Cocoa Crop Resilience in Ghana: The Application of Convolutional Neural Networks for Early Detection of Disease and Pest Infestations"

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Potential competing interests: No potential competing interests to declare.

The introduction provides a compelling overview of the research topic, but it could benefit from a clearer statement of the research objectives and the specific contributions of the study.

The methodology section lacks detail on the data collection process and the criteria used for selecting the dataset, which may impact the reproducibility and reliability of the findings.

The paper would benefit from a more thorough literature review to situate the research within the broader context of AI applications in agriculture and cocoa farming specifically.

There are several grammatical errors and awkward phrasings throughout the manuscript that need to be addressed to improve readability and clarity.

The discussion section could be expanded to provide deeper insights into the implications of the findings for cocoa farmers, policymakers, and other stakeholders in the agricultural sector.

It would be helpful to include visual aids such as charts, graphs, or images to illustrate key concepts and findings, enhancing the presentation of the research.

The conclusions drawn in the paper should be supported by the data presented in the results section, ensuring that the discussion remains grounded in empirical evidence.

Consider providing a glossary of technical terms or explanations for readers who may not be familiar with AI terminology, enhancing accessibility for a broader audience.

The paper could benefit from more explicit discussions of the limitations of the study, including potential sources of bias or uncertainty in the data analysis.

Ensure consistency in citation style and formatting throughout the paper to maintain professionalism and adherence to academic standards.

The abstract should be revised to provide a concise summary of the research objectives, methods, results, and implications, guiding readers in understanding the paper's significance.

Consider including a section on practical implications to discuss how the research findings can be applied in real-world cocoa farming contexts and the potential benefits for farmers and agricultural communities.

It may be useful to include a subsection on future research directions to suggest areas for further investigation and expansion of the study's findings.

Provide more context on the importance of cocoa farming in Ghana and the specific challenges faced by farmers in

managing disease and pest infestations, enhancing the relevance of the research.

Ensure that all figures and tables are properly labeled and referenced in the text, facilitating comprehension and interpretation of the data presented.

Consider incorporating feedback from stakeholders in the cocoa farming industry to validate the research findings and ensure their relevance and applicability.

Avoid overly speculative language in the discussion section and focus on interpreting the results in relation to the research objectives and hypotheses.

Clarify the significance of the study's findings in advancing our understanding of AI applications in agriculture and their potential impact on cocoa farming practices and sustainability.

Proofread the manuscript carefully to eliminate typographical errors and inconsistencies in spelling, punctuation, and grammar, enhancing the professionalism and credibility of the research.