

# 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.

While this article presents an interesting topic, it requires major revision. Please refer to my comments below:

1) Abstract: How did the author determine that CNN is the best model for early disease detection and pest infestations?

Were any statistical criteria used? The abstract should discuss the novelty of the paper and present the results mathematically, along with how they were validated.

2) Introduction: The objective of the study is mentioned repeatedly, not only in this section but also in others. Please remove the repetitive sentences.

3) Literature Review: To establish a cohesive narrative, the literature review should commence by discussing traditional models employed in prior research and their limitations, thus providing a clear rationale for exploring alternative approaches such as CNN and other ML models. By presenting a well-structured framework, supported by relevant references, the review should demonstrate why these conventional techniques are inadequate, paving the way for a detailed exploration of the advantages offered by CNN and other ML methodologies.

4) Methodology: This section should clearly outline the data used, including its source, and describe the methodology employed and the study area you used. One major weakness of the paper is the lack of figures. To address this, consider creating a flowchart to summarize each section clearly, providing a visual aid for readers to understand the study's processes and findings.

4.1) Understanding Convolutional Neural Networks (CNNs): It should be moved to the methodology. Additionally, in the results section, specific results should be highlighted, rather than focusing solely on discussing previous papers.

6) Conclusion: The conclusion should begin with a summary of the research findings. Subsequently, it should highlight the significance of the results obtained in the study, emphasizing their importance in the context of the research topic.

To summarize, upon reviewing all sections, it appears that the paper lacks the necessary quality for publication. It requires the addition of figures and improvements in coherence to enhance its overall quality.