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 research explores AI's transformative impact on the Ghanaian Cocoa industry. The paper is well-written and informative.

a. The article was written to convince the audience that Artificial Intelligence, particularly CNNs, can be deployed to detect diseases and pest infections in cocoa plants in Ghana. The author states in the abstract that the research was strategically focused on the practical applications of AI and CNNs in identifying and managing cocoa plant diseases and pests. However, no practical implementation was reported. The author further states that the results highlight the profound potential of AI to augment productivity in the Ghana cocoa industry, but fails to demonstrate this.

- The author needs to address the following questions:
  What type of pests and diseases affect the cocoa industry in Ghana?
- How do they affect the cocoa plants?
- Which deep learning algorithms can be used to detect them?
- How do you intend to collect the dataset?
- What type of dataset?

The topic is on the application of CNNs for the early detection of diseases and pests to enhance crop resilience in Ghana. I was hoping to see the practical implementation of CNNs; rather, the paper raises awareness of the potential of CNNs to detect pests and diseases. This is something already known. However, if the paper is about raising awareness of the potential of CNNs to detect pests and diseases in cocoa crops, perhaps the author needs to clearly state that in the abstract to avoid misleading the audience.

Finally, the author needs to clearly demonstrate how the application of CNNs enhances crop resilience.