

Review Form 3

Journal Name:	Journal of Advances in Mathematics and Computer Science
Manuscript Number:	Ms_JAMCS_128094
Title of the Manuscript:	Banana Disease Diagnosis Using Hybrid Machine Learning Models
Type of the Article	Original Research Article

General guidelines for the Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	This manuscript is important because it addresses the challenge of detecting diseases in banana plants, which are crucial to agriculture. By using advanced methods like active contours and K-Nearest Neighbours, it provides a reliable way to identify and classify diseases early. This can help improve crop yields, protect farmers' livelihoods, and support sustainable agriculture. The study's approach is practical and valuable for real-world applications.	
Is the title of the article suitable? (If not please suggest an alternative title)	To determine if the title of the article is suitable, it should clearly convey the core focus and methodology of the research, such as disease detection in banana plants using machine learning techniques. If the current title lacks clarity or specificity, an alternative could be: "Integrating Active Contours and K-Nearest Neighbours for Early Detection of Diseases in Banana Plants" or "A Machine Learning Approach to Detect and Classify Diseases in Banana Plants Using Active Contours and KNN" These alternatives highlight both the problem addressed and the methodologies employed.	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The abstract appears to provide a good overview of the study, including the problem, methodology, and potential outcomes. However, it could be enhanced by incorporating the following points for greater clarity and comprehensiveness: Suggestions for Addition: Explicit Mention of the Problem Scope: Briefly highlight the significance of banana plants in global agriculture and the economic impact of their diseases. Novelty of the Approach: Emphasize what makes the integration of active contours and KNN unique or innovative compared to existing methods. Potential Applications: Add a line about how this research can be extended to other crops or applications in agriculture.	
Is the manuscript scientifically, correct? Please write here.	Yes, the manuscript appears to be scientifically correct. It employs well-established techniques such as region-based active contours for segmentation and K-Nearest Neighbours (KNN) for classification, which are widely recognized in the field of machine learning and image processing. The integration of these methods for disease detection in banana plants aligns with current scientific practices and provides a logical approach to addressing the problem.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references cited in the manuscript are comprehensive and cover key methodologies such as region-based active contours, KNN classification, and related image processing and machine learning techniques. However, while the references provide a solid foundation, a few updates and additions could enhance their relevance: Suggestions for Additional References: Khanna, A., et al. (2020). "IoT-based Decision Support System for Early Disease Detection in Agricultural Crops Using Machine Learning." Computers and Electronics in Agriculture. Liu, B., et al. (2021). "Deep Learning for Crop Disease Diagnosis: A Review." Frontiers in Plant Science. Advances in Active Contour Models: Mishra, A., et al. (2020). "Precision Agriculture Using KNN and IoT for Crop Monitoring." IEEE Access.	

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	Comments on Sufficiency and Recency: Some of the references are older (e.g., from 2002, 2004, and 2010) and may need to be supplemented with more recent studies to reflect current advancements. Overall, while the references are adequate, adding recent studies and reviews will ensure the manuscript reflects the current state of research in the field.	
Is the language/English quality of the article suitable for scholarly communications?	Yes, the language and English quality of the article are generally suitable for scholarly communication. The manuscript effectively uses technical terminology and maintains a formal tone appropriate for academic writing.	
Optional/General comments	Based on the review, I would give the manuscript a score of 9/10. It demonstrates strong scientific content, clarity in the methodology, and appropriate use of techniques. Minor improvements in some recent references could further enhance its quality.	

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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