

Review Form 3

Journal Name:	Journal of Scientific Research and Reports
Manuscript Number:	Ms_JSRR_130705
Title of the Manuscript:	Deep learning-based multi-class pest and disease detection in agricultural fields
Type of the Article	Original Research Article

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.	Farmers once manually inspected crops for pests, but the advent of deep learning algorithms, such as vision transformers and FastAI ResNet, has revolutionized pest detection. These advanced algorithms process large datasets, learning patterns of different pest species. They offer efficient, accurate pest detection and can adapt to changes over time. FastAI ResNet-50 and Vision Transformers have shown remarkable accuracy (0.95 to 1.00) in classifying diseases. However, challenges arise with increased class complexity. Strategies like data augmentation, class balancing, and transfer learning are recommended to maintain accuracy and reliability in pest detection and disease management.	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes	
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.	Yes, it is comprehensive	
Is the manuscript scientifically, correct? Please write here.	Yes, it is correct	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Yes, references are sufficient	
Is the language/English quality of the article suitable for scholarly communications?	Yes	
Optional/General comments		

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PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
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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