Review Form 1.7

Journal Name:	**Journal of Experimental Agriculture International**
Manuscript Number:	**Ms_JEAI_112796**
Title of the Manuscript:	**Advancing Coffee Leaf Rust Disease Management: A Deep Learning Approach for Accurate Detection and Classification using Convolutional Neural Networks**
Type of the Article	**Original Research Article**

PART 1: Review Comments

	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)*
Compulsory REVISION comments **1. Is the manuscript important for scientific community?** (Please write few sentences on this manuscript) **2. Is the title of the article suitable?** (If not please suggest an alternative title) **3. Is the abstract of the article comprehensive?** **4. Are subsections and structure of the manuscript appropriate?** **5. Do you think the manuscript is scientifically correct?** **6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.** **(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)**	**1. Yes** **3. Yes** **4. Yes** **5. Not really; some issues need to be considered.** **6. Not really. I recommend that the author thoroughly research and summarize the current CNN models in the references section, including LeNet, AlexNet, VGG, GoogLeNet, ResNet, etc. Additionally, it is advisable to extensively investigate and cite papers on object detection, such as YOLO networks, SSD networks, etc. For example:** **1. Tugrul, B.; Elfatimi, E.; Eryigit, R. Convolutional Neural Networks in Detection of Plant Leaf Diseases: A Review. Agriculture 2022, 12, 1192. https://doi.org/10.3390/agriculture12081192** **2. Soeb, M.J.A., Jubayer, M.F., Tarin, T.A. et al. Tea leaf disease detection and identification based on YOLOv7 (YOLO-T). Sci Rep 13, 6078 (2023). https://doi.org/10.1038/s41598-023-33270-4** **3. Zhao, Y.; Ju, Z.et al. TGC-YOLOv5: An Enhanced YOLOv5 Drone Detection Model Based on Transformer, GAM & CA Attention Mechanism. Drones 2023, 7, 446. https://doi.org/10.3390/drones7070446**	
Minor REVISION comments **1. Is language/English quality of the article suitable for scholarly communications?**	Need improved	
Optional/General comments	1. The author mentions the use of a CNN model for leaf lesion detection, but fails to specify the detailed CNN architecture. It appears that the author may not be familiar with current mainstream CNN structures. It is necessary for the author to explicitly state the specific model structure employed in this design and provide a diagram illustrating the structure. 2. Judging from the training accuracy and loss curves, the model's training performance is subpar. This indicates that either the author's parameter settings are not optimal or the network structure is not sufficiently refined, resulting in less than ideal training outcomes. The author should address and adjust these issues to ensure the model genuinely achieves convergence.	

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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?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

Name:	**Chao Lian**
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