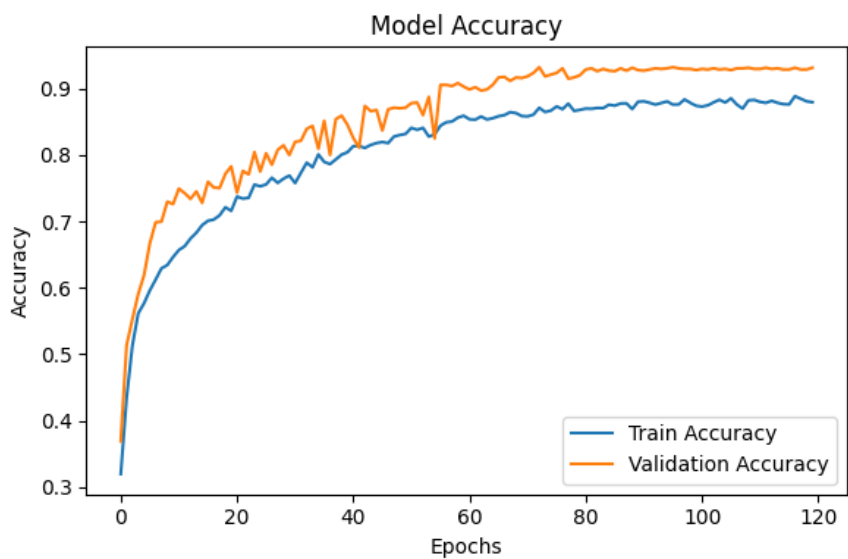


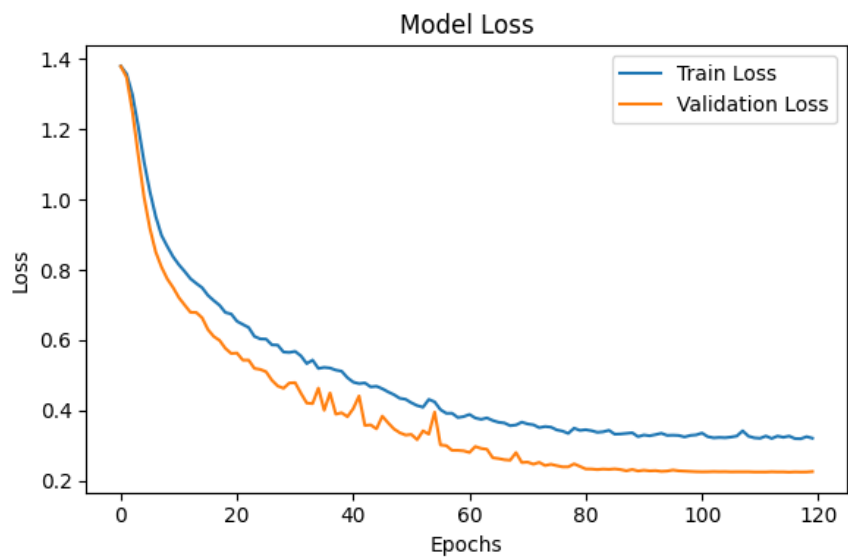
# Rice Leaf Disease Detection - Model Results Summary

Number of classes: 4  
Classes: Bacterialblight, Blast, Tungro, Healthy

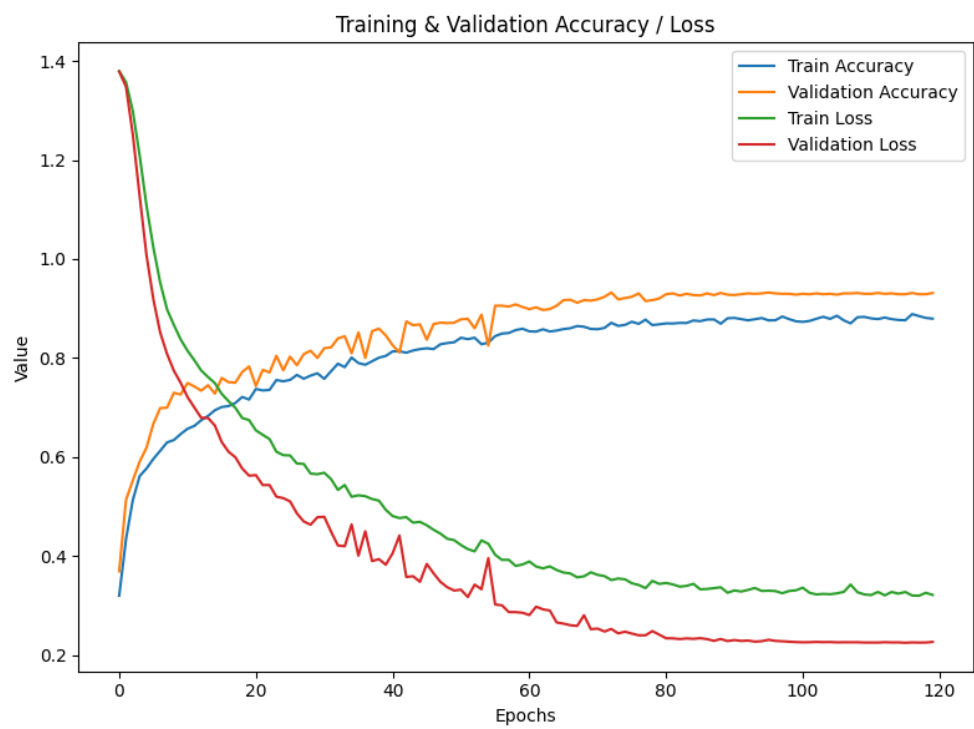
## Training Accuracy and Validation Accuracy (Initial Training)



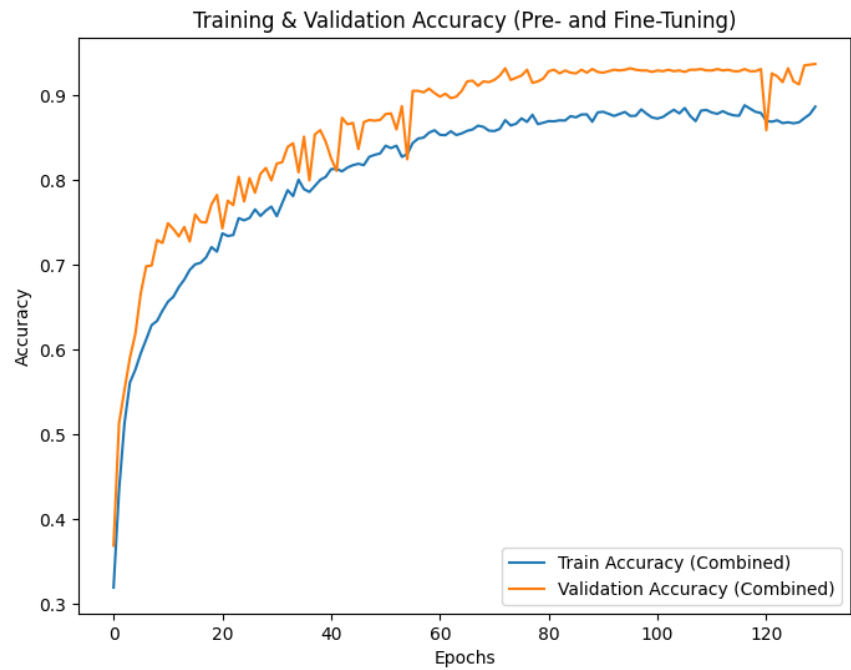
## Training Loss and Validation Loss (Initial Training)



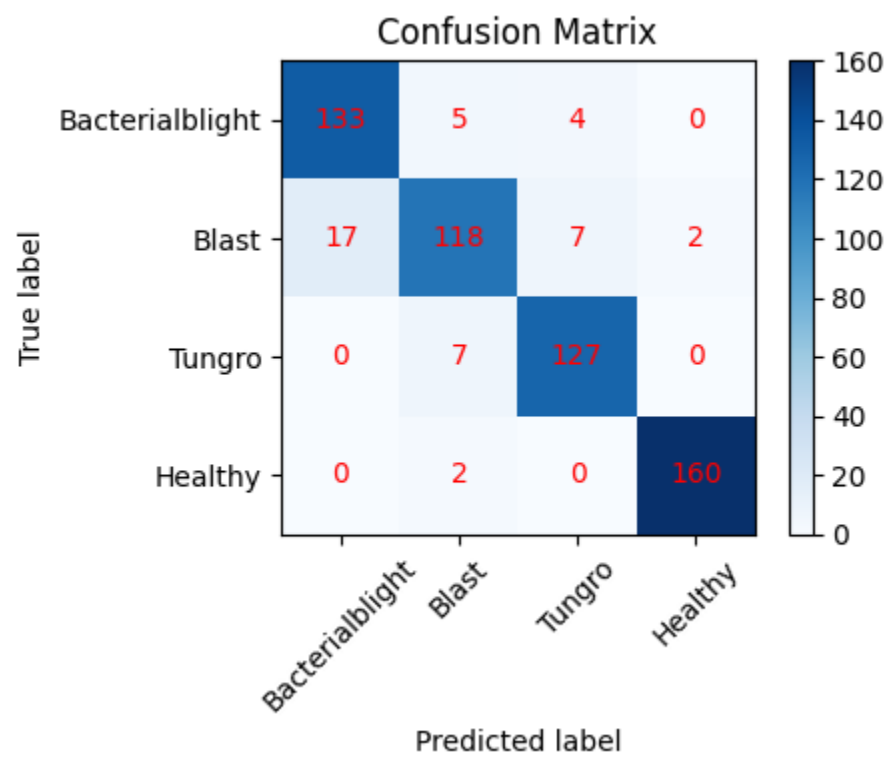
# Combined Training & Validation Accuracy / Loss



# Combined Training & Validation Accuracy (Pre- and Fine-Tuning)



# Confusion Matrix



# Classification Report (Precision, Recall, F1-Score)

precision	recall	f1-score	support	
Bacterialblight	0.8867	0.9366	0.9110	142
Blast	0.8939	0.8194	0.8551	144
Tungro	0.9203	0.9478	0.9338	134
Healthy	0.9877	0.9877	0.9877	162
accuracy			0.9244	582
macro avg	0.9221	0.9229	0.9219	582
weighted avg	0.9243	0.9244	0.9237	582

## AUC (Area Under ROC Curve) per Class

Bacterialblight: 0.9871

Blast: 0.9836

Tungro: 0.9945

Healthy: 0.9999

## Notes

This report summarizes the training, validation, and evaluation of the Rice Leaf Disease Detection model.

Key metrics including accuracy, loss, confusion matrix, classification report, and AUC per class are displayed.

Graphs are generated from training history and test evaluation.

The model architecture uses ResNet50 with attention and multi-scale blocks.

GAN-based augmentation was optionally used for robustness.

Grad-CAM visualizations and TFLite quantized model are also available.