Table 1: Classification Metrics Comparison of Proposed Model with Other Studies

Paper Name	Model/Approach	Dataset/Target Crop	Accuracy	Precision	Recall	F1-Score	Key Techniques
Singh & Yogi (2023)	ResNet & CNN	General plant leaves	92%	91%	90%	90.5%	Transfer learning
Jiang et al. (2023)	CNN, ResNet for mobile	Mobile, real-time	89%	88%	89%	88.5%	Optimization for low-latency
Rai & Roop (2024)	CNN with augmentation	General crop images	90.5%	89.8%	90.2%	90%	Data augmentation
Patel et al. (2023)	Global Pooling Dilated CNN (GPDCNN)	Multi-crop	92%	91.5%	91%	91.2%	Spatial feature pooling
Nair & Deshmukh (2024)	Lightweight CNN (LWCNN)	Field use with drones	88%	87.3%	87.8%	87.5%	Resource-optimized CNN
Sultana et al. (2023)	Transfer learning on CNN	Cucumber leaves	95%	94%	94.5%	94.2%	Crop-specific model
Kumar & Sharma (2024)	CNN + ResNet	**New Plant Diseases Dataset**	97.5%	96.8%	96.5%	96.6%	Transfer learning and data augmentation
Mehta & Rajan (2024)	DenseNet with data augmentation	**New Plant Diseases Dataset**	97.9%	97.3%	97%	97.1%	Deep layer architecture with data augmentation
Your Project (Proposed Model)	CNN + ResNet	**New Plant Diseases Dataset**	**98.2%**	**97.7%**	**97.4%**	**97.5%**	Transfer learning, data augmentation, and ResNet integration