Fold 1 - Confusion Matrix (blue) Amrapali -Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -- 30 Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -- 0 Bari 4 Fazli Langra Khrishapat Sundari Banana GobindoBhog GopalBhog Harivanga Himsagar RaniBhog Predicted

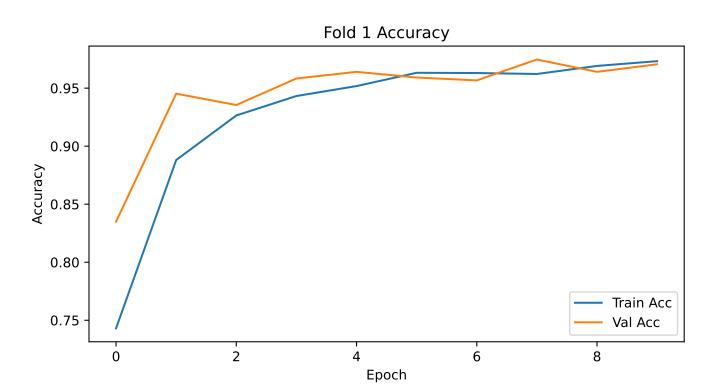
Fold 1 - Confusion Matrix (red)

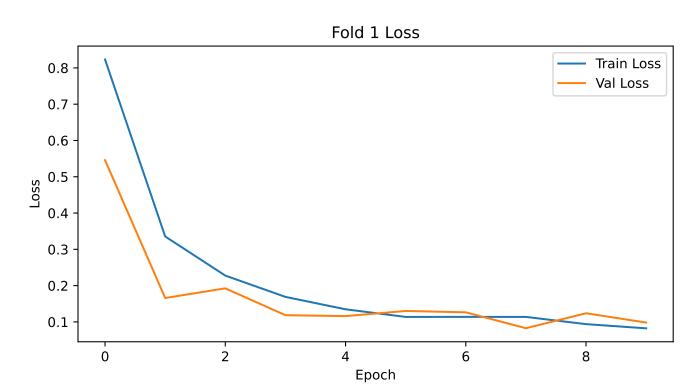
Fold 1 - Confusion Matrix (red)						90									
	Amrapali -	88	0	0	0	0	0	0	1	0	1	0	0		90
	Banana -	0	90	0	0	0	0	0	0	0	0	0	0		- 80
	Bari 4 -	1	0	85	0	0	0	0	4	0	0	0	0		- 70
	Fazli -	1	0	0	89	0	0	0	0	0	0	0	0		60
G	GobindoBhog -	0	0	0	0	90	0	0	0	0	0	0	0		- 60
<u>e</u>	GopalBhog -	0	0	0	0	0	90	0	0	0	0	0	0		- 50
True	Harivanga -	0	0	0	0	0	0	84	4	1	0	1	0		- 40
	Himsagar -	0	0	0	1	0	0	1	76	0	9	1	2		20
	Khrishapat -	1	0	1	0	0	0	0	1	86	1	0	0		- 30
	Langra -	1	0	0	1	0	0	0	0	1	86	1	0		- 20
	RaniBhog -	0	0	0	0	0	0	0	0	0	0	90	0		- 10
	Sundari -	0	0	0	0	0	0	0	1	0	0	0	89		
		Amrapali -	Banana -	Bari 4 -	Fazli -	GobindoBhog -	GopalBhog -	Harivanga -	Himsagar -	Khrishapat -	Langra -	RaniBhog -	Sundari -		- 0
						J	Pred	icted							

Fold 1 - Confusion Matrix (green) Amrapali -- 80 Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -- 30 Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -- 0 Fazli Langra Bari 4 Khrishapat Sundari Banana GobindoBhog GopalBhog Harivanga Himsagar RaniBhog Predicted

Fold 1 - Confusion Matrix (magenta) - 90 Amrapali -- 80 Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -Lο Khrishapat -Sundari -Himsagar – Bari 4 -Fazli Langra . Amrapali Harivanga Banana GobindoBhog GopalBhog RaniBhog Predicted

Fold 1 - Confusion Matrix (viridis) - 90 Amrapali -- 80 Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -- 0 Sundari – Bari 4 Fazli Langra Amrapali Himsagar Khrishapat Banana GobindoBhog GopalBhog Harivanga RaniBhog Predicted

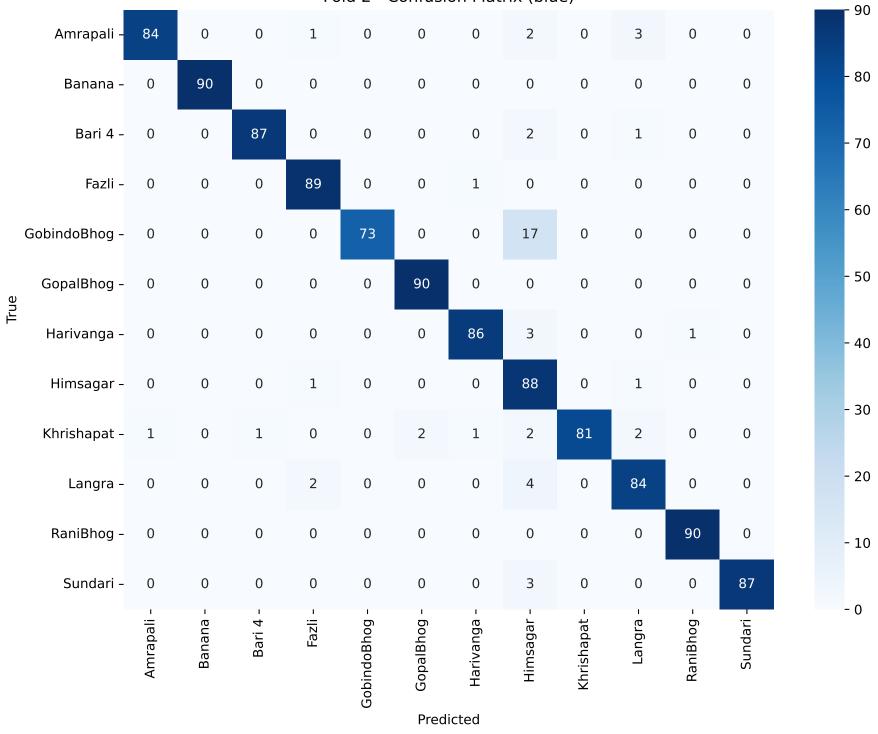




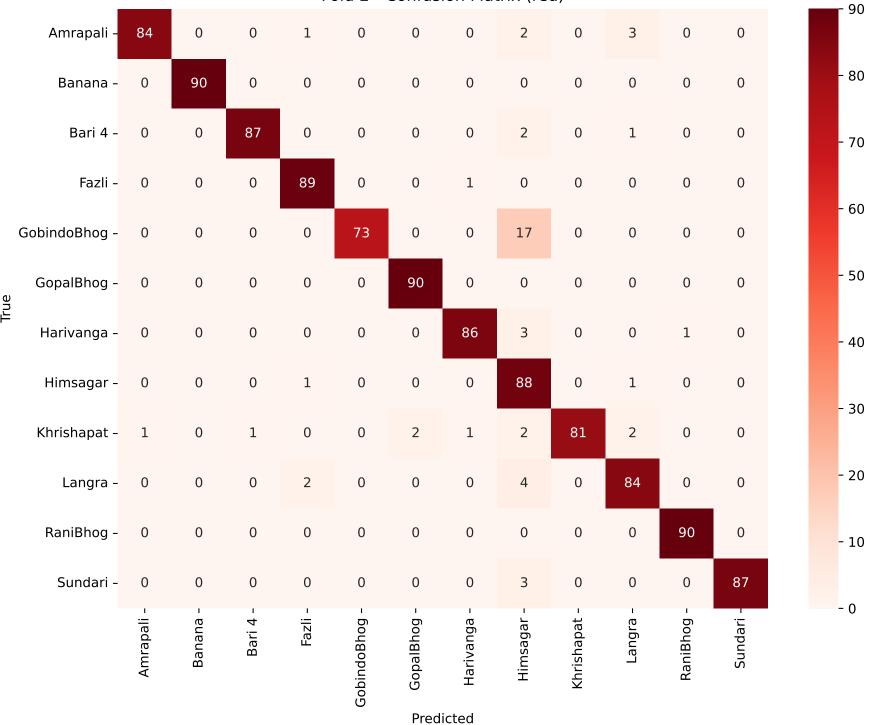
Classification Report - Fold 1 Generated: 2025-10-02 10:33:01

	precision	recall	f1-score	support
Amrapali Banana Bari 4	0.9565 1.0000 0.9884	0.9778 1.0000 0.9444	0.9670 1.0000 0.9659	90 90 90
Fazli	0.9780	0.9889	0.9834	90
GobindoBhog GopalBhog	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	90 90
Harivanga Himsagar	0.9882 0.8736	0.9333 0.8444	0.9600 0.8588	90 90
Khrishapat	0.9773 0.8866	0.9556 0.9556	0.9663 0.9198	90 90
Langra RaniBhog	0.9677	1.0000	0.9836	90
Sundari	0.9780	0.9889	0.9834	90
accuracy macro avg weighted avg	0.9662 0.9662	0.9657 0.9657	0.9657 0.9657 0.9657	1080 1080 1080

Fold 2 - Confusion Matrix (blue)



Fold 2 - Confusion Matrix (red)



Fold 2 - Confusion Matrix (green) - 80 - 70 - 50 - 40 - 30 - 20 - 10 - 0 Fazli Langra Bari 4 Khrishapat Sundari Banana GobindoBhog GopalBhog Harivanga Himsagar RaniBhog

Predicted

Amrapali -

Banana -

Bari 4 -

Fazli -

GobindoBhog -

GopalBhog -

Harivanga -

Himsagar -

Khrishapat -

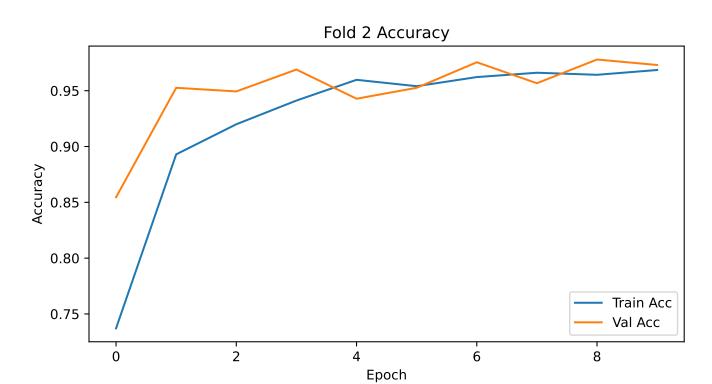
Langra -

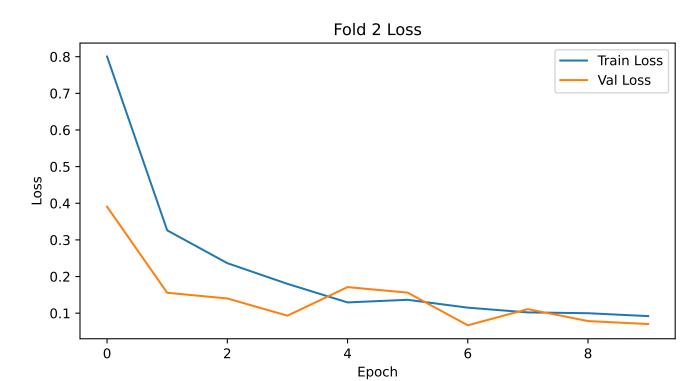
RaniBhog -

Sundari -

Fold 2 - Confusion Matrix (magenta) - 90 Amrapali -- 80 Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -Lο Khrishapat -Sundari -Himsagar – Bari 4 -Fazli Amrapali Langra Harivanga Banana GobindoBhog GopalBhog RaniBhog Predicted

Fold 2 - Confusion Matrix (viridis) - 90 Amrapali -- 80 Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -- 0 Sundari – Bari 4 Fazli Langra Amrapali Himsagar Khrishapat Banana GobindoBhog GopalBhog Harivanga RaniBhog Predicted

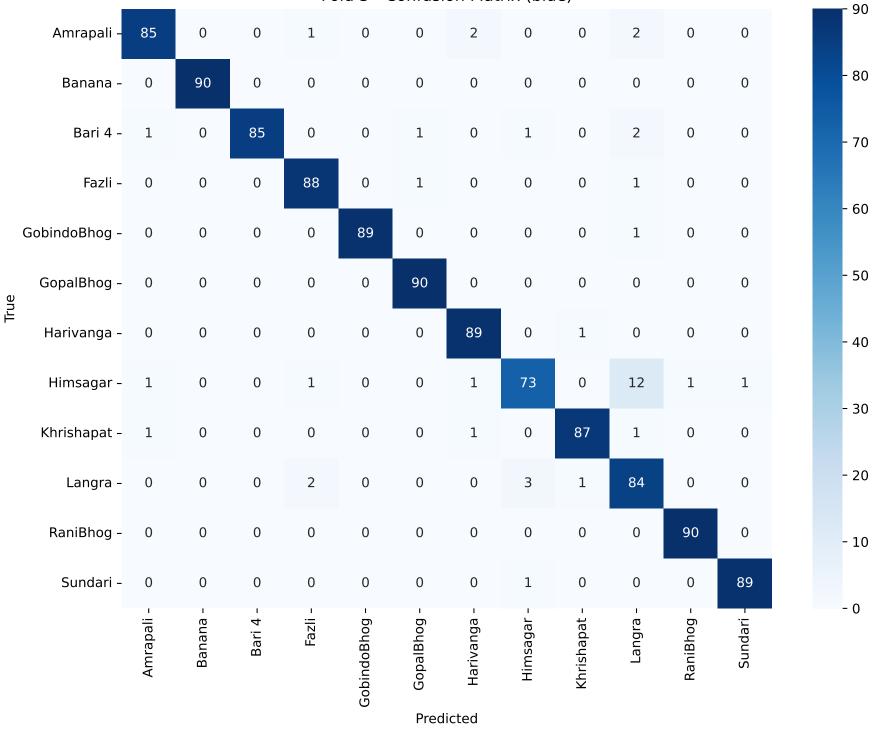




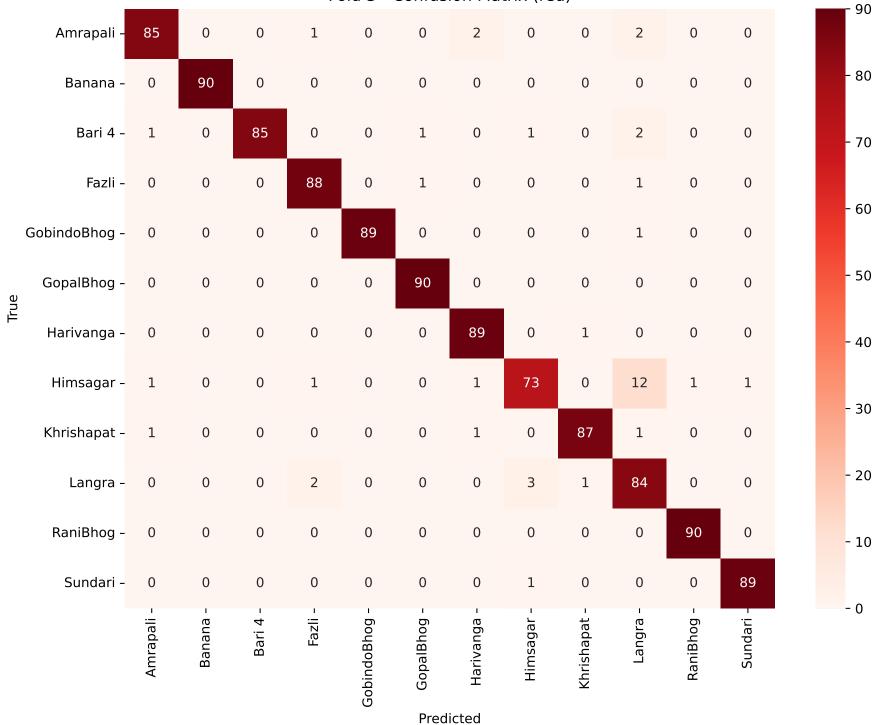
Classification Report - Fold 2 Generated: 2025-10-02 11:30:13

	precision	recall	f1-score	support
Amrapali Banana Bari 4	0.9882 1.0000 0.9886	0.9333 1.0000 0.9667	0.9600 1.0000 0.9775	90 90 90
Fazli GobindoBhog	0.9570 1.0000	0.9889 0.8111	0.9727 0.8957	90 90
GopalBhog	0.9783	1.0000	0.9890	90
Harivanga Himsagar	0.9773 0.7273	0.9556 0.9778	0.9663 0.8341	90 90
Khrishapat	1.0000 0.9231	0.9000 0.9333	0.9474 0.9282	90
Langra RaniBhog	0.9890	1.0000	0.9262	90 90
Sundari	1.0000	0.9667	0.9831	90
accuracy macro avg weighted avg	0.9607 0.9607	0.9528 0.9528	0.9528 0.9540 0.9540	1080 1080 1080

Fold 3 - Confusion Matrix (blue)



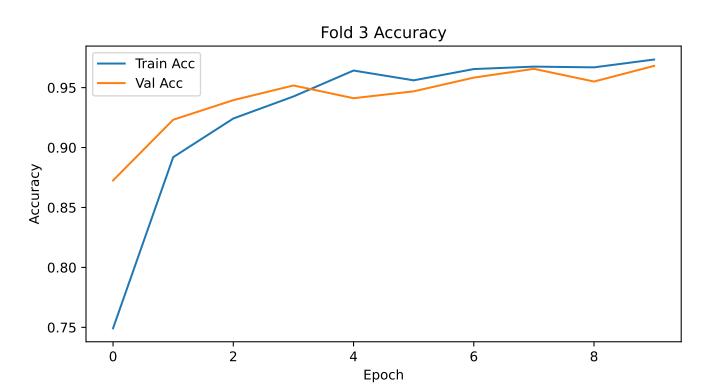
Fold 3 - Confusion Matrix (red)

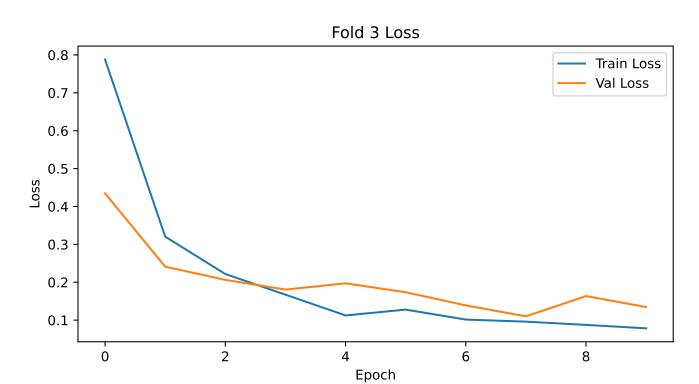


Fold 3 - Confusion Matrix (green) Amrapali -- 80 Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -- 30 Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -- 0 Fazli Langra Bari 4 Khrishapat Sundari Banana GobindoBhog GopalBhog Harivanga Himsagar RaniBhog Predicted

Fold 3 - Confusion Matrix (magenta) - 90 Amrapali -- 80 Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -Lο Khrishapat -Sundari -Himsagar – Bari 4 -Fazli Langra . Amrapali Harivanga Banana GobindoBhog GopalBhog RaniBhog Predicted

Fold 3 - Confusion Matrix (viridis) - 90 Amrapali -- 80 Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -- 0 Sundari – Bari 4 Fazli Langra Amrapali Himsagar Khrishapat Banana GobindoBhog GopalBhog Harivanga RaniBhog Predicted





Classification Report - Fold 3 Generated: 2025-10-02 12:29:34

	precision	recall	f1-score	support
Amrapali Banana	0.9659 1.0000	0.9444 1.0000 0.9444	0.9551 1.0000 0.9714	90 90
Bari 4 Fazli	1.0000 0.9565	0.9778	0.9670	90 90
GobindoBhog GopalBhog	1.0000 0.9783	0.9889 1.0000	0.9944 0.9890	90 90
Harivanga Himsagar	0.9570 0.9359	0.9889 0.8111	0.9727 0.8690	90 90
Khrishapat	0.9775	0.9667	0.9721	90
Langra RaniBhog	0.8155 0.9890	0.9333 1.0000	0.8705 0.9945	90 90
Sundari	0.9889	0.9889	0.9889	90
accuracy macro avg weighted avg	0.9637 0.9637	0.9620 0.9620	0.9620 0.9620 0.9620	1080 1080 1080
weighted avg	0.9037	0.9020	0.9020	1000

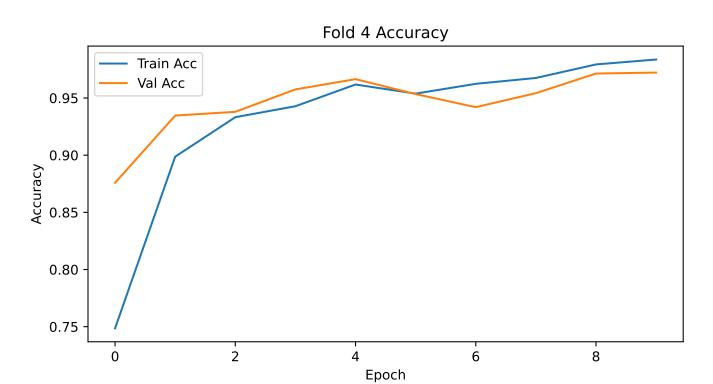
Fold 4 - Confusion Matrix (blue) Amrapali -Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -- 30 Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -- 0 Bari 4 Fazli Langra Khrishapat Sundari Banana GobindoBhog GopalBhog Harivanga Himsagar RaniBhog Predicted

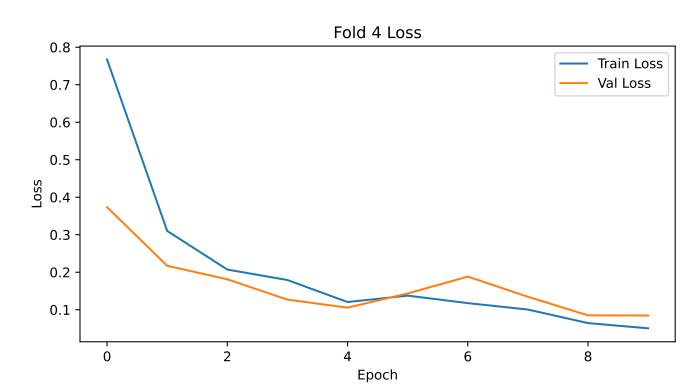
Fold 4 - Confusion Matrix (red) - 90 Amrapali -- 80 Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -- 30 Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -- 0 Bari 4 Fazli Langra Sundari Banana GobindoBhog GopalBhog Harivanga Himsagar Khrishapat RaniBhog Predicted

Fold 4 - Confusion Matrix (green) Amrapali -- 80 Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -- 30 Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -- 0 Bari 4 Fazli Langra Khrishapat Sundari Banana GobindoBhog GopalBhog Harivanga Himsagar RaniBhog Predicted

Fold 4 - Confusion Matrix (magenta) - 90 Amrapali -- 80 Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -Lο Khrishapat -Sundari -Himsagar – Bari 4 -Fazli Langra . Amrapali Harivanga Banana GobindoBhog GopalBhog RaniBhog Predicted

Fold 4 - Confusion Matrix (viridis) - 90 Amrapali -- 80 Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -- 0 Sundari – Bari 4 Fazli Langra Amrapali Himsagar Khrishapat Banana GobindoBhog GopalBhog Harivanga RaniBhog Predicted

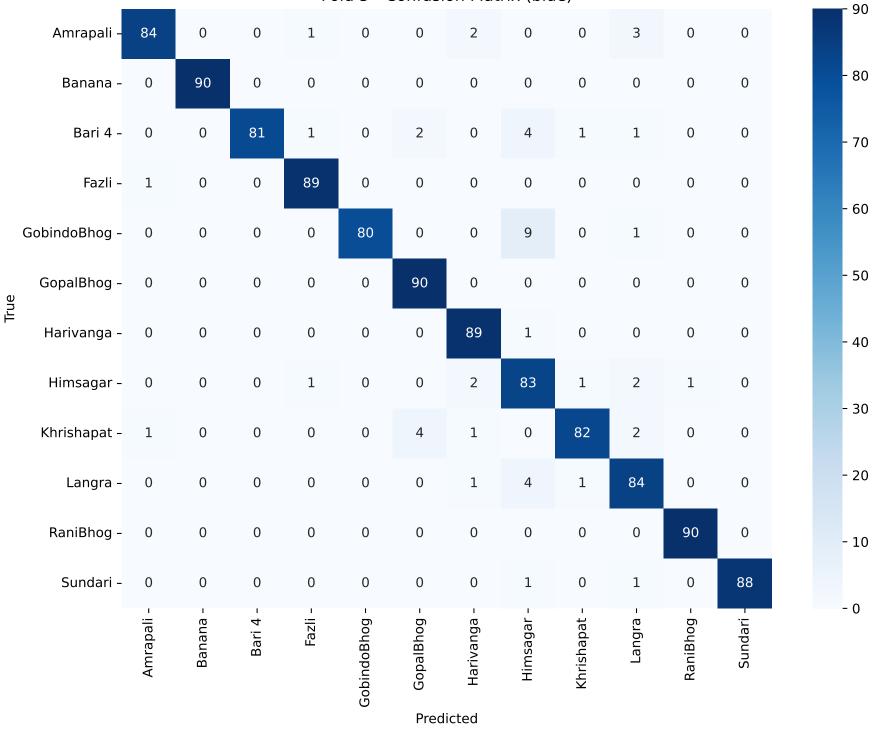




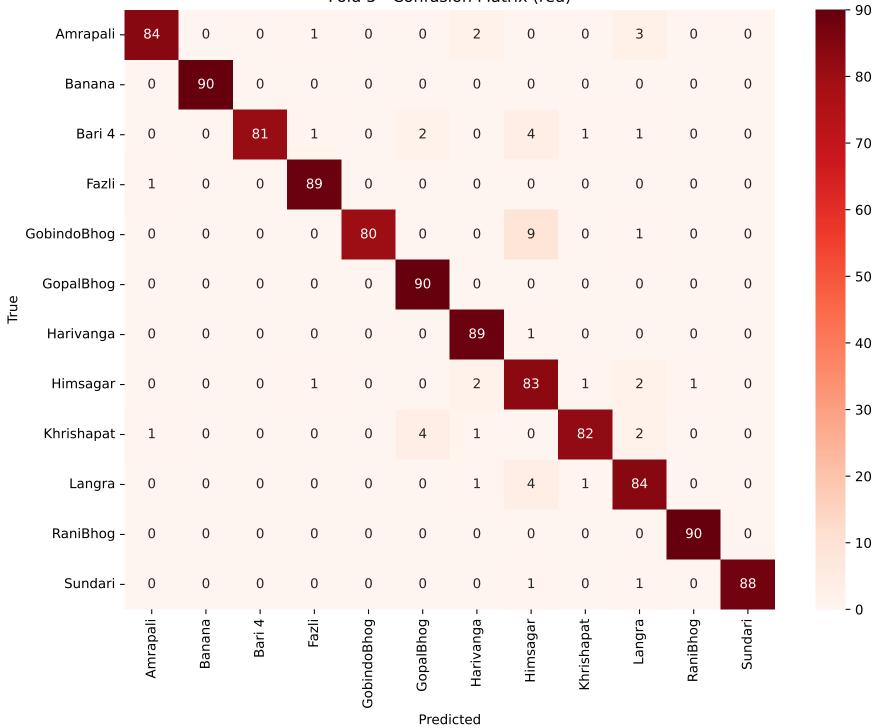
Classification Report - Fold 4 Generated: 2025-10-02 13:28:20

	precision	recall	f1-score	support
Amrapali	1.0000	0.9778	0.9888	90
Banana		1.0000	1.0000	90
Bari 4	0.9889	0.9889	0.9889	90
Fazli	0.9677	1.0000	0.9836	90
GobindoBhog	1.0000	0.9444	0.9714	90
GopalBhog	1.0000	1.0000	1.0000	90
Harivanga	0.9783	1.0000	0.9890	90
Himsagar	0.9053	0.9556	0.9297	90
Khrishapat	0.9778	0.9778	0.9778	90
Langra	0.9651	0.9222	0.9432	90
RaniBhog	0.9890	1.0000	0.9945	90
Sundari	1.0000	1.0000	1.0000	90
accuracy macro avg weighted avg	0.9810 0.9810	0.9806 0.9806	0.9806 0.9806 0.9806	1080 1080 1080

Fold 5 - Confusion Matrix (blue)



Fold 5 - Confusion Matrix (red)

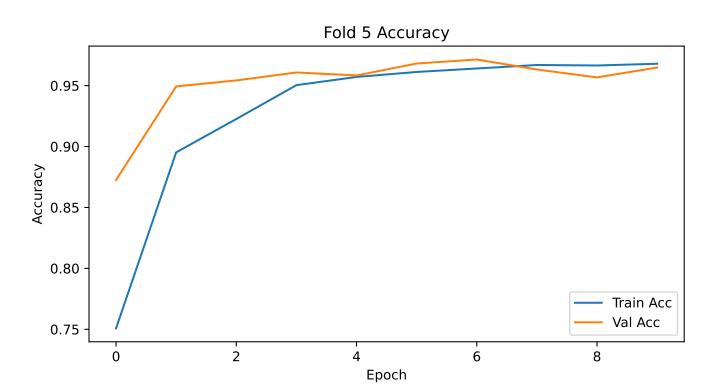


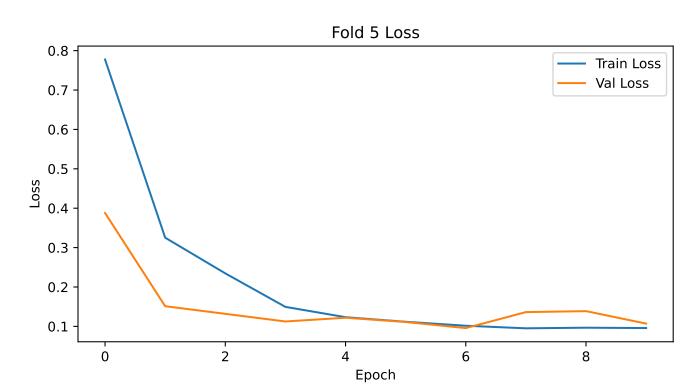
Fold 5 - Confusion Matrix (green) Amrapali -- 80 Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -- 30 Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -- 0 Fazli Langra Bari 4 Khrishapat Sundari Banana GobindoBhog GopalBhog Harivanga Himsagar RaniBhog

Predicted

Fold 5 - Confusion Matrix (magenta) - 90 Amrapali -- 80 Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -Lο Khrishapat -Sundari -Himsagar – Bari 4 -Fazli Amrapali Langra Harivanga Banana GobindoBhog GopalBhog RaniBhog Predicted

Fold 5 - Confusion Matrix (viridis) - 90 Amrapali -- 80 Banana -Bari 4 -- 70 Fazli -GobindoBhog -- 50 GopalBhog -Harivanga -- 40 Himsagar -Khrishapat -- 20 Langra -RaniBhog -- 10 Sundari -- 0 Sundari – Bari 4 Fazli Langra Amrapali Himsagar Khrishapat Banana GobindoBhog GopalBhog Harivanga RaniBhog Predicted





Classification Report - Fold 5 Generated: 2025-10-02 14:26:19

	precision	recall	f1-score	support
Amrapali Banana	0.9767 1.0000	0.9333 1.0000	0.9545 1.0000	90 90
Bari 4	1.0000	0.9000	0.9474	90
Fazli	0.9674	0.9889	0.9780	90
GobindoBhog	1.0000	0.8889	0.9412	90
GopalBhog	0.9375	1.0000	0.9677	90
Harivanga	0.9368	0.9889	0.9622	90
Himsagar	0.8137	0.9222	0.8646	90
Khrishapat	0.9647	0.9111	0.9371	90
Langra	0.8936	0.9333	0.9130	90
RaniBhog	0.9890	1.0000	0.9945	90
Sundari	1.0000	0.9778	0.9888	90
accuracy			0.9537	1080
macro avg	0.9566	0.9537	0.9541	1080
weighted avg	0.9566	0.9537	0.9541	1080

K-Fold Summary Metrics

Fold Train Acc Train	n Loss Val Acc	Val Loss Test Acc	Test Loss
1 0.9732 0.0823	0.9706 0.0982	0.9657 0.0913	
2 0.9685 0.0920	0.9730 0.0703	0.9528 0.1431	

0.9806

0.9537 j

0.0714

0.1202

3 | 0.9734 | 0.0784 | 0.9681 | 0.1345 | 0.9620 | 0.1176

4 | 0.9837 | 0.0504 | 0.9722 | 0.0846

0.9679 | 0.0958 | 0.9649 | 0.1071 |

Aggregate K-Fold Statistics

Metric	Mean	Std	Min	Max
Train Acc	0.9734	0.0056	0.9679	0.9837
Train Loss	0.0798	0.0160	0.0504	0.0958
Val Acc	0.9698	0.0030	0.9649	0.9730
Val Loss	0.0989	0.0217	0.0703	0.1345
Test Acc	0.9630	0.0101	0.9528	0.9806
Test Loss	0.1087	0.0249	0.0714	0.1431