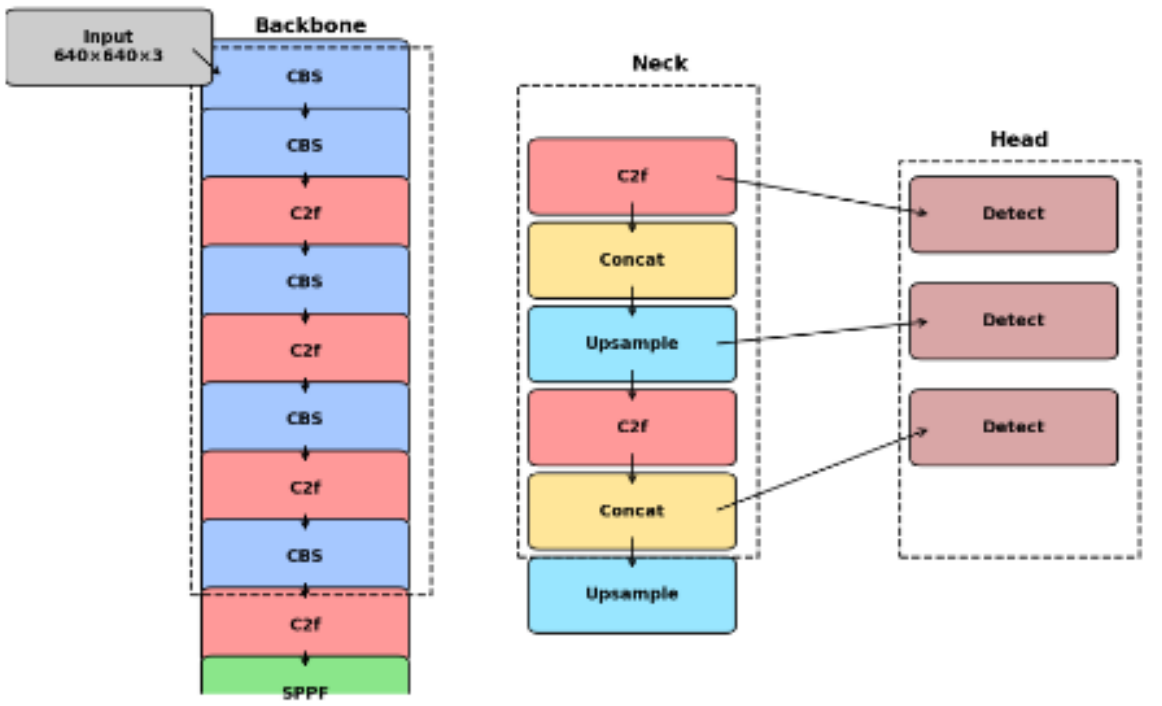
PlantWildV2 Dataset

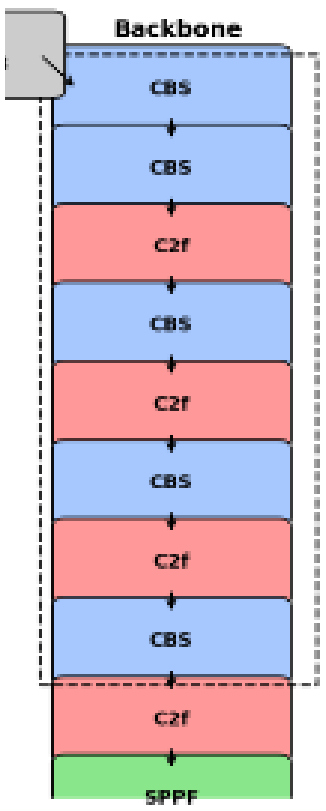
Train Set (80%)

Test Set (20%)

YOLOv8m Architecture



YOLOv8m Backbone



A forward pass over the dataset

Train Set **80%**

Test Set **20%**

Original Feature Bank

307,200-dimensional vectors

307,200

PCA

Optimized Feature Bank

95% variance
450 principal components per image

95% variance

Label Engineering

No data leakage

Exp 2

Visual Grouping

Train Set

Test Set

Exp 1

Treatement Grouping

Train Set

Test Set

MLC

SVC
RF
XGBoost
MLP

Evaluation Metrics

Accuracy/F1-score