

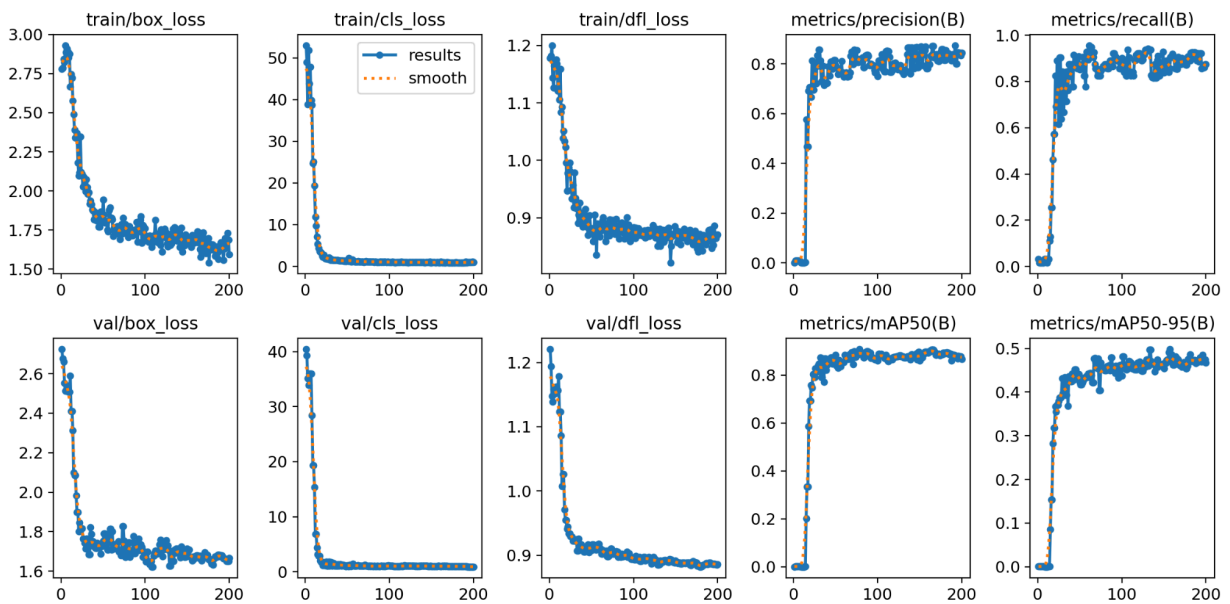
Training configuration:

Model	YOLOv11s (9.4M parameters)
Dataset	45 train, 6 val, 13 test images (64 total)
Resolution	2000px
Epochs	200
Optimizer	SGD (lr: 0.001->0.0001, cosine decay)
Loss Weights	box=7.5, cls=2.0, dfl=1.5
Augmentation(albumentations)	Random crop Square symmetry
Training Time	36 minutes

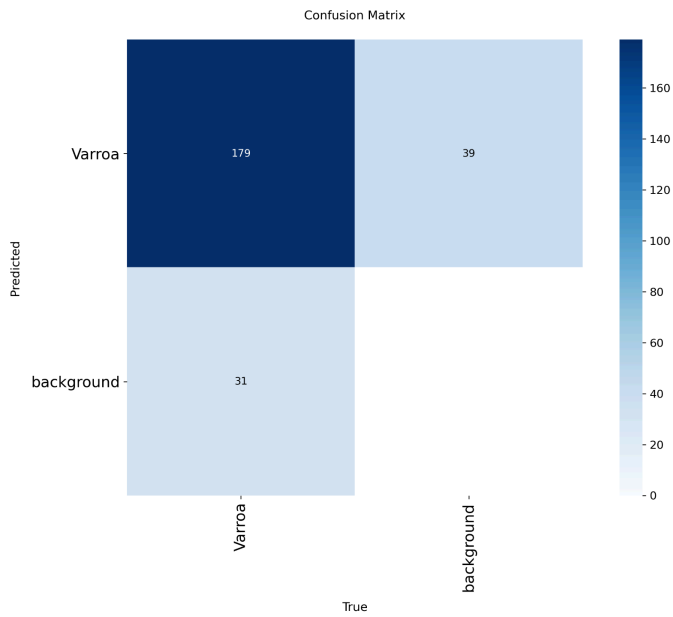
Model performance:

Dataset	Images	Mites	Precision	Recall	F1	mAP@0.5	mAP@0.5:0.95
Validation	6	63	0.867	0.857	0.862	0.897	0.502
Test	13	210	0.816	0.857	0.836	0.911	0.491

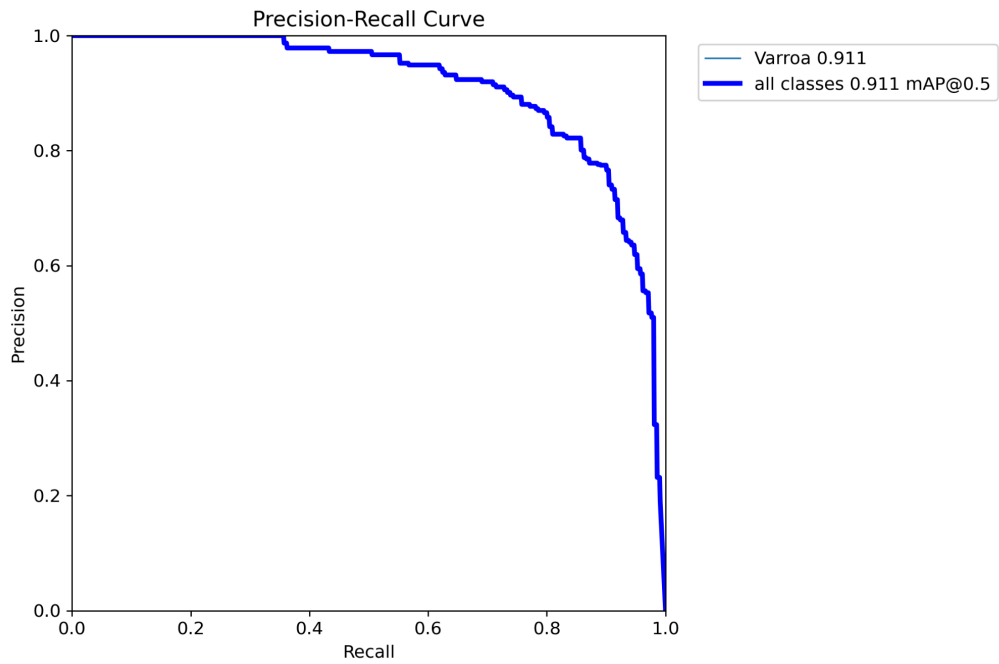
Training and validation loss curves:



Test set confusion matrix:



Test set PR curve:



Test set F1 curve:

