

Model Report: TabNet Field-Level (xr\_fresh)  
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Script: /home/mmann1123/Documents/github/South\_Africa\_Crop\_Comp/deep\_learn/src/Classical Machine Learning/Fi

Data Split:

train\_count: 2653  
val\_count: 664  
test\_count: 830  
random\_seed: 42  
split\_method: fid-wise (field-level)

Metrics (test set):

Accuracy: 0.6265  
Cohen Kappa: 0.4612  
F1 Weighted: 0.5869  
F1 Macro: 0.4841

Hyperparameters:

n\_d: 64  
n\_a: 64  
n\_steps: 5  
gamma: 1.5  
n\_independent: 2  
n\_shared: 2  
lr: 0.001  
scheduler: StepLR(step=10, gamma=0.9)  
max\_epochs: 100  
patience: 10  
batch\_size: 1024  
n\_models: 5  
seeds: [42, 101, 202, 303, 404]  
features: xr\_fresh time-series (field-level mean)

## Per-Class Metrics

Class	Precision	Recall	F1-Score	Support
Barley	0.466	0.543	0.502	138
Canola	0.783	0.540	0.639	87
Lucerne/Medics	0.736	0.940	0.825	352
Small grain grazing	0.222	0.023	0.041	88
Wheat	0.433	0.394	0.413	165

# Confusion Matrix

