

Model Report: Logistic Regression (Pixel-Level)

---

Generated: 2026-02-09 09:57:08

Script: /home/mmann1123/Documents/github/South\_Africa\_Crop\_Comp/deep\_learn/src/Classical Machine Learning/pi

Data Split:

```
train_count: 6058481
test_count: 1484625
random_seed: 42
split_method: fid-wise
```

Metrics (test set):

```
Accuracy: 0.6761
Cohen Kappa: 0.5692
F1 Weighted: 0.6646
F1 Macro: 0.6200
```

Hyperparameters:

```
C: 1.0
class_weight: None
dual: False
fit_intercept: True
intercept_scaling: 1
l1_ratio: None
max_iter: 100
multi_class: deprecated
n_jobs: 4
penalty: l2
random_state: None
solver: lbfgs
tol: 0.0001
verbose: 0
warm_start: False
```

## Per-Class Metrics

Class	Precision	Recall	F1-Score	Support
Barley	0.514	0.555	0.534	273836
Canola	0.880	0.716	0.789	193105
Lucerne/Medics	0.792	0.929	0.855	486935
Small grain grazing	0.532	0.250	0.340	153323
Wheat	0.573	0.590	0.582	377426

# Confusion Matrix

