## CNN analysis results + plots:

```
Found 1890 images belonging to 4 classes.
Found 471 images belonging to 4 classes.
Epoch 1/10
60/60 —
                         - 35s 547ms/step - accuracy: 0.5358 - loss: 1.0517
Epoch 2/10
                          - 34s 568ms/step - accuracy: 0.8120 - loss: 0.5015
60/60 -
Epoch 3/10
60/60 —
                         - 32s 541ms/step - accuracy: 0.8640 - loss: 0.3792
Epoch 4/10
60/60 ----
                         - 34s 554ms/step - accuracy: 0.8847 - loss: 0.3400
Epoch 5/10
60/60 -
                          - 32s 535ms/step - accuracy: 0.8898 - loss: 0.3069
Epoch 6/10
60/60 -
                          - 33s 537ms/step - accuracy: 0.8823 - loss: 0.2937
Epoch 7/10
60/60 ---
                          - 40s 533ms/step - accuracy: 0.9442 - loss: 0.1827
Epoch 8/10
60/60 -
                          - 33s 556ms/step - accuracy: 0.9242 - loss: 0.1971
Epoch 9/10
60/60 -
                          - 32s 537ms/step - accuracy: 0.9317 - loss: 0.1844
Epoch 10/10
60/60 ----
                         - 42s 558ms/step - accuracy: 0.9405 - loss: 0.1801
<keras.src.callbacks.history.History at 0x7e34004cf7d0>
```



1/1 — 0s 40ms/step Predicted probabilities: [[1.2399347e-03 8.4059125e-01 1.5816776e-01 1.0395477e-06]] Predicted class: 1 {'damaged': 0, 'old': 1, 'ripe': 2, 'unripe': 3}