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WHEAT GRAIN QUALITY CLASSIFICATION REPORT

AI-Powered Deep Learning System

Report Date:	November 16, 2025
Report Time:	06:07 PM

Total Images:	2
Processing Time:	2.36 seconds

Generated by Wheat Quality Classification System

Executive Summary

This report presents the quality classification results for **2** wheat grain images processed using an AI-powered deep learning system. The analysis was completed in **2.36 seconds**, with an average processing time of **1.18 seconds** per image.

Grade Distribution

Grade	Count	Percentage	Quality Description
D	2	100.0%	Low quality — visible damage or poor size.

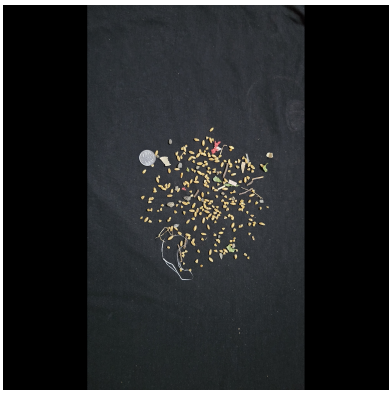
Detailed Results

Image 1: 20251014_044829.jpg

Predicted Grade:	D
Quality Description:	Low quality — visible damage or poor size.
Processing Time:	2.16 seconds
Timestamp:	2025-11-16 18:07:31

Image 2: 20251014_173105.jpg

Predicted Grade:	D
Quality Description:	Low quality — visible damage or poor size.
Processing Time:	0.2 seconds
Timestamp:	2025-11-16 18:07:31



Methodology

This wheat grain quality classification system utilizes advanced deep learning techniques to automatically assess grain quality. The system employs a ResNet50 convolutional neural network, pre-trained on ImageNet, to extract 2048-dimensional feature embeddings from each wheat grain image. These features are then normalized and fed into a machine learning classifier trained on labeled wheat grain samples to predict quality grades ranging from A (excellent) to F (rejected).

Performance Statistics

Metric	Value
Total Images Processed	2
Total Processing Time	2.36 seconds
Average Time per Image	1.18 seconds
Unique Grades Detected	1
Highest Grade	D

Report generated on November 16, 2025 at 06:07 PM