WHEAT GRAIN QUALITY CLASSIFICATION REPORT

AI-Powered Deep Learning System

Report Date:	November 16, 2025
Report Time:	05:53 PM
Total Images:	1
Processing Time:	0.19 seconds

Executive Summary

This report presents the quality classification results for 1 wheat grain images processed using an AI-powered deep learning system. The analysis was completed in 0.19 seconds, with an average processing time of 0.19 seconds per image.

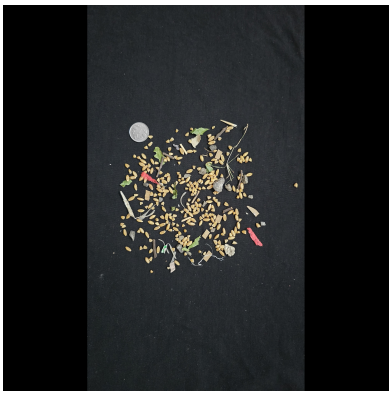
Grade Distribution

Grade	Count	Percentage	Quality Description
C	1	100.0%	Moderate quality — noticeable irregularities.

Detailed Results

Image 1: 20251014_041238.jpg

Predicted Grade:	C
Quality Description:	Moderate quality — noticeable irregularities.
Processing Time:	0.18 seconds
Timestamp:	2025-11-16 17:52:43



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	1
Total Processing Time	0.19 seconds
Average Time per Image	0.18 seconds
Unique Grades Detected	1
Highest Grade	C