

# APIT Rice Doctor

## Grain Analyser Quality Control Report

### General Information

Operator Name:	Mr/Ms. ABC
Location of sample:	XYZ
Rice Mill Name:	PQR Mills
Report Generated:	August 20, 2025
Process ID:	M1_20250818_184908
Machine:	Clean I (Precleaner)

### Grain Information

Parameter	Value
Variety	ADT
Process	Parboiled
Testing Type	Individual
Sampling Technique	Systematic

### Grain Properties

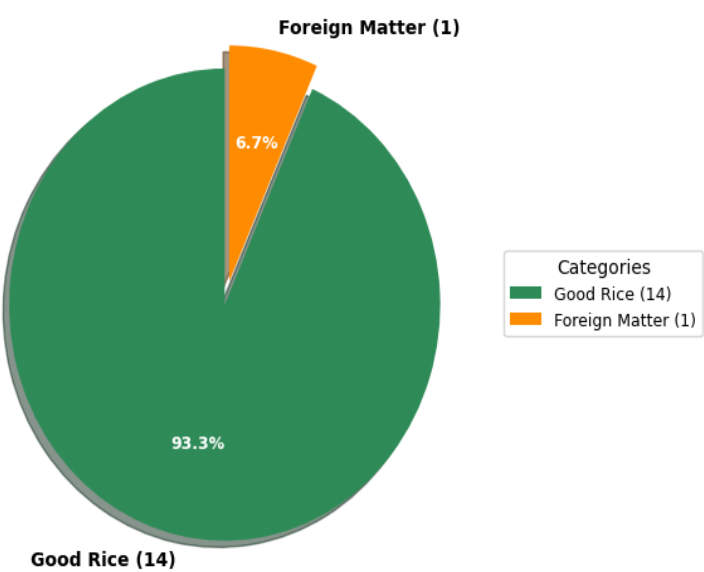
Nutritional Parameters		Morphological Parameters		GMAD Parameters	
Protein	7 %	Length	6 mm	Gelatinization Temp	65 °C
Carbohydrates	78 %	Breadth	2 mm	Moisture	14 %
Vitamin	0.5 mg	Weight	20 mg	Age	6 months

Mineral	1 %	Aspectratio	3	Density	1.4 g/cm3
Lipids	0.8 %	Hardness	7 N		


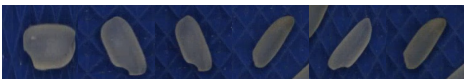

## Quality Analysis Summary

Category	Count	Percentage
Good Rice	14	93.3%
Rejections	0	0.0%
Foreign Matter	1	6.7%
Total	15	100.0%

Quality Distribution



## Good Rice Analysis

Category	Count	Sample Images
Head Rice	6	
3/4 Head Rice	6	
1/4 Fine Broken	1	

# Statistical Analysis of Good Rice

## CLASS-HEAD RICE

	Length	Width	Aspect Ratio
Mean	6.08	2.0	3.04
Mode	5.7	1.9	2.9
Median	5.9	1.97	3.04
Std Deviation	0.4	0.09	0.13
Min	5.7	1.92	2.85
Max	6.67	2.18	3.26
Coefficient of Variation (CV%)	6.61%	4.4%	4.26%

## CLASS-THREE FOURTH HEAD RICE

	Length	Width	Aspect Ratio
Mean	5.0	1.53	3.62
Mode	4.8	1.6	2.7
Median	5.08	1.61	3.2
Std Deviation	0.34	0.44	1.35
Min	4.37	0.73	2.59
Max	5.47	2.02	6.56
Coefficient of Variation (CV%)	6.89%	28.48%	37.24%

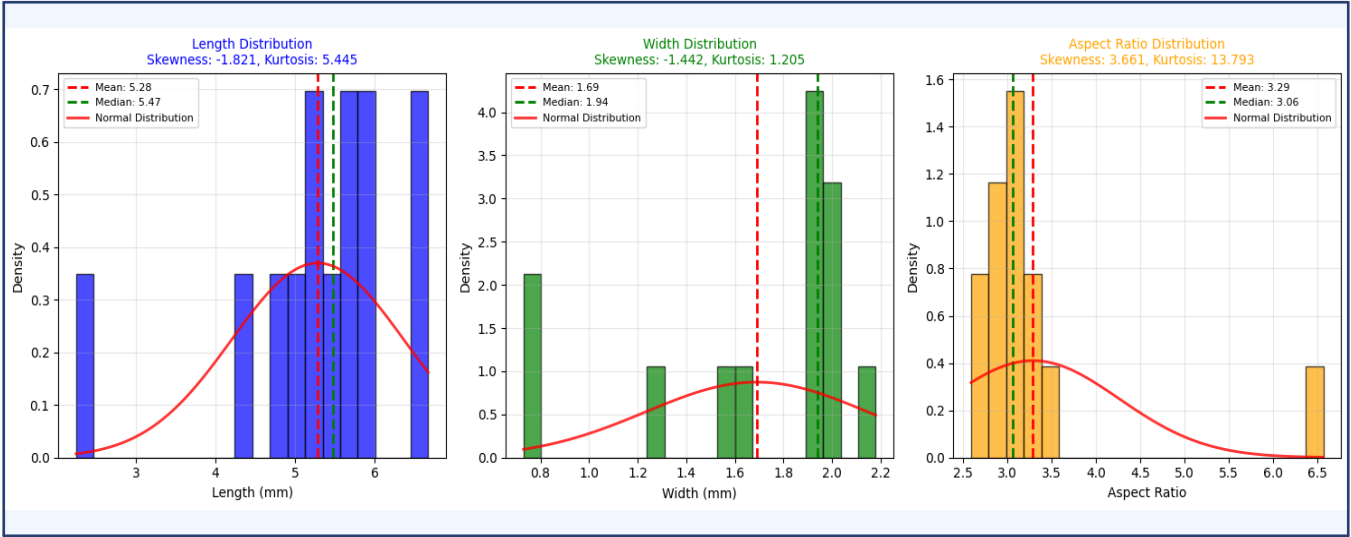
## CLASS-QUARTER FINE BROKENS

	Length	Width	Aspect Ratio
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Mean	2.25	0.8	2.81
Mode	2.2	0.8	2.8
Median	2.25	0.8	2.81
Std Deviation	0.0	0.0	0.0
Min	2.25	0.8	2.81
Max	2.25	0.8	2.81
Coefficient of Variation (CV%)	0.0%	0.0%	0.0%

## Distribution Analysis (Skewness & Kurtosis)

Parameter	Skewness Value	Skewness Interpretation	Kurtosis Value	Kurtosis Interpretation
Length (mm)	-1.821	Highly left-skewed (negative skew)	5.445	Highly leptokurtic (heavy tails)
Width (mm)	-1.442	Highly left-skewed (negative skew)	1.205	Moderately leptokurtic (heavy tails)
Aspect Ratio	3.661	Highly right-skewed (positive skew)	13.793	Highly leptokurtic (heavy tails)



# RGB Color Analysis of Good Rice

## CLASS-HEAD RICE

	Red Channel	Green Channel	Blue Channel
Mean	90.5	91.5	91.5
Mode	99.8	100.1	97.1
Median	92.0	92.2	91.8
Std Deviation	6.2	5.9	5.3
Min	79.1	81.0	82.9
Max	99.8	100.1	98.0
Coefficient of Variation (CV%)	6.9%	6.4%	5.8%

## CLASS-THREE FOURTH HEAD RICE

	Red Channel	Green Channel	Blue Channel
Mean	84.5	85.8	87.6
Mode	96.6	96.9	96.2
Median	83.8	85.9	90.5
Std Deviation	7.2	7.3	9.0
Min	74.5	75.0	72.4
Max	96.6	97.0	97.2
Coefficient of Variation (CV%)	8.6%	8.5%	10.3%

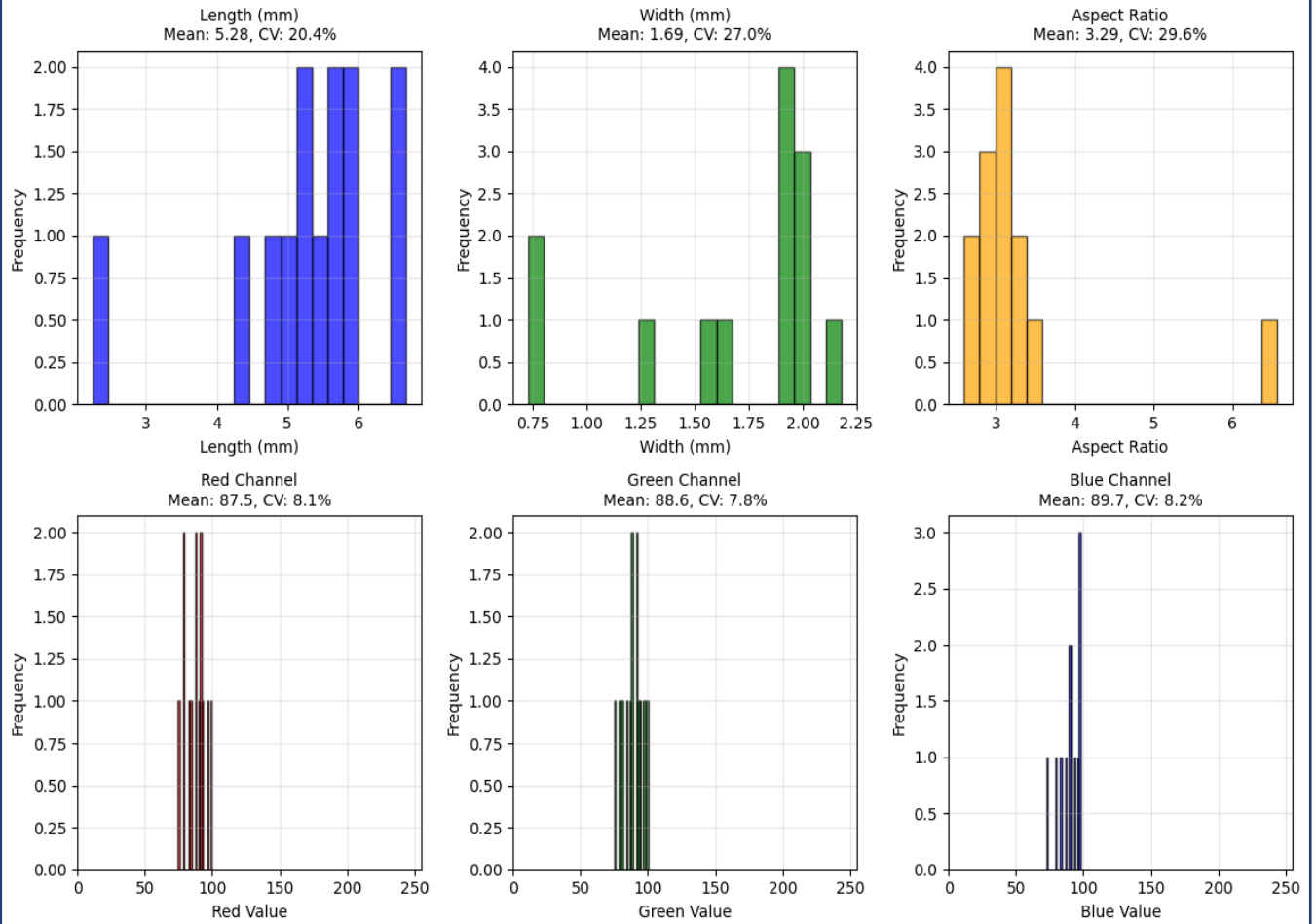
## CLASS-QUARTER FINE BROKENS

	Red Channel	Green Channel	Blue Channel
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Mean	87.7	87.9	91.1
Mode	87.7	87.9	91.1
Median	87.7	87.9	91.1
Std Deviation	0.0	0.0	0.0
Min	87.7	87.9	91.1
Max	87.7	87.9	91.1
Coefficient of Variation (CV%)	0.0%	0.0%	0.0%



# General Analysis



# Rejections Analysis

No rejection data available.

## Foreign Matter Analysis

Category	Count	Sample Images
Brown Rice	1	