

# IRRI Rice Quality Assessment Kit



Better understand grain quality

Make better decisions in post harvest management

## Determine the Following Quality Traits:

### Direct Measurements

- Grain length, width
- 1000 grain weight
- Sample weights < 250g
- Volume < 100ml
- Whole and broken grains
- Grain moisture content
- Grain temperature
- Air temperature
- Air relative humidity

### Visual Checks

- Insects, cracks, damage
- Estimated milling degree

### Calculated Parameters

- Length/width ratio
- Seed lot purity
- Milling recovery
- Head rice recovery
- Milling degree
- Purity
- Insect infestation
- Safe storage conditions
- Drying air properties
- Equilibrium moisture content
- Drying air temperature
- Others

## Some of the tools included in the kit (check back for details)



### Graduated Cylinder (Flask)

This cylinder is calibrated and is easy-to-read, raised graduation allows precise measuring of the volume of grain samples.



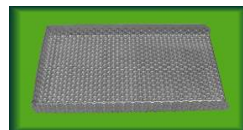
### IRRI Moisture Tester

The affordable decision making, tells you whether your paddy needs drying, can be stored safely before milling or as seed.



### Scale

This mini scale weighs samples in different modes: grams, ounces, troy ounces and penny weights. It can weigh a maximum of 250g.



### Indented Sheet Grader

Used to separate the broken rice (large & small) from the whole kernel.



### Caliper

Used to measure the length and width of the grain.



### Magnifier

Double the size of the item being viewed. Used for observing cracks and insects in the grain.



### Rice Milling Chart

Indicates the level of polishing of white rice. It ranges from 8-14% with 10-12% the preferred range.



### Infrared Thermometer

This non-contact thermometer can be used for monitoring grain temperature in rice milling and drying.

(Two options available)



### Documentation and Tables

Contains printed users' manual and training video. EMC table and psychometric charts, and many other tools allow you to measure air properties and determine safe drying and storage conditions.

For more information contact

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IRRI International Rice Research Institute  
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## Types of quality kits

The quality kit can be configured with different tools to suit the needs of the user. Below are standard configurations.

Item	"No battery" field kit	"Classic" version, for measuring grain properties		"Extended" version, includes air property measurements	
		<i>Budget</i>	<i>De Luxe</i>	<i>Budget</i>	<i>De Luxe</i>
Carrying case	✓	✓	✓	✓	✓
Graduated cylinder / flask	✓	✓	✓	✓	✓
Caliper	✓	✓	✓	✓	✓
Rice milling chart	✓	✓	✓	✓	✓
Indented sheet grader	✓	✓	✓	✓	✓
Magnifier	✓	✓	✓	✓	✓
IRRI moisture tester	✗	✓	✓	✓	✓
Infrared thermometer, gun type	✗	✗	✓	✗	✓
Infrared thermometer, pen type	✗	✓	✗	✓	✗
Scale, 250g	✗	✓	✓	✓	✓
Thermo/hygrometer	✗	✗	✗	✓	✓
Palm husker		✗			
EMC table, laminated	✗	✗	✗	✓	✓
Psychometric chart 0-40°C, laminated	✗	✗	✗	✓	✓
Psychometric chart 20-80°C, laminated	✗	✗	✗	✓	✓
Quality Kit fact sheet	✓	✓	✓	✓	✓
Printed manual	✓	✓	✓	✓	✓
CD "IRRI Quality Kit"	✓	✓	✓	✓	✓
Approximate Price	Inquire for prices at <a href="mailto:Postharvest@irri.org">Postharvest@irri.org</a>				

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