

What is rice quality?

Rice quality refers to a combination of genetic, physical and bio-chemical characteristics that are required for a specific use by a specific user. The quality of the grain is best when it reaches physiological maturity. Rice quality is impacted with the use of inputs and if proper management will not be followed the quality of rice will be poor.

What determines grain quality?

Grain quality is determined by a combination of varietal properties and environmental conditions which occur during crop production, harvesting, processing and handling.

Varietal properties

These include:

- Chemical characteristics (gelatinization temperature, apparent amylase content, gel consistency, alkali spreading value, aroma)
- Shape
- Size
- Color of grain
- Bulk density
- Thermal conductivity

Physical Properties

These are either in addition to normal varietal characteristics or in the consequence of certain varietal qualities. The important environmental properties are:

- Equilibrium moisture content
- Grain purity
- Physical and pest damage, cracked grains
- Presence of immature grains and
- Milling related characteristics (head rice recovery, grain dimensions, whiteness, milling degree and chalkiness)

Milling related characteristics are relevant measures for determining the rice perception at the consumer level. The preference of the consumers may vary as per aroma, taste, gelatin content, size of grains, softness, stickiness and hardness of rice. These preferences may vary as per geography.

