Automatic Rice Classification System

Introduction

Automatic rice classification system is based on flat-bed scanner and image processing. The rice grains are classified as per uniform specificationsof rice given by Government of India. The rice sample (usually 20 gm) is drawn randomly from the rice consignment received by the government agencies and is placed on a sample holder on a flat-bed scanner. The scanner scans the rice grains at a pre-determined resolution and the acquired image is given to the image processing software for detailed analysis. At the image analysis stage, each rice grain is studied by its size and colour features. Based on its size and colour features, each grain is classified into one of the standard defined "refractions" of rice grains. The rice sample (usually 20 gm) is drawn randomly from the rice consignment received by the government agencies and is placed on a sample holder on a flat-bed scanner. The scanner scans the rice grains at a pre-determined resolution and the acquired image is given to the image processing software for detailed analysis. The method reveals size and colour features of the rice grains.

Features

Based on its size and colour features, each grain is classified into one of the standard defined "refractions" of rice grains.

Applications

- It is required by National Testing Labs like FCI, State Agencies for rice quality certification before selling to domestic markets.
- Additionally, similar systems would be required by Rice Millers and Exporters before they send their rice produce for export.

Status

- Lab prototype ready.
- FCI is in requirement of such kind of technology.