

# Rice Grain Analysis Software

## Introduction

Dimensional analysis of rice grains is an important part of quality estimation of rice grains. Rice Grain Analysis Software is an image processing based software for performing dimensional analysis of rice grains in a quick, efficient manner. Rice grain samples are placed on a flat-bed scanner and the scanned images are analysed by the developed software in few seconds. The analysis results are then provided to the user in tabular and graphical displays. The accuracy of dimensional measurements of rice grains using the developed software is comparable to the operator based methods involving length measuring tools such as Vernier callipers. The developed software provides a fast, inexpensive, efficient, repeatable and robust method for dimensional analysis of rice grains in comparison to the manual method which is tedious, subjective, error-prone and expensive in nature.

## Features

- Developed on Java, a robust, platform-independent, high performance programming language
- Image processing using OpenCV, an open source library for image processing and computer vision
- Security features such as user access, software copy protection using hardware dongle
- Easy to learn and perform analysis, intuitive graphical user interface
- Low memory footprint
- Ability to perform dimensional analysis of few hundreds of rice grains rapidly
- Provides the analysis results in tabular and graphical format with date-time stamping
- Enables the user to verify analysis results using bounding boxes on labelled rice grains
- Enables the user to store and print the analysis results

## Specifications

- Input Images : BMP format, scanned at 200 DPI
- Operating System : Windows 7 Service Pack 1 or Windows 10  
64-bit OS required
- System Requirements : 2 GB RAM (minimum),  
500 MB of HDD space for installation
- Graphics : No specific graphics card is required



- Processor : Any Intel or AMD x86-64 processor  
Additionally, MS-Office and any image viewer software required for viewing the analysis reports.

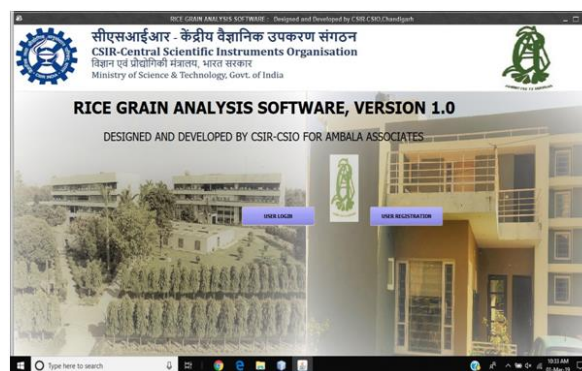
## Benefits

- Indigenously developed fast, inexpensive, efficient, repeatable and robust method for dimensional analysis of rice grains.

## Applications

For use in Agro Industry.

## RICE GRAIN ANALYSIS SOFTWARE



## ANALYSIS SCREEN

