Abstract

Rice is one of the most important cereal grains. Rice is a good source of complex carbohydrates and is rich in several other essential nutrients. The paper presents a solution for quality analysis of Indian Basmati rice grains using Top-hat Transformation. In this paper the problem of Non-uniform Illumination for quality assessment is defined which show their effects in the process of extracting objects from the background and cause segmentation errors. The proposed method for quality assessment of Indian Basmati rice grains using Top-hat Transformation which achieves high degree of accuracy in correcting the effects of the Non-uniform Illumination than Computer Vision Inspection. The proposed method based on Morphological features is developed for counting the number of Indian Basmati rice grains with Normal grains, Long grains and Small grains.

References

Quality Analysis of Indian Basmati Rice Grains using Top-Hat Transformation


Index Terms

Computer Science

Keywords

Top-hat Transformation Quality Morphological operations Basmati rice grains Parameters