

ABSTRACT

There are several types of rice circulating in the people of Indonesia, namely: pandanus fragrant rice, rojolele, IR 64, IR 42, and others. The most widely circulated rice on the market is IR 64 Rice. Rice has different qualities. in this final project aims to assist rice inspectors in the classification of rice quality in three classifications of quality A, B, and C based on the quality of Indonesian National Standard.

In this final project, the author discusses how to detect the quality of rice Starting from the first stage of pre-processing is to change the image of RGB into grayscale and resize the image, the second stage detects the edge of rice using canny edge detection, the third stage separates the object against the background with image morphology operation , the fourth stage is the convolution of grayscale and morphological image , the fifth stage is characteristic extraction with Gray Level Co-Occurrence Matrix (GLCM) method and the sixth step of classification by the the Support Vector Machine (SVM) method.

With this final project, it can be easier to know the quality of rice more effectively and get the accuracy level using Support Vector Machine (SVM) 96.66% polynimial kernel for Multiclass classification method Support Vector Machine OAA and OAO.

Keywords: Gray Level Co-occurrence Matrix, Support Vector Machine, rice.