

Abstract

In agriculture, corn is one of the main commodities in Indonesia. The quality of corn is determined by the seeds. Many farmers often find a variety of seeds and usually the quality of these seeds is determined manually. The manual method is very inefficient due to several factors. Therefore a lot of research has been done to overcome this problem. From these references it can be concluded that the method used in the scope of Computer Vision namely Artificial Neural Network (ANN) is very precise and efficient. Artificial Neural Networks work like neurons in human neural networks. This paper is intended to improve the accuracy of previous studies with black corn as its image. By using Artificial Neural Network method, image data of black corn kernels as input and output is in the form of good or bad classification of the corn kernels. The parameters used as a reference for the good or bad seeds are color and shape. For the color parameters taken an average of RGB from the pixel image of corn kernels and for the parameter parameters taken width, height, circumference, and area. The accuracy calculation uses cross-validation and an accuracy of 95 percent is generated for this study.

Keywords: image processing, black corn kernels, classification, artificial neural network.