ABSTRACK

Coffee is one of the plantation crops that has long been a cultivated plant. Coffee plants are a source of people's income and also increase foreign exchange through exports of raw and processed coffee beans, determining the maturity of coffee cherries starting from raw, ripe enough and ripe so that the color of the coffee can be an important indicator to be able to determine the level of fruit maturity and fruit quality. coffee. Classification of coffee fruit maturity aims to reduce the risk of unripe coffee fruit, classification of coffee fruit maturity manually still has several weaknesses and requires a long process, has low accuracy and is inconsistent, this is due to the determination made subjectively by coffee farmers. As for classifying the maturity level of coffee cherries automatically, it can be faster with objective determination, therefore the use of image processing is relatively easier, faster and based on a quantified descriptive assessment to determine coffee maturity. Image Processing is a method used to process or manipulate images in 2-dimensional form. In the classification process, there are many methods used to obtain classification of objects based on training data. One of the algorithms used for the classification process is K Nearest Neighbor (KNN). KNN is a classification technique for objects based on training data that is the closest or has similar characteristics to the object. . K Nearest Neighbor (KNN) is a method for classifying new objects based on their closest (K) Neighbor, K Nearest Neighbor (KNN) including supervised learning algorithms, where the results of the new query instance are classified based on the majority of the categories in K Nearest Neighbor (KNN). The class that appears the most will be the class resulting from the classification, and from the results of the literature KNN can provide good accuracy in the classification results.