

ABSTRACT

Protein is one of the nutrients needed for everyone. One food that has a good protein content is chicken eggs. As people who often consume eggs every day, of course we must know how the conditions and quality of the eggs we consume. There are many ways to find out how the condition and quality of the egg itself, one of them by see and analyze the weight.

In this final project, we discuss how to analyze the estimated weight of broiler eggs based on digital image processing techniques using the *Binary Large Object* (BLOB) method for feature extraction and *Support Vector Machine* (SVM) for classification. The process of system testing carried out is on the image of the 1st and 10th day eggs. Therefore, to facilitate the process of estimating the weight of chicken eggs to be known precisely, in this study discussed the techniques to identifying and classifying the weight of chicken eggs on farms were used digital image processing techniques.

Based on the results of test that have been carried out, accuracy of the images 77% is obtained with computation time of 0,00072 seconds for testing the image of day 1 of broiler chicken eggs and obtained an accuracy of 64% with a computation time of 0,00258 seconds to test the image of 10th day of broiler chicken eggs. The results of the study are expected to help consumers in knowing egg quality based on estimated egg weight.

Keywords: *Broiler Chicken Eggs, Binary Large Object (BLOB), Support Vector Machine (SVM), Digital Image Processing*