

ABSTRACT

The egg is one of the food hewani in the consumption of in addition to the meat, fish and milk. Generally eggs are in the consumption of derived from the kinds of birds, like a chicken, duck and a swan. The egg is the food very familiar with our lives a day. Each eggs have yellow eggs are different types. Yolks have 15 levels that can be seen from the named Yolk Color Fun, so it can be classified into the egg yolks. This is what into the background of the topic of the task of the end of this is the classification of yellow egg. Like we know technological developments in the field of treatment image of digital has been very rapidly precisely techniques mauldin patterns of an image of digital so in the use of treatment image of digital to classify egg yolks in the country[15].

In the task of this end of the author discuss about a to classify quality and fitness eggs from the acquisition and detect the quality of the egg yolks of color egg yolks chicken with using the processing image of digital. There are several methods that can be used to detect quality and fitness eggs and yellow eggs. At the task of this end of the author of using the Fuzzy Color Histogram (FCH).Discrete Wavelet Transform (DWT) and detection of the with the classification of K-Nearest Neighbour (K-NN) at the start with the process of preprocessing consisting of surgery cropping and resizing. RGB to grayscale, RGB to CMYK, filling, detection of the and detection of the distance.

The results of research in the task of this end in get the value of accuracy detection of the quality of the egg yolks is 81,81 % with time computing 10.548171s seconds, and the value of accuracy detection of the quality of the fitness egg is 73,84 % .Hoped with the ability of the system, can help users Yolk Color Fun so that can be made the standard measurement accuracy right in the quality of the egg yolks and also the quality of the freshness egg chicken of the country.

Key words: Eggs chicken country, Discrete Wavelet Transform (DWT), Fuzzy Color Histogram, K-Nearest Neighbor, Edge Detection.