ABSTRACT

Cow's milk is a drink that is very important for the community for health. One of the benefits of cow's milk is a source of protein, calcium, fat and fat which is very good for meeting the daily needs of the body. But not infrequently also producers mix cow's milk with a lot of air volume, so that mixing air into milk. Therefore, people need to know about the purity of cow's milk which is good and does not contain a lot of water.

In this study a composition system was created and classified cow's milk with the composition percentage of milk 20%, 40%, 60%, 80% and 100%. The extraction method used is the Binary Large Object (BLOB) algorithm and the classification method used is the Learning Vector Quantization (LVQ). The research was conducted by taking samples of cow's milk mixed with different percentages of water content. Digital images of cow's milk are distinguished based on the shape and texture of the results of digital image processing with extraction of features of Large Object Binary.

The results of this study indicate a system completion rate of 80% using 30 data training images and 12 data training images from pasteurized milk.

Keywords: *Cow's Milk, Image Processing, Binary Large Object, Learning Vector Quantization*