

ABSTRACT

The increasing consumption of animal protein, especially meat does not escape from a variety of problems ,among them is a concern that it contains ham as food ingredients. Lately often appears the case of beef such as counterfeiting security beef with ham. This condition could harm the consumers , especially beef consumers in traditional markets. They do not know how to differentiate beef with ham , the consumers only origin buy meat. In order to protect consumers from these scams ,so it takes tool or system that can help people to recognize the beef and ham

In this final project has been carried out research and design of a simulation using the texture feature extraction method Grey Coocurent Level Matrix (GLCM) is one of the methods used in analyzing the texture and classification method with Fuzzy Logic

In this final project has created a simulation that can classify the image of beef and pork, by using two types of data among others are the database training and test images . Number of training images database is 200 data. The details is 100 images of beef and 100 image of ham . Number of test images is 600, with details of the 200 image of beef and ham , 100 data of image verification meat are lamb and chicken , 100 data of test data with parameter image distance , and 200 images of beef and ham with low brightness is 30lux. Captured image at a distance of 8 cm and the brightness 300lux. In the final project research is conducted has been tested with a test image of beef and ham using 90^0 and 135^0 of gray get accuracy reached 98.5 % .Testing with a distance parameter to get the highest accuracy is 92.5% , in the making distance to the object is 8cm. Testing with low brightness parameters 30 lux at 0^0 and 135^0 GLCM get an accuracy of 46%. Testing with the image verification lamb and chicken obtain accuracy of 37%, the epoch is 20 and 135^0 of gray GLCM get an accuracy 98.5 % with a computation time 4,190s.

Keywords : Image Processing , Meat , GLCM , Fuzzy Logic

