Identification of Beef and Wild Boar Types to Avoid Meat Counterfeiting Using the K-NN Method

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ABSTRACT

Beef is one of the foods with the highest consumption level in Indonesia. The price of beef also continues to increase every year due to the increasing demand for the needs of the population. To overcome these losses, beef traders usually reduce the amount of merchandise so as not to experience greater losses. However, there are also traders who cheat to reap bigger profits. One way is to mix pork and beef. The purpose of this study was to create a system for identifying types of beef and wild boar based on color to avoid meat adulteration using the K-NN method. The stages of the research method include problem identification, literature study, pre-processing, training, testing and implementation of the GUI system. There are 3 criteria as variables used, namely the value of H, S and V from the image. From these criteria the data will be identified into 2 classes based on the values of H, S and V. The results of the identification are then displayed on the system. After the training and testing process has been carried out by comparing the system accuracy test with the manual calculation of K-NN, the accuracy value is 90% using the value K = 3, so it can be concluded that the system can identify the data correctly but there are still data that are identified as other classes.

Keywords : *Beef, Wild Boar, Identification System, K-NN*