

ABSTRACT

There are various types of plants that grow in Indonesia, one of which is the rhizome of the Zingiberaceae family (encounter). This type of rhizome plant has many different benefits and uses. Therefore, it cannot be arbitrary in its use and use because the results and properties will be different. The rhizomes of the Zingiberaceae family (temu-finds) have a shape that looks the same, but humans will easily classify the types of rhizomes that exist by looking at the characteristics of the shape and color of the rhizomes. There are still many people who have not been able to distinguish the types of rhizomes that exist. With a machine or computer that is not equipped with an intelligent system, it will not be able to identify the types of rhizomes that exist. The existence of the phenomenon of artificial intelligence is able to encourage experts to imitate the working principles of the human brain and try to replace the work system of the human brain into a computer system. It is hoped that this research can be used in the herbal or traditional medicine industry, pharmaceuticals, cosmetics, food and beverages. This is the basis of reference for this study, so in this study the researcher will take the topic of rhizome classification using the Naive Bayes Classifier method based on color features (Red, Green, Blue) and texture features (Entropy, Contrast, Energy, Homogeneity). This application uses 160 training data and 40 test data. The level of accuracy generated by the system is 97.5%.

Keywords: Rhizomes, Color Features and Texture Features, Naive Bayes Classifier