

Sistem Klasifikasi Warna Kulit Buah Naga (*Hylocereus spp.*) Menggunakan Metode Jaringan Syaraf Tiruan (*Dragon Fruit Maturity Level Identification System (Hylocereus spp.) Using Artificial Neural Network Method*)
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ABSTRACT

*Dragon fruit which has the Latin name *Hylocereus spp.* belongs to the type of cactus from the genera *Hylocereus* and *Selenicereus*. Dragon fruit is one type of fruit that is popular with the public because it has many health benefits and also has a delicious taste. There are 4 types of dragon fruit that have been widely cultivated, namely white dragon fruit, red dragon fruit, super red dragon fruit and yellow dragon fruit. The method commonly used by dragon fruit farmers to classify dragon fruit skin color is still done manually. By utilizing this highly developed information technology, researchers are trying to create a system for classifying dragon fruit skin color using the Artificial Neural Network (ANN) method. The Artificial Neural Network method was used to classify dragon fruit skin color into four classes namely green, green_red, yellow_red and red. In this study using RGB color features and HSV color features and using GLCM texture features as input parameters of the Artificial Neural Network method. This study uses 325 data which is divided into 280 training data and 45 test data. By using the ANN method using a learning rate of 0.2, a goal of 0.01 and epoch 100, the accuracy obtained is 99.29% for training data and 93.33% for test data.*

Key words : *Artificial Neural Network, Dragon Fruit, RGB, HSV, GLCM*