**Ensiklopedia Klasifikasi Jenis Buah Mangga (*Mangifera spp.*)
Berbasis Neural Network**

*Encyclopedia Of Species Mango Fruit Classification (Mangifera Spp.) Using
Neural Network*

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ABSTRACT

Mango is one of the superior national fruit commodities that can act as a source of vitamins and minerals. In Indonesia, there are 19 species of mangoes scattered throughout Indonesia, with a variety of different fruit shapes for each type. However, due to the large amount of genetic diversity, wide distribution area and various mango species, it does not guarantee that information and data on these mango varieties are complete and easily accessible. Researchers were tried to create a digital encyclopedia system that not only provides more detailed knowledge about each type of mangoes, but also can distinguish each type of mangoes. This application can identify and classify based on the shape of the fruit of 5 types of mangoes, that is Apple Mango, Gadung Mango, Gedong Gincu Mango, Golek Mango and Manalagi Mango. The classification method used is Backpropagation Neural Network, with fruit shape parameters in the form of area, perimeter, eccentricity, major axis length and diameter values. The system can identify the type of mango fruit using Backpropagation with the highest accuracy of 99.6% in the training program and 96% accuracy in the testing program.

Key words : Mango fruit, Backpropagation Neural Network, Shape Feature