## KLASIFIKASI UMUR POHON KELAPA SAWIT PADA CITRA FOTO SATELIT BERDASARKAN TEKSTUR MENGGUNAKAN METODE LVQ

By

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## **ABSTRACT**

Oil palm plantations are one of the products that have the highest value and the industry, including labor-intensive. Pengelolahan oil palm plantations up to this time-based block each block comprising one with the smallest units of planting age of 12-30 ha / block. This study makes a system that can see and distinguish the life of a young oil palm plantations, adults, elderly and not the palm oil land. Classifying types of satellite images of palm trees based texture features using the LVQ. This Methode will calculate the distance between the initial with training data, so that at the end of the iteration will find the weight of the end of each class/data. In the process of matching or in the system used for the search process, the system will find the shortest distance between the new input data with a final weight of each class. From the test results of the methods used in the training process and the testing of palm trees, this method has a very high success. By using  $\alpha$ =0.05, Min  $\alpha$ =0.075, Deca  $\alpha$ =0.1, and 100 epoh, then the success of achieving 62,2%.

**Kata Kunci:** *Image Processing, Learning Vector Quantization.*