

**IDENTIFICATION OF ORANGE IMPORT IMAGE PROCESSING
BASED ON COLOR AND STATISTIC TEXTURE METHOD with
K-NN**

By

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ABSTRACT

Development of information technology is growing very rapidly. Some studies gave birth to many applications in the field identifier of an object image. Image processing is one type of technology to solve problems of image processing. In image processing, image processing such that the images could be used for further applications. Applications in digital image is also experiencing growth in terms of identifying both the plants, fruit, leaves and the other based on certain characteristics. At this final project will be implemented in a system that will identify the type of Citrus Imports by color and texture. Color selection is done by a simple statistical calculation, while the texture selection using co-occurrence matrix analysis. Finding the average value of the total number of pixels. While co-occurrence matrix is a square matrix with the elements as much as the square of the number of pixels in the image intensity level. Based on the above objectives, the system created using the application Matlab program R2011b. Experiments were done using the fruit Citrus Import images that have dimensions of 448 x 336 pixels (with a similar background) as much as 85 images. From the test results yield 98.8% based on the color corresponding to the condition (color), while for phase identification (texture) resulted in K=3 73.75%, K=5 87.50%, K=7 26.25%.

Keywords : Image Processing, Orange Import, Simple Statistic, K-NN, Color Range.

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