

# **CLASSIFICATION OF ORANGE FRUIT MATURITY USING THE SUPPORT VECTOR MACHINE (SVM) METHOD**

**ESTERLINA IRMA YEMPORMASE**

*Informatics Study Program, Faculty of Science & Technology*

*University of Technology Yogyakarta*

*Jl. Ringroad Utara Jombor Sleman Yogyakarta*

*E-mail : [yempormaseellin@gmail.com](mailto:yempormaseellin@gmail.com)*

## **ABSTRACT**

*The various colors of fruit make it sometimes difficult for us to determine whether the fruit is ripe or unripe. How to determine the ripeness of fruit using the SVM (Support Vector Machine) method, by taking several image samples of orange fruit using a digital camera or mobile phone camera, then from these samples the original image will be converted into greyscale color then the greyscale will be converted into LAB color with the aim of finding the A color value from LAB and the R,G value from RGB colors (Red, Green, Blue) then taking the average value and then classifying it. From this research, the results will be obtained whether the fruit is ripe or still unripe. From the research results, the match accuracy was obtained with a percentage of 89.47% from the data of 93 orange images.*

*Keywords: Fruit Maturity Level Classification,*