Abstract

The classification of mangoes maturity level is still done manually and has a weakness in terms inconsistent of accuracy, and there is a differences of opinion between the sorting operator. Therefore, in this final task the authors make a system to classify the maturity level of mango fruit based on the skin color of the fruit. This final task use mango image dataset amounts to 188 user created image, divided into 4 classes, namely "Matang", "Muda", "Tua" and "Mentah". Meanwhile, for the image classification process using the method *Support Vector Machine* (SVM). The highest result generated by SVM to classify the mango fruit was 96.67% using One vs One model with Polynomial Orde 2 kernel.

Keywords: Maturity Classification, Support Vector Machine, Image Classification, Maturity of Mango