

Abstract

This study is conducted to categorize the palm oil fruits according to their ripeness whether under ripe, ripe or over ripe. A grading palm oil system is developing to determine the ripeness of fruits and it can be used in the factory environments. This grading system is developed to computerize the currently manual grading system. Classifications of the fruits are done by applying the RGB colour analysis in analyzing the colour value. Evaluation of the system will be compared with the manual grading using human vision. This study will focus on fresh fruit bunches only. By using this system, the plantation workers can do their work easier on sorting the fruit. The palm oil quality and productivity can be increase, gain more profits and reduce the unripe fruit withdrawals. The result showed that the fruit can differentiate from other ripeness category based on RGB intensity.

Keywords: palm oil FFB, grading palm oil, colour grading, RGB, colour analysis

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