THE EFFECTS OF POSTHARVEST MANGO DIP IN CALCIUM CHLORIDE AND HYDROGEN PEROXIDE

CHONG CHEE KEAN

FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE
UNIVERSITI MALAYSIA TERENGGANU

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The effects of postharvest mango dip in calcium chloride and hydrogen peroxide / Chong Chee Kean.

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THE EFFECTS OF POSTHARVEST MANGO DIP IN CALCIUM CHLORIDE AND HYDROGEN PEROXIDE

CHONG CHEE KEAN

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ABSTRACT

This study was conducted by using Mango (*Mangifera indica* L.) and it was carried out from 13th September to 29th September 2007. The mangoes were dipped in two different solutions that are calcium chloride ($CaCl_2$) and hydrogen peroxide (H_2O_2) solutions with different concentrations of 1%, 2%, 3% and 4%. Subsequently, the mangoes were stored at 13°C for 16 days of storage. During the storage times, the mangoes were analyzed for four different parameters that are colour, firmness value, total soluble solids and weight loss every four days. Based on the results, all the four different concentrations of calcium chloride and hydrogen peroxide respectively had no effect on the colour (Hue angle) of the mangoes. Meanwhile 3% $CaCl_2$ is the more effective treatment compared with the other treatments and the untreated control mangoes in maintaining the firmness of the mangoes. Treatment of 3% $CaCl_2$ is also more effective compared with untreated control mangoes and is equally effective with the other concentration of calcium chloride and hydrogen peroxide solutions in maintaining the total soluble solids of mangoes. On the other hand, dipping in four different concentrations of calcium chloride and hydrogen peroxide respectively are effective in reducing the percentage of weight lost compared to the untreated control mangoes.