

**EFFECTIVENESS OF DIFFERENT CONCENTRATIONS
OF ALOE VERA GEL COATING IN ENHANCING
THE SHELF LIFE OF LOCAL FRUITS**

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ABSTRACT

EFFECTIVENESS OF DIFFERENT CONCENTRATIONS OF ALOE VERA GEL COATING IN ENHANCING THE SHELF LIFE OF LOCAL FRUITS

This experiment focuses on the effects of different concentrations of Aloe Vera gel coating on the storage behaviour of banana and star fruit at the room temperature of 25°C ($\pm 5^\circ\text{C}$). Both chemical and physical characteristics of the fruits were tested. The physical characteristics tested were Physiological Loss of Weight (PLW) and size of the fruits. The chemical characteristics of fruit that were tested are titrable acidity, pH value and Total Soluble Solid (TSS). Both banana and star fruit were coated with 0%, 25%, 50%, 75% and 100% Aloe Vera gel coating and the shelf life of the local fruits were observed up to 15 days. The constant which is 0% of Aloe Vera gel coating for both fruits started to deteriorate after storage period of 5 days and only few survived after 10 days. However, the coated banana and star fruit have extended to 15 days with most of the fruits still in good conditions even after 15 days. The optimum concentration of Aloe Vera gel coating that enhance the shelf life of both fruits is 100% of Aloe Vera gel coating.