

EFFECT OF EDIBLE WAX COATING AND MAP ON THE QUALITY OF MANGO DURING STORAGE

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ABSTRACT

*The effect of edible coating (1% bee wax in rice bran oil) and MAP on shelf life extension of mango fruit (*Mangifera indica*) was investigated. The physical and biochemical quality parameters such as titrable acidity, TSS, physiological loss in weight, respiration and skin colour were monitored. The analysis was carried out under ambient ($26\pm4^{\circ}\text{C}$, $75\pm4\%$) and cold ($13\pm1^{\circ}\text{C}$, $95\pm2\%$ RH) storage conditions. This study showed that use of edible coating along with MAP condition could reduce the respiration rate and there by extend the shelf life by one to three weeks. From the studies it was able to conclude that bee wax coated mango fruits in combination with MAP condition created by LDPE bags of 210 ± 1 gauge thickness (0% perforation) could store for 20 days in cold storage under set condition with acceptable quality. While the fruits under ambient condition of same treatment lasted only for seven days.*

KEYWORDS: Mango, Edible bee wax, LDPE bags

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