EFFECT OF ALOE VERA COATING ON QUALITY OF STAR FRUITS (Averrhoa carambola)

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ABSTRACT

EFFECT OF ALOE VERA COATING ON QUALITY OF STAR FRUITS (Averrhoa carambola)

Star fruits had been popular among people nowadays as they now discover and realize that star fruits have lots of nutrients. It was a highly perishable fruit and high postharvest losses occur in Malaysia. In addition, star fruits had a relatively long storage life compared to many tropical fruit but are easily damaged especially after harvest because they are very susceptible to mould growth. In order to overcome this problem, this study had seek to create a more efficient system for fruit storage by determining the effect of Aloe vera coating with different treatment on quality of fruit. The fresh star fruits, Averrhoa carambola commonly called as 'Belimbing Besi' were treated as control (uncoated), 70% Aloe vera and 70% Aloe vera with glycerol at chilled temperature, 4°C. Studies were conducted in 4 consecutive weeks and undergo fruit analysis at an interval of 7 days for periods of 21 days. The physicochemical properties of the coated star fruits were evaluated in term of titratable acidity, weight loss, fruit firmness and fruit colour. The Aloe vera coated fruit showed decreasing in titratable acidity, reducing weight loss, maintaining firmness and rapid colour changes. Meanwhile, the result showed that at both treated treatments of Aloe vera gel, with and without glycerol significantly increased the shelf life evidenced by reduced decrease in titratable acidity. The result showed higher potential on using Aloe vera at 70% with glycerol coating had improve postharvest shelf life and maintaining quality of star fruits hence reduced postharvest losses.