ALOE VERA POTENTIAL AS BIOPRESERVATIVE FOR CHERRY TOMATOES (Solanum lycopersicum var. cerasiforme)

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ABSRACT

ALOE VERA POTENTIAL AS BIOPRESERVATIVE FOR CHERRY TOMATOES (Solanum lycopersicum var. cerasiforme)

Pre and post-harvest crop are a main problem because of quick deterioration due to disease, insect and drought. Effect of coating of Aloe vera gel on cherry tomatoes (Solanum lycopersicum var. cerasiforme) storage was investigated in this research. The aims of this study were to study the effectiveness of Aloe vera to prolong the shelf-life and the effect of different concentration of Aloe vera treatment on cherry tomatoes. Harvested clusters of cherry tomatoes were treated by Aloe vera diluted with water in concentration of 25%, 50%, 75% of Aloe vera and distilled water as control. The samples treated were stored at 4°C for 35 days. Control treatment fruits showed a rapid damaged of cherry tomatoes on quick changes of weight loss, firmness value, accelerated of chroma index and high incident of fruits decay. In contrast, Aloe vera gel coated fruits can maintain the chroma value indicated delaying in degradation process of chlorophyll. Moreover, Aloe vera gel treatment greatly reduced in weight loss and firmness loss of fruit. Hence, 75% of Aloe vera gel treatment gave the best visual and physiological results. In addition, control coated fruits gave the highest decay percentage among treatment within 35 days storage. Overall of result displayed the dominance of 75% of Aloe vera treatment in extending the shelf-life of cherry tomatoes up to 35 days compared to other treatments.