Title Physiological changes in different from of fresh-cut mango during storage at low temperatures

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Keyword fresh-cut; mango; low temperature

Abstract

After processing of fresh-cut mango, the product is deteriorated quickly even storage at low temperature. This research was aimed to investigate the effect of cutting style on quality changes of fresh-cut ripe mango. The cutting style was separated into 3 types; Cross Section (CS), Long Section (LS) and Half Section (HS), which all the cutting type was then kept at 4 and 10°C after processing. It was found that CS type induced the respiration rate most which more than that of LS and HS types. The CO_2 production rate of fresh-cut mangoes at 4 and 10°C, CS, LS and HS types, were 18.64, 14.49 and 12.92 and were 58.52, 42.12 and 27.30 mg $CO_2 kg^{-1} h^{-1}$, respectively. The loss of weight increased in all samples and was more pronounced in fresh-cut mango of CS type at both storage temperatures. The difference of colour (E) of CS type increased more significantly than that of LS and HS types. Obviously, the HS type revealed the highest quality during 2 days and 3 days storage at 4 and 10°C, respectively, Moreover, total plate count was found in all samples especially in HS sample at both storage temperatures. However, Salmonella was found only in stored fresh-cut mango at day 2 of 10°C storage temperature.