**Title** Characteristics of fresh-cut 'Khake Dam' and 'Red Maradol' papayas processed from whole fruits stored at various temperatures

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**Abstract**

Physicochemical and microbiological quality of fresh-cut ‘Khake Dam’ and ‘Red Maradol’ papayas were evaluated after storage papaya fruits at 4, 13 and 25°C for 2 d. Whole papaya fruits ripened at the highest temperature of 25° C as shown in yellowing of peel and flesh color of ‘Khake Dam’ cultivar but not in ‘Red Maradol’ cultivar. A storage temperature of 4° C caused a slight pitting on papaya fruits, whereas at 25° C caused physiological disorders that adversely affected the visual quality of fruits as compared with the fruits stored at 13° C. The physicochemical and microbiological quality of fresh-cut papaya just after slicing differed between cultivars and storage temperatures. ‘Khake Dam’ and ‘Red Maradol’ cultivars just after slicing had a lower respiration rate, except for ‘Red Maradol’ cultivar where the respiration rate was the highest when stored at 25° C. A storage temperature of 25° C stimulated the respiration rates in fresh-cut ‘Red Maradol’ cultivar and affected the quality of fresh-cut papaya, observed as water-soaked appearance. ‘Red Maradol’ papaya, just after slicing, had higher acidity, ascorbic acid and total soluble solid contents, lower mesophilic aerobic bacteria, coliforms, and fungi counts than those of ‘Khake Dam’ cultivar. The difference in physicochemical and microbiological quality of two papaya fruits stored at various temperatures may have an effect on the quality and shelf life of fresh-cut papaya during storage.