

Title Preliminary study on microbial quality of fresh-cut honeydew stored at refrigerated temperature

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Abstract

This preliminary study was conducted to assess the quality of fresh-cut honeydew under conditions that would be typically used in the home by consumers or by foodservice operators. The conditions involved washed the whole honeydew melon under running tap water before cutting and unwashed honeydew (control). The quality was studied during storage for 15 days at 5°C by evaluating: (a) the microbial indices namely mesophilic aerobic bacterial count (TBC), coliforms (TC), *E.coli*, lactic acid bacteria (LAB), yeasts and moulds (YM) and also *Salmonella* detection; (b) the sensory attributes, namely appearance and overall acceptability. Microbial results showed that no significant different was found between treatments, where most of higher microbial populations were determined from unwashed samples (TBC: 3.9-6.2 log₁₀ cfu/g; TC: 2.7-4.8 log₁₀ cfu/g; *E.coli*: 3.4-5.4 log₁₀ cfu/g; LAB: 2.7-5.8 log₁₀ cfu/g and YM: 3.4-6.3 log₁₀ cfu/g) than washed samples (TBC: 3.8-5.6 log₁₀ cfu/g; TC: 3.0-4.9 log₁₀ cfu/g; *E.coli*: 2.7-5.4 log₁₀ cfu/g; LAB: 3.4-3.9 log₁₀ cfu/g and YM: 3.4-5.8 log₁₀ cfu/g). *Salmonella chlorea-suis* were isolated from unwashed rind and flesh. Evaluation on microbial and sensory quality indicated that washed and unwashed samples could be accepted until 12 and 9 days of storage at 5°C, respectively.