

# 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 at home by consumers or by foodservice operators. The conditions involved were the process of washing the whole honeydew melon under running tap water before cutting as well as preparing an unwashed honeydew (control). Quality was studied during storage for 15 days at 5°C by evaluating: (a) 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) sensory attributes, namely appearance and overall acceptability. Microbial results showed that no significant difference was found between treatments, where most of the higher microbial populations were determined from unwashed samples (TBC: 3.9-6.2 log<sub>10</sub> cfu/g; TC: 2.7-4.8 log<sub>10</sub> cfu/g; *E. coli*: 3.4-5.4 log<sub>10</sub> cfu/g; LAB: 2.7-5.8 log<sub>10</sub> cfu/g and YM: 3.4-6.3 log<sub>10</sub> cfu/g) than washed samples (TBC: 3.8-5.6 log<sub>10</sub> cfu/g; TC: 3.0-4.9 log<sub>10</sub> cfu/g; *E. coli*: 2.7-5.4 log<sub>10</sub> cfu/g; LAB: 3.4-3.9 log<sub>10</sub> cfu/g and YM: 3.4-5.8 log<sub>10</sub> cfu/g). *Salmonella chlorea-suis* was isolated from unwashed rind and flesh. Evaluation of microbial and sensory quality attributes indicated that unwashed and washed samples could be accepted until 9 and 12 days of storage at 5°C, respectively.