

Title Growth of *Salmonella* Enteritidis in melon, watermelon and papaya pulp stored at different times and temperatures

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Abstract

The ability of *Salmonella* Enteritidis to grow on melon (*Cucumis melo*), watermelon (*Citrullus vulgaris*) and papaya (*Carica papaya*) pulp stored at different times and temperatures was investigated. Fruit pulp portions with an average pH of 5.87, 5.50 and 4.87 for melon, watermelon and papaya, respectively, were obtained aseptically, homogenized, weighed and inoculated with suspensions (approximately 10^2 CFU/g) of *Salmonella* Enteritidis. Viable populations of *Salmonella* were determined by the pour plate technique using of test portions on TSA agar. The test organism increased in numbers at all tested temperatures. The generation times for melon at 10, 20 and 30 °C were respectively 7.31, 1.69 and 0.69 h, for watermelon were 7.47, 1.60 and 0.51 h and for papaya 16.61, 1.74 and 0.66 h. The results showed that *Salmonella* Enteritidis can grow on low acid fruit pulp, and that refrigeration at 10 °C, although reducing the generation rate, does not inhibit its growth.