

Title Occurrence of *Salmonella* spp. in persimmon fruit (*Diospyrus kaki*) and growth of *Salmonella enteritidis* on the peel and in the pulp of this fruit

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Abstract

The occurrence of *Salmonella* spp. on persimmon (*Diospyrus kaki*) surface of 'Fuyu' and 'Rama Forte' was evaluated during a 5-month-period (from April to August) of two season periods (years 2005 and 2006). The fruits were collected in wholesale (CEAGESP) and street markets in Sao Paulo and Campinas City, Brazil. A total of 582 fruits were analyzed using the BAX[®] system, which is based on the Polymerase Chain Reaction (PCR). The ability of this pathogen to grow on the peel and pulp of the two persimmon varieties was also verified at different incubation periods at temperatures of 10, 20 and 30 °C. The growth parameters were obtained by modeling the experimental data using the Gompertz function. The presence of *Salmonella* spp. was evidenced in 5 of the 582 analyzed fruits (0.9% incidence). The growth studies showed that *Salmonella enteritidis* can grow on the peel as well as in the pulp of the two persimmon varieties studied incubated at 10, 20 and 30 °C and that low temperatures can reduce the generation rate but do not inhibit its growth.