Title Effects of peracetic acid disinfectant on the postharvest of some fresh vegetables

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Abstract

Raw salad vegetables are typically consumed without being cooked. This study compared peracetic acid mix (PAA) and sodium hypochlorite (SH) as disinfectants on vegetables postharvest. Tomato, sweet pepper and cucumber were evaluated in three different experiments: (1) determination of organoleptic characteristics of vegetables by consumer preference; (2) disinfectant capacity comparison of PAA versus SH; and (3) measurement of phytotoxicity of disinfectant products, expressed as alteration of the surface of sweet peppers. Each treatment was replicated four times, and all procedures simulated the procedures carried out in industry. No differences in fruits washed with different treatments were found by the panel. Starting at Day 15, the peracetic acid mixture (PAA) showed better disinfection performance than sodium hypochlorite (SH). The results indicate that the peracetic acid mix is better for washing fruit and improving postharvest life as it is better for the environment (due to low toxicity) and for health safety and does not affect the taste characteristics of the fruit.