Influence of different chemical sanitizers on shelf-life of fresh cut strawberry

C. Pérez, A. Arias, J. Palanco, A. Gómez, M. Torres , M. Rodríguez, D. Bohoyo, R. Contador, J. Delgado , T. Hernández

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Abstract

Different chemical sanitizers were tested in vitro on strawberry tissue. The most effective of them were used to carry out in vivo experiments on fresh cut, washed and MAP strawberry. Shelf-life of fresh cut strawberry processed on a Turatti continuous flow washing device, was also studied. Self life was monitored as a function of physicochemical, microbiological and sensory quality parameters. In vitro experiments on samples prepared using Muller Hilton culture medium in a 1:9 proportion of strawberry: medium resulted in FH2-FH6 as the most effective sanitizers. The results of color, texture, pH and water soluble solids measurements do not show significant differences in fresh cut strawberry quality treated with FH2-FH6, throughout eight days storage. From the microbiological results we can conclude that gently washing the fresh products, prior to processing, reduces the microbiological content significantly. Physicochemical measurements of strawberry processed on a continuous flow washing system model. Camel equipped with UV lamp as sanitizer show no variations throughout ten days storage. From the microbiological results a shelf-life of ten days can be reported for processed strawberry (MA = 17.5% O_2 and 3% CO_2).