

Title Case-studies of post-harvest treatments with 1-MCP on whole and fresh-cut fruits
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Abstract

The first aim of present work was to investigate the effects of a semi-commercial postharvest treatment with 1-MCP on the quality of Pink Lady apples as functions of fruit ripening stage, 1-MCP dose and storage time. The second aim of this study was to evaluate the effect of 1-MCP treatment carried out on fresh pineapples and MAP of their fresh cut products with an alternative modified atmosphere (86.13 kPa N₂O, 10.13 O₂, and 5.07 kPa CO₂) on the physiological and quality changes of minimally processed pineapple during refrigerated storage. The results showed that 1-MCP treatment and MAP in a N₂O enriched atmosphere had a positive effect on the inhibition of respiration and ethylene production. From a microbiological viewpoint, N₂O MAP extended the shelf-life of the products of 3-4 days by increasing the lag phase of microbial growth.