POST-HARVEST OF ORANGE cv. PERA TREATED WITH 1-MCP AND STORED UNDER REFRIGERATION

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Oranges are the leading citrus species cultivated in Brazil, with domestic production directed to exports of juice and fruit consumption. The use of 1-methylcyclopropene (1-MCP) on vegetables, has achieved positive results for several fruits and vegetables, however there are few researches about its effects on non-climacteric fruits such as oranges. Considering the relevance of the citrus industry and the lack of studies of the action of the 1-MCP applied to citrus fruit, this study aimed to evaluate the post-harvest quality of oranges cv. Pera, treated with 1-MCP and stored for 60 days at 7, 14 and 25 °C. The analysis performed every 15 days were: weight loss, percentage of juice, content of soluble solids (SS), titratable acidity (TA), ratio (SS/TA), and content of vitamin C, phenolic compounds and total carotenoids. The experimental design was completely randomized in a 3x4 factorial design (storage temperature x doses of 1-MCP), with four replicates and eight fruits per plot. Data were subjected to analysis of variance (test F) and the means were studied by regression method (P≤0.05), utilizing the statistical program SISVAR (FERREIRA, 2008). Results showed: 1-MCP did not provide greater postharvest conservation for fruits analyzed; the application of 1-MCP did not changed the chemical characteristics as SS, TA, vitamin C, carotenoids and phenolic compounds; and the shorter the period between harvesting and cooling, the better was the preservation of fruits.