

Title Postharvest treatments for the preservation of Tangor Murcott
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Abstract

For reducing the sensitivity of citrus fruits to cold and lowering the incidence of changes, several techniques have been developed, like Modified Atmosphere (MA); Pre-conditioning with CO₂; Pre-conditioning in average temperatures, Intermittent heating; Cure; among others. This work aimed to determine possible alterations in the physico-chemical character of the fruits of Murcott tangor in relation to different storage conditions. The specific goals were to evaluate the influence of different temperatures in the susceptibility to cold; evaluate the conjugated effect of temperatures of storage or other physical methods in the susceptibility to cold and in the organoleptic qualities of the fruits; evaluate the variations in the internal and external qualities of the fruit, measured through determination of the total soluble solids, acidity, pH ratio, technological index (TI), percentage of juice, color of the pulp and the peel, amount of seeds, texture and loss of weight; evaluate and compare the effect of different physical methods in storage focusing in the organoleptic characters of the fruits; evaluate and characterize the appearance of pathogens associated with the storage. As results of this work, it was verified that the cultivar Murcott tangor did not show a response that could be considered satisfactory in relation to the application of Intermittent heating, leading us to conclude that, during the maritime transportation, in a case of temperature breaking of the container, this cultivar will present losses in higher scale. It was also possible to observe in all experiments that the treatment modified atmosphere was the most promising in relation to a possible control of pathogenic fungi and also in relation to the longevity of the fruits. In relation to color, it was observed that, in both storage temperatures (5°C and 10°C), the fruits presented a strong yellowish coloration, which is beneficial for exportation of this cultivar.