CONSERVATION OF CHARENTAIS MELON COATED WITH GELATIN BIOFILMS AND SAPONIFIED COCONUT OIL DURING COLD STORAGE

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Cantaloupensis melon have great economic importance to the Rio Grande do Norte. However, as it is a climacteric fruit is necessary the use of postharvest technologies suitable to delay the respiration and thus extend the fruit postharvest shelf-life. The techniques most widely used commercially for this purpose is the cold storage associated with the use of plastic films. In view of environmental imbalance caused by the difficulty in directing the final destination of the plastic packaging this work had aimed to study the conservation of Charentais melon coated with biofilm gelatin and saponified coconut oil during cold storage. The experimental design utilized was entirely randomized in scheme of split plot with treatments in the plot (control, LDPE film and biofilm) and the sub-plot a factorial design 5x2, five storage time at 5 ± 1 °C and RH of 90 ± 2% and two shelf-life (zero and three days of shelf life at 20 ± 1 °C and 85 ± 2% RH). The following characteristics were evaluated: mass loss and pulp firmness. The fruits covered with biofilm had 24% of reduction in mass loss when compared to the controls fruits. Despite the decrease in pulp firmness during storage time, the biofilm coating resulted in higher maintenance of firmness longer.