RESPIRATORY INTENSITY AND QUALITY INDEXES OF FRESH CUT BANANA DURING COLD STORAGE

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The banana fruit (Musa spp.) when fresh cut, increases metabolism, accelerate significantly the respiration rate and reduce the shelf life of food, therefore requiring appropriate technology in the conservation. The objectives for this work were to reduce losses due to improper handling of fresh cut banana and finding the most suitable condition and conservation treatment of the fruit. Respiratory intensity was evaluated and the quality indexes of banana slice when applied treatments in the supermarket shelf simulated (13 ± 2 °C and 92 ± 2% RH). Bananas were transported, selected, washed, and sanitized up by immersion for 2 minutes in sodium hypochlorite (200 µl l⁻¹), sliced and arranged in four groups to which different treatments were applied: CaCl₂ 1% (w/v) + citric acid 0.92% (w/v), CaCl₂ 1% (w/v) citric acid 0.92% (w/v) and control (no application). Quality indexes evaluated were: pH, titratable acidity, color, soluble solids, weight loss, firmness and respiratory intensity every two days. The treatments had lower weight loss and respiratory rate were cut banana calcium application. Fresh cut bananas with citric acid application gave lower rates of enzymatic browning. The CaCl₂ treatment more citric acid was shown to be the most appropriate treatment in the conservation of fresh cut banana up to day 11 of refrigerated storage at 13 ± 2 °C and 92 ± 2% RH.

Key Words: Musa spp, physiological behavior, postharvest, refrigeration, antioxidant.