

Title Prolonging postharvest quality of camu camu (*Myrciaria dubia* H.B.K.) as the first step in the commercial chain

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Abstract

Camu camu (*Myrciaria dubia* H.B.K.) is a shrub present in flooded zones of the Amazonian. The fruits of this plant have a high nutritional content, notably due to the high levels of vitamin C and other antioxidants. To assure utilization of the fruit it is key to identify the optimal handling and storage conditions. This study aimed to optimize the commercialization chain of camu camu, with the support of the Lumber Association of Tarapacá and the women association of Tarapacá. Camu camu fruits with turning color and fully ripe color were harvested in Tarapacá (Amazonas-Colombia) and transported via air to Bogotá. The fruit in both maturity stages (turning color and fully ripe) were stored at (6, 10 and 20°C, all at 85% relative humidity), evaluating its physiological behavior and quality for 4 days (fully ripe) and 8 days (turning color). The fruit was found to have a climacteric pattern. For both maturity stages, the lower temperature (6°C) preserved for longer time the vitamin C and the retention of color, as well as reducing weight loss and respiration rate. However, at this low temperature fruits showed chilling injury. It was observed that a fruit at the turning color and storage at 10°C, the shelf life is extended and the retention of nutrients is prolonged (vitamin C and sugars).