Abstract

In spite of its pleasant aroma and the tasty flavor of its juicy, sweet and mildly acid pulp, the champa fruit is highly perishable. For this reason, it is only locally commercialized, unless it has been processed; all the more because its behavior has not been studied yet, therefore making it difficult to program its harvesting and to seek for commercial alternatives. The objective of the present research was to assess the physico-chemical variation of the fruit along five stages of its maturation process. For such purpose, at each maturation stage, five fruits were selected to measure each of the following parameters: mass, color, firmness, pH, Total Soluble Solids (TSS), Total Titratable Acidity (TTA), maturity ratio and sucrose, glucose and fructose contents. The pulp was determined to be 60% of the fruit’s fresh mass, while the seeds account for the resting 40%. Along the whole maturation process, the skin of the fruit goes from green to yellow, when it is finally ready for consumption; fruit firmness varied from 85 to 9.5 N for mature fruits; TSS increased, and TTA decreased. Sucrose is the most abundant sugar, followed by fructose and glucose.

Keywords

Sugars, sucrose, tropical fruits, preharvest.