OPTIMIZATION OF BURITI DRINK MILK AND REPLACEMENT OF SUCROSE BY SWEETENERS

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Among the rich flora of the Brazilian scrubland, there is a fruit popularly known as swamp buriti (Mauritia flexuosa), which has high nutritional value, but little commercial value. This research aimed to develop a buriti milk drink without the addition of sucrose, and to evaluate its sensory acceptance. The first step consisted of the definition of a central rotational composite (CRCD) to optimize the ideal concentrations of sucrose and buriti pulp, resulting in a total of 11 samples. In the second step, four treatments were evaluated, including: one optimized conventional formulations and three formulations with total replacement of sucrose by sweeteners (sucralose, a blend of sodium saccharin and cyclamate, and blend of sodium saccharin, sodium cyclamate and acesulfame K). The samples were evaluated as to the sensory attributes of appearance, color, sweetness, texture and overall impression. After the optimization step of the conventional milk drink, we determined the optimal formulation, prepared with 11.18 g.100g-1 sucrose and 19.23 g.100g-1 buriti pulp. At the end of the experiment it was observed that the sample prepared with the blend of sodium saccharin, sodium cyclamate and acesulfame K was the most widely accepted by the panelists, possibly because it is sensorily the most similar to the conventional dairy beverage.