

Development and stability study of shampoo obtained with *Mauritia flexuosa* oil

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Introduction: Many species of fruit in the Brazilian cerrado can be potentially used in cosmetic formulations for containing a carotenoid-rich oil (Nascimento, 2006). The color provide by carotenoids, natural pigments, may result in higher buying intention by the consumer. (SIMÕES e SCHENKEL,2008). The oil extracted from *Mauritia flexuosa* is used in folk medicine as vermifuge natural energetic and cicatrization, besides the color, odor and flavor promoting. (MONTEIRO, RODRIGUEZ, SANCHEZ; COSTA, PORTELA, SANTOS e SILVA, 2010). **Objective:** The present work aimed to develop and study the stability of a shampoo obtained with *Mauritia flexuosa* oil. **Methods:** *Mauritia flexuosa* oil was obtained from informal market in Palmas,Tocantins, Brazil. A formulation containing lauryl ether sulfate, cocamide DEA, methyl, ethyl, propyl, and butyl esters of p-hydroxybenzoic acid in 2-phenoxyethanol, citric acid, sodium chloride and distilled **water** was prepared for control. An addiction of 0,5% of *Mauritia flexuosa* was made at 40°C and mixed until cooling. The formulation was tested by centrifugation (3.000RPM for 30 minutes) and stability was evaluated for 6 alternated cycles of 24 hours 40°C ± 2°C and 24 hours -4°C ± 2°C. After each cycle physical-chemical parameters such as precipitation, disturbance, flocculation, pH (ph-meter PG 1800 GEHAKA) were analyzed. **Results:** It was found satisfactory compatibility between the formulation and *Mauritia flexuosa* oil. The shampoo obtained with the oil presented a bright yellow color, dismissing synthetic pigment utilization. It was not observed any physical-chemical change, shampoo remained with normal aspect, with no color or odor changes and pH was maintained in 5 in all study period. **Conclusion:** The results allowed concluding that shampoo obtained with *Mauritia flexuosa* oil was stable during the stability study.

Keywords: shampoo, buriti, cerrado, Tocantins, biocosmetics.

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