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Title: Quality Control Parameters of Cucurbita Ficifolia Bouché for Phytotherapeutics

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Cucurbita ficifolia Bouché has been studied for its anti-hyperglycemic properties. Study aimed at the physical, chemical and microbiological characterization of skin, flesh and seeds of this fruit, as well as the determination of the quality control parameters for phytotherapy use. The fruits were harvested at 60, 70 and 80 days after anthesis (DAA). They were sanitized and skin, flesh and seeds were separated, crushed, packed individually and frozen at -18 °C. The material was lyophilized and ground to carry out the grain size analysis, total ash, acid insoluble ash, moisture content, mesophilic and fungi count, Escherichia coli, Salmonella and Staphylococcus aureus. Samples of skin and seeds were classified as thick, since more than 40% were retained on sieves of 75 µm. The highest moisture content was found for the flesh (3.5%). The total ash of skin (2.7%) and seed (2.6%) did not differ during the harvest time, and the fruit flesh had the highest value (3.7%) at 60 DAA. Acid insoluble ash showed no significant difference during harvest times for the fruit parts. Mesophilic counts did not differ between flesh and the seed; the skin showed 2.7 log CFU g⁻¹. All parts of the fruit showed similarity in fungi count, 2.8 log CFU g⁻¹ for skin, 2.2 log CFU g⁻¹ for flesh and 2.4 log CFU g⁻¹ for seed. No Escherichia coli, Salmonella e S. aureus were detected. The established quality control parameters can be used as reference for future studies related to preparation of herbal medicines as raw material.