



Research article

Methods for assessing the stability of phytocosmetics

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Abstract

Plant-based cosmetics are currently an important focus of product research and development. The formulation of phytocosmetics is challenging, since the function of its components must be kept stable and conserved. For this, stability tests in formulations are essential to guarantee physical and microbiological quality standards under different storage conditions. Since the parameters can be defined by the researcher, the objective was to propose a sequence of stability tests to be used for a creamy phytocosmetic formulation, using green banana peel extract as an active ingredient. Organoleptic, physical-chemical and microbiological tests have been proposed for preliminary, accelerated and shelf stability studies. The developed formulation remained microbiologically stable during the stability studies. Having its organoleptic and physical-chemical characteristics also preserved during the 6 months of the shelf test, it is possible to determine the minimum validity period of the formulation of 180 days. The proposed test sequence establishes a protocol to evaluate the stability of phytocosmetics and consists of physical-chemical tests compatible with the structure of pharmacies, allowing to determine the shelf life of the products handled.