

Phytodermsunscreen

Garcia Colorado, Alejandro (School: Centro de Bachillerato Tecnológico Industrial y de Servicios No. 165)

Marin Martinez, Gabriela (School: Centro de Bachillerato Tecnológico Industrial y de Servicios No. 165)

The prolonged exposure to UV rays emitted by the sun, has generated various diseases that affect human health, such as: skin burns, premature photoaging and it can worsen skin cancer. These skin problems have increased dramatically in recent decades, becoming the biggest diagnosed problem in the world. Because of these skin problems, alternatives for skin care have been created, such as sunscreen creams. They come in different presentations, such as: physical filters, chemical and biological filters. For this reason, the present study provides a sunscreen, made from extracts of *Fragaria x ananassa* and the *Caléndula officinalis* L. (strawberry and marigold); which, together in certain proportions, produce a high content of antioxidants, in order to protect from UV rays, in addition, ingredients with bactericidal properties are used. The methodology used in the preparation of the product was the repetition of tests, until the optimum amount of ingredients was determined. Once the sunscreen was obtained, physical and chemical tests were performed. In addition to qualitative and quantitative analysis of anthocyanins of the extract, and subsequently, SPF was determined using an in-vitro test, based on the method proposed by Mansur, 2014, taking into consideration national and international regulations for microbiological control for the identification of pathogens in cosmetics. This study is expected to contribute as a bio-alternative, for future research. Key Words: anthocyanins, phenolic compounds