

ABSTRACT

One common type of skin precancer is actinic keratosis. Preventive measures and treatment of actinic keratosis can include the use of skincare that has emollient, photo-protective, and antioxidant effects. Antioxidant compounds are potential protectors against the effects of UV rays, thus preventing and treating actinic keratosis. Extracts of purple eggplant skin and watercress are known to have antioxidant and phytonutrient effects, so it is possible to be a lotion cosmetic ingredient preparation. So this study aims to make OLUNA bio-lotion, get the right formulation (Control/F1 0%, F2 3%, and F3 5%) and determine the type of OLUNA antioxidant compounds. The methods used are extraction, phytochemical screening, SPF test with Uv-Vis Spectrophotometry, and Physico-Chemical Test including pH, homogeneity, emulsion type, adhesivity, spreadability and viscosity. Phytochemical test results showed that purple eggplant peel (*Solanum melongena L.*) contains flavonoid, tannin, alkaloid and phenolic secondary metabolite compounds. While watercress (*Nasturtium officinale*) contains flavonoids, tannins, alkaloids and phenolics. Through UV-Vis spectrophotometric analysis, the SPF value of OLUNA is included in the extra protection range (F2 6.93 and F3 7.24). OLUNA has antioxidant compounds combined with two extracts that support it to be an anti-cancer product so that it is good to use as a preventive and treatment of actinic keratosis. OLUNA has a very good usability value based on the consumer preference test with an average score of 84.87% so that it is included in the category worth using.

Keywords: actinic keratosis. antioxidant, OLUNA, watercress, eggplant.