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Short Communication

Development of Cosmeceutical Emulsion Formulations incorporated with Plant extracts for skin Rejuvenation

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Abstract

Botanical photochemoprotectives are used because they act on various stages to prevent skin cancer and photoaging. The aim of this study was to prepare Emulsions from various photochemoprotective herbs and to perform efficacy studies on them by using physicochemical, microbiological, safety, psychometric, biophysical, and sun protection factor measurements.Emulsions were prepared by incorporating hydroalcoholic extracts of grapes (seeds), Glycin max (Soybean seeds) and Tamarindus indica (fruit pulp) in varied concentrations (1–5% w/w) in a base cream. The efficacy of all formulations was checked out for four weeks on 60 normal subjects on the volar forearm for evaluation of biophysical properties, and for psychometric evaluations (fragrance, lathery feel, softness, irritation, stickiness, smoothness, and aftereffect on the skin) and safety measurements. In the biophysical characterization, a cutometer for viscoelasticity, a mexameter for melanin content, a corneometer for hydration, and a sebumeter for sebum determination were used. All the cream formulations with 1% and 3% w/w extracts showed positive results and passed physicochemical, microbiological, and safety tests. The SPF values increased as the concentration of extract was increased up to a limit in the formulations. The SPF values were significantly higher ($p < 0.01$) in formulations with 3% herbal extract than with 1% herbal extract. Increased skin hydration, sebum levels, viscoelasticity, and decreased melanin values were obtained. Tamarindus formulations were found more effective as photoprotectives than the grape seeds and Soybean formulations.

Biography

Muhammad KhurramWaqas has completed his PhD from The Islamia University of Bahawalpur, Pakistan. He is an Assistant Professor at Institute of Pharmaceutical Sciences, University of Veterinary and Animal Sciences, Lahore, Pakistan He has published more than 20 papers in reputed journals. His main research focus on impacts of botanical extracts in cosmetics. His research objectives are to develop safe, efficacious and economical dermatological products from plant extracts for the improvement of skin complexion and treatment of various dermatologica ldisorders.

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