



In vivo evaluation for skin lightening and antierythmic effects of a newly formulated cosmetic emulsion containing soybean extract assessed by non-invasive methods

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The overproduction of melanin pigment causes the skin hyperpigmentation. Soybean extract inhibits the activation of the protease-activated receptor-2 (PAR-2), which is involved in the regulation of pigmentation. The current study was undertaken to investigate the skin lightening and antierythmic effects of a cosmetic emulsion containing 4% concentrated extract of soybean (Glycine max), using the base without soy bean extract as control. In the inner aqueous phase of cosmetic w/o emulsion entrapment of soybean extract was carried out. Both the base (containing no extract) and formulation (containing 3% concentrated extract of soybean) were applied to 11 healthy male volunteers for a duration of 12 weeks. By using a Mexameter MPA5 (a non-invasive skin bioengineering technique) skin parameters such as skin melanin and skin erythema were evaluated for every two weeks to assess any effect produced by these cosmetic emulsions. Statistically significant ($p \leq 0.05$) decrease in skin erythema was shown by formulation while the base showed insignificant ($p > 0.05$) decrease. Significant ($p \leq 0.05$) decrease in skin melanin contents were displayed by the formulation while the base presented a statistically insignificant ($p > 0.05$) increase in skin melanin. The

newly formulated cosmetic emulsion containing soybean extract can therefore be used safely without causing any irritation as skin lightening agent in males.

Biography

Muhammad Khurram Waqas has more than 12 years of job experience in quality control, teaching and research/development. Currently, he is Assistant Professor at Institute of [Pharmaceutical Sciences](#) (IPS), University of Veterinary & Animal Sciences, Lahore Pakistan. The area of his research in Doctoral study is [Cosmetic Dermatology](#). He developed various novel formulations for the treatment of [skin aging](#) and [rejuvenation](#). During his Doctoral study, he used sophisticated instruments for the measurement of skin parameters. i.e. Mexameter, Corneometer, Cutometer, Sebumeter, Skin pH-meter and Skin Visio Scan. He has Published more than 20 full-length original research articles in national and international journal and was invited as key note speaker and Oral presenter in various national and international events worldwide.

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