CARPATHIAN JOURNAL OF FOOD SCIENCE AND TECHNOLOGY

journal homepage: http://chimie-biologie.ubm.ro/carpathian_journal/index.html

FORMULATION AND EVALUATION OF UV RESISTANT PROPERTY OF THE HERBAL CREAM USING CRUCIFEROUS VEGETABLES LEAVES

Ms. N Jerophin¹, Ms. S. Rubavathi¹, Ms.K.Kalaivani² and Dr.G.Ayyappadasan¹

¹Department of Biotechnology, K S Rangasamy College of Technology, Tiruchengode-637 215, Namakkal District.

ABSTRACT

https://doi.org/10.34302/crpjfst/2023.15.4.15

Article history: Received: 29 November 2022 Accepted: 2 December 2023 Keywords: UV resistance ; Herbal cream; Brassicaceous family; GC-MS; Antioxidant activity;

The demand for cosmeceuticals is rapidly expanding. The expansion is due to the availability of new ingredients, the financial rewards for developing successful products, consumer formulation needs maintenance of quality standards. the quality of a formulation should satisfy the consumer's need in terms of its performance. Herbal creams have several advantages over conventional chemical-based creams. Herbs and herbal preparations have a high potential due to their antioxidant activity, and anti-inflammatory activity primarily. The present study aims to prepare a UV resistant herbal cream containing the leaf extracts of brassicaceous vegetables (cauliflower, cabbage). The objective of this study was to develop sunscreen cream formulations with high sun protection factor (spf) and satisfied characteristics. This study focuses on uv protection from the sun and discusses potential herbal candidates with antioxidant properties that can serve as a strong barrier in cosmeceuticals to protect skin against harmful UV rays. GC-MS result provides the presence of various bioactive compounds and the identified 19 bioactive compounds such as Nhexadecanoic acid, dodecanoic acid, cyclohexanone, 4-H-Pyran-4-one, oleic acid etc. Mainly due to their antioxidant activity, these compounds have been suggested for potential use in cosmetics and the pharmaceutical industry, and this review aims to summarize current knowledge on the natural sources and biological activity of the substances.