

Preliminary Data Regarding the Use of Camelina Oil in Some Dermatocosmetic Formulations

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Abstract

Camelina sativa is an annual plant belonging to fam. Brassicaceae, originating from S-E Europe and S-V Asia, from whose seeds high quality oil is obtained from the compositional point of view. It has a saponifiable fraction of fatty acids, of which the polyunsaturated ones are more than 55% and a non-saponifiable fraction of sterols and tocopherols. In addition to biofuel uses, camelina oil can be purified by specific technological processes and harnessed to produce products with different destinations: food supplements, feed ingredients, dermatocosmetics and pharmaceuticals. The purpose of this paper is to analyze the SPF of camelina oil in order to include it in dermatocosmetic product formulations. We analyzed spectrophotometrically 10 solutions of camelina oil in hexane, 1% -10% concentration, at wavelengths between 290 and 320 nm. The regression analysis confirms the existence of a significant linearity relationship between concentration and SPF (RSquare = 0.9967). The sun protection factor determined using the Mansur et al (1986) equation indicates values between 3.65 and 22.32 indicating the possibility of using camelina oil in dermatocosmetic formulations for sun protection.

Keywords: camelina oil, dermatocosmetic product, SPF.