



Kojic (di)Stearate: Synthesis and Evaluation of an Innovative Whitening Agent for Cosmeceutical Purposes

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SUMMARY. Skin whitening agents are widely used for cosmetic purposes in order to obtain a lighter skin appearance. Kojic acid is mainly produced by *Aspergillus* and *Penicillium* fungi and is commercially available as an effective whitening agent in the treatment of hyperpigmentary conditions, like melasma, postinflammatory hyperpigmentation, freckles, and lentigines. New esters of kojic acid have been evaluated in order to improve its depigmentation effects. The aim of this work was to synthesize kojic (di)stearate and to investigate its depigmentation potential for cosmeceutical purposes. Kojic (di)stearate was successfully obtained by esterification using *N,N'*-dicyclohexylcarbodiimide/4-dimethylaminopyridine system. Histological sections of stained pig skin showed that a non-ionic cream containing 5.75% kojic (di)stearate provided enhanced depigmentation effect than kojic acid when used at equivalent concentration.

KEY WORDS: Cosmeceuticals, Depigmentation, Kojic (di)stearate, Skin whitening.

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