



Synthesis the combination of gold nanoparticles-kojic acid for antimelanin activity

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The purpose of this study was to evaluate the efficacy of nano-skin care product containing the combination between naturally extracted kojic acid and gold nanoparticles (AuNPs). Moreover, the search initially reveals that kojic acid reduces dullness and helps brighten the skin. In this research, the ratios of kojic acid and gold nanoparticles (AuNPs) at 2-4 % (w/w) were studied. The chemical and physical properties of AuNPs-kojic acid were characterized by UV-Vis and TEM. Then, ten subjects were studied to assess the antiwrinkle efficacy and other skin benefits of the nano-skin care product containing the combination between naturally extracted kojic acid and gold nanoparticles (AuNPs). AuNPs-kojic acid was decreased the melanin, as well as delaying the melanogenesis. This study intends to demonstrate that the combination AuNPs-kojic acid can be a huge advantage to a cosmetic industry.

Keywords: Kojic Acid; Gold nanoparticles; Melanin