

Abstract

Skin issues are common problems in daily life. The oxidative effect by exposure to UV radiation and pollution causes skin inflammation and premature aging. Nowadays, the cosmetic industry has shifted toward usage of natural products. The Noni fruit (*morinda citrifolia*) used as food and medicine, prevents and treats a variety of diseases. The problem with the extract is their poor penetration. *Morinda citrifolia* extract was planned to formulate into cream, to make it unique, the extract was combined with another extract, in which the propolis extract, scientists discovered presence of phenolic acids, esters, and flavonoids, which have high antiradical activity, is responsible for its pharmacological activities. The objective of this study was to formulate and evaluate antioxidant cream containing *morinda citrifolia* and propolis extract combination. DPPH testing was used to check the antioxidant of the extracts, the IC50 of antioxidant activity of the combine extract through DPPH assay was 58.34 ppm, while the propolis IC50 40.56 ppm, however the *morinda citrifolia* IC50 was unstable. Nonetheless, the extract still showed a percentage of inhibition value ranging from 48.84 - 53.96 %. The chosen concentration extract was formulated into 3 formulation creams, while the evaluation of the cream were organoleptic, pH, emulsion type, spreadability, centrifugation, viscosity, and sensory test. The result of the evaluation showed that the physical conditions have good color, smell, however the texture of the cream is too viscous, due to its high amount of emulsifying agent, other evaluation results mostly considered the cream still safe and follow the standard of the evaluation. Overall from 3 formulations, formula 3 gave best result mostly on the evaluation, however the overall liking from the sensory testing shows formula 1 was preferred as the best choice from all 3 formulations.