

## INTISARI

**Devi, I.P, 2022. UJI AKTIVITAS KRIM ANTI-AGING EKSTRAK ETANOL DAUN MUDA PEPAYA (*Carica Papaya L.*) PADA KULIT PUNGGUNG KELINCI NEW ZEALAND YANG DIPAPAR SINAR UV-A, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.**

Penuaan menyebabkan kulit menjadi keriput. Penyebab penuaan adalah radikal bebas, radikal bebas berupa sinar UV-A. Daun muda pepaya (*Carica papaya L.*) sebagai sumber antioksidan yang mampu memberikan aktivitas *anti-aging*. Pengujian ini dilakukan untuk mengetahui bahwa krim ekstrak daun muda pepaya mampu memberikan aktivitas anti aging.

Ekstrak daun muda pepaya (*Carica papaya L.*) dilakukan pengujian terhadap susut pengeringan dan identifikasi kandungan kimia. Sediaan krim dibuat menggunakan ekstrak daun muda pepaya dilanjutkan dengan pengujian mutu fisik krim. Uji aktivitas *anti-aging* menggunakan 5 ekor kelinci *New Zealand*. Kelinci yang telah dicukur bulunya, diinduksi menggunakan sinar UV-A selama 6 jam sehari selama 2 minggu. Kulit punggung kelinci diolesi dengan kontrol positif, kontrol negatif,, dan krim ekstrak etanol daun muda pepaya 2,5%, 5% dan 10% selama 30 hari. Parameter pengukuran persen kolagen, kelembapan, dan elastisitas sebelum diinduksi, setelah diinduksi dan setelah diolesi krim selama 30 hari diukur dengan menggunakan alat *skin analyzer*.

Hasil pengujian mutu fisik krim F1, F2, F3 dan F4 memenuhi syarat organoleptik, homogenitas, viskositas, pH, daya lekat, daya sebar dan daya proteksi. Untuk uji keamanan krim, krim sangat sedikit mengiritasi. Pada uji aktivitas *anti-aging* sediaan ekstrak daun muda pepaya dengan konsentrasi 5% memberikan efek *anti-aging* yang paling baik.

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Kata kunci: ekstrak daun pepaya, aktivitas *anti-aging*, krim, sinar UV-A, *skin analyzer*.

## ABSTRACT

**Devi, I.P, 2022. TESTING THE ACTIVITY OF ANTI-AGING CREAM ETHANOL EXTRACT of Young Papaya (*Carica Papaya* L.) LEAVES ON THE BACK SKIN OF NEW ZEALAND RABBITS EXPOSED TO UV-A LIGHT, THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.**

Aging causes the skin to become wrinkled. The cause of aging is free radicals, free radicals in the form of UV-A rays. Young papaya leaves (*Carica papaya* L.) as a source of antioxidants capable of providing anti-aging activity. This study was conducted to determine the activity of cream of ethanol extract of papaya young leaves as anti-aging using rabbits exposed to UV-A light.

Young papaya leaf extract (*Carica papaya* L.) was tested for drying shrinkage and chemical content identification. Cream preparations were made using young papaya leaf extract followed by testing the physical quality of the cream. Anti-aging activity test using 5 New Zealand rabbits. Rabbits that had been shaved were induced using UV-A light for 6 hours a day for 2 weeks. The skin of the rabbit's back was smeared with negatif control, positive control, and cream of 2.5%, 5% and 10% ethanol extract of young papaya leaves for 30 days. Observation of the parameters of percent collagen, percent elasticity, and moisture percent were carried out before induction, after induction and after the rabbit's back was smeared with cream using a skin analyzer.

The results of testing the physical quality of F1, F2, F3 and F4 cream fulfilled the organoleptic requirements, homogeneity, viscosity, pH, stickiness, spreadability and protection power. For the safety test of the cream, the cream is very slightly irritating. In the anti-aging activity test, young papaya leaf extract with a concentration of 5% gave the best anti-aging effect.

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Keywords: papaya leaf extract, anti-aging activity, cream, UV-A rays, skin analyzer.