

## ABSTRAK

**VERLIANNA CHARISMA PUTRI, 2023, UJI AKTIVITAS EKSTRAK DAUN STROBERI (*Fragaria x ananassa* var *Duchesne*) SEBAGAI ANTI AGING PADA KULIT PUNGGUNG KELINCI NEW ZEALAND, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI SURAKARTA.**

Paparan sinar UV menghasilkan radikal bebas yang dapat merusak struktur lapisan dermis sehingga kulit kehilangan elastisitas. Kandungan antioksidan tanaman stroberi (*Fragaria x ananassa* var *Duchesne*) berdasarkan nilai IC50 sebesar 68,09 ppm. Pada penelitian sebelumnya, hasil krim ekstrak daun stroberi (*Fragaria x ananassa* var *Duchesne*) berpotensi sebagai tabir surya pada konsentrasi ekstrak 1,0% didapat nilai SPF 52,90. Penelitian ini merupakan penelitian eksperimental yang bertujuan untuk mengetahui aktivitas ekstrak daun stroberi (*Fragaria x ananassa* var *Duchesne*) sebagai anti aging.

Ekstrak daun stroberi dilakukan pengujian terhadap susut pengeringan dan identifikasi kandungan kimia. Daun stroberi di ekstraksi menggunakan metode maserasi dengan pelarut etanol 96%. Ekstrak daun stroberi di buat tiga variasi konsentrasi yaitu 0,25%; 0,5%; 1%; dan 1,5%. Pengamatan aktivitas anti aging parameter yang diamati persentase kolagen, persentase kelembaban, dan persentase elastisitas setelah diinduksi dan setelah diolesi ekstrak selama 30 hari diukur menggunakan alat skin analyzer. Data yang diperoleh dianalisis dengan SPSS metode One-Way ANOVA.

Berdasarkan hasil pengujian anti aging yang telah dilakukan, ekstrak daun stroberi dengan konsentrasi 0,25%; 0,5%; 1%; dan 1,5% memiliki aktivitas sebagai anti aging dilihat dari peningkatan parameter. Ekstrak daun stroberi 1,5% memberikan efek anti aging paling efektif karena peningkatan persen parameter paling besar yaitu pada kolagen 54,32%, elastisitas 51,86%, dan kelembaban 190%. Uji iritasi primer konsentrasi ekstrak 1% dan 1,5% sangat sedikit mengiritasi.

Kata kunci : Ekstrak daun stroberi, anti aging, skin analyzer

## ABSTRACT

**VERLIANNA CHARISMA PUTRI, 2023, TESTING THE ACTIVITY OF STRAWBERRY LEAF EXTRACT (Fragaria x ananassa var Duchesne) AS ANTI-AGING ON THE SKIN OF THE BACKS OF NEW ZEALAND RABBITS, THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY SURAKARTA.**

Exposure to UV rays produces free radicals which can damage the structure of the dermis layer so that the skin loses elasticity. The antioxidant content of strawberry plants (*Fragaria x ananassa var Duchesne*) based on the IC50 value is 68.09 ppm. In previous research, the results of strawberry leaf extract cream (*Fragaria x ananassa var duchesne*) had potential as a sunscreen at an extract concentration of 1.0%, with an SPF value of 52.90. This research is an experimental study which aims to determine the anti-aging activity of strawberry leaf extract (*Fragaria x ananassa var Duchesne*).

Strawberry leaf extracts were tested for drying shrinkage and chemical content identification. Strawberry leaves were extracted using the maceration method with 96% ethanol solvent. Strawberry leaf extract is made in three concentration variations, namely 0.25%; 0.5%; 1%; and 1.5%. Observing the anti-aging activity, the parameters observed were the percentage of collagen, percentage of moisture, and percentage of elasticity after being induced and after being smeared with the extract for 30 days, measured using a skin analyzer. The data obtained were analyzed using the SPSS One-Way ANOVA method.

Based on the results of anti-aging tests that have been carried out, strawberry leaf extract with a concentration of 0.25%; 0.5%; 1%; and 1.5% has anti-aging activity as seen from the increase in parameters. Strawberry leaf extract 1.5% provides the most effective anti-aging effect due to the largest percent increase in parameters, namely collagen 54.32%, elasticity 51.86% and moisture 190%. Primary irritation test extract concentrations of 1% and 1.5% were very slightly irritating.

Keywords: Strawberry leaf extract, anti-aging, skin analyzer