

ABSTRAK

NI KETUT SIMPEN WIDNYANI. 2023. UJI AKTIVITAS ANTI-AGING SEDIAAN EMULGEL EKSTRAK DAUN STROBERI (*Fragaria x ananassa*) PADA PUNGGUNG KELINCI NEW ZEALAND YANG DIPAPAR SINAR UV- A. SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA

Sinar UV-A yang terkandung dalam sinar matahari menyebabkan penuaan dini. Daun stroberi (*Fragaria x ananassa*) yang mengandung antioksidan dan tabir surya dapat mencegah penuaan dini dan diformulasikan menjadi sediaan topikal anti- aging. Penelitian ini bertujuan mengetahui variasi konsentrasi ekstrak daun stroberi sediaan emulgel yang dapat memberikan aktivitas *anti-aging* mutu fisik serta stabilitas yang baik menggunakan kelinci yang dipapar sinar UV-A.

Ekstrak daun stroberi dibuat menggunakan metode maserasi dengan pelarut etanol 96%, kemudian diformulasikan menjadi sediaan emulgel. Uji aktivitas *anti- aging* menggunakan 3 ekor kelinci. Setiap hari punggung kelinci dioles sediaan emulgel ekstrak daun stroberi dengan variasi konsentrasi yaitu 0,25%; 0,5%; 1% kemudian dipapar sinar UV-A selama 6 jam dilakukan selama 30 hari. Pengamatan parameter persen kolagen, persen elastisitas, dan persen kelembapan dilakukan pada hari ke-0 dan hari ke-30 setelah diolesi dengan emulgel menggunakan *skin analyzer*. Hasil penelitian diolah secara statistic menggunakan SPSS.

Variasi konsentrasi ekstrak daun stroberi pada emulgel mempengaruhi *pH* namun tidak mempengaruhi viskositas. Pengujian keamanan sediaan tidak mengiritasi. Konsentrasi pada uji aktivitas *anti-aging* terbaik adalah konsentrasi ekstrak daun stroberi sebesar 1%.

Kata kunci: *anti-aging*, ekstrak daun stroberi, emulgel, *skin analyzer*

ABSTRACT

NI KETUT SIMPEN WIDNYANI. 2023. ACTIVITY TEST ANTI-AGING EMULGEL PREPARATION OF STRAWBERRY LEAVES EXTRACT (*Fragaria x ananassa*) ON THE RABBIT'S BACK NEW ZEALAND EXPOSED BY UV-A RAYS. SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA

UV-A rays contained in sunlight can cause premature aging. Strawberry leaves (*Fragaria x ananassa*) which contains antioxidants and sunscreen can prevent premature aging and is formulated into topical preparations anti-aging. This study aims to determine variations in the concentration of strawberry leaves in an emulgel preparation that can provide anti-aging activity, good in physical quality and stability using rabbits exposed by UV-A rays.

Strawberry leaves extract was made using the maceration method with 96% ethanol solvent, then formulated into an emulgel preparation. Activity test anti-aging using 3 rabbits. Every day the rabbit's back was smeared with an emulgel preparation of strawberry leaves extract with concentration variations, i.e. 0.25%; 0.5%; 1% was then exposed to UV-A rays 6 hours for 30 days. The parameters of % collagen, % elasticity, and % moisture were observed on day 0 and day 30 after being smeared emulgel using skin analyzer. The research results were processed statistically using SPSS

Variation in the concentration of strawberry leaves extract in the emulgel affect the *pH* but don't affect the viscosity. The safety test of the preparation is non- irritating. The best anti-aging activity test concentration is 1% strawberry leaf extract concentration

Keywords: anti-aging, strawberry leaves extract, emulgel, skin analyzer