

INTISARI

PERMATASARI, P. I., 2019, UJI AKTIVITAS ANTI-AGING KRIM EKSTRAK ETANOL DAUN KERSEN PADA KULIT PUNGGUNG KELINCI NEW ZEALAND YANG DIAPAPAR SINAR UVA, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Radikal bebas dapat menyebabkan penuaan dini. Efek sinar UVA yang bersifat sebagai sumber radikal bebas dapat dicegah dengan senyawa antioksidan. Antioksidan adalah senyawa yang mampu menangkal atau meredam dampak negatif oksidan dalam tubuh. Sediaan krim ekstrak etanol daun kersen (*Muntingia calabura* L) memiliki efektivitas antioksidan. Penelitian ini dilakukan untuk mengetahui aktivitas krim ekstrak etanol daun kersen sebagai *anti-aging* secara *in vivo* menggunakan kelinci yang dipapar sinar UVA.

Ekstrak daun kersen (*Muntingia calabura* L) dilakukan penetapan kadar kelembaban dan identifikasi kandungan kimia. Ekstrak dibuat sediaan krim kemudian diuji mutu fisiknya. Pengujian aktivitas *anti-aging* menggunakan 5 ekor kelinci. Bulu punggung kelinci dicukur, induksi sinar UVA dilakukan 6 jam sehari selama 2 minggu. Kulit punggung kelinci dioles krim ekstrak daun kersen 3%, 6%, dan 9% selama 30 hari. Pengamatan parameter persen kolagen, persen elastisitas, dan persen kelembaban dilakukan sebelum induksi, sesudah induksi, dan setelah punggung kelinci dioles krim.

Hasil uji mutu fisik krim F1, F2, F3, dan F4 memenuhi syarat organoleptis, pH, homogenitas, viskositas, dan daya sebar. Hasil uji stabilitas krim F1, F2, F3, dan F4 memenuhi syarat organoleptis dan pH. Hasil uji iritasi primer menunjukkan krim sangat sedikit mengiritasi kulit dan hasil uji iritasi okuler krim tidak mengiritasi. Hasil penelitian menunjukkan bahwa sediaan krim ekstrak daun kersen dengan konsentrasi 3% memberikan efek *anti-aging* paling efektif.

Kata kunci: ekstrak daun kersen, aktivitas *anti-aging*, krim, uji keamanan, *Skin Analyzer*

ABSTRACT

PERMATASARI, P. I., 2019, TEST OF ACTIVITIES ANTI-AGING CREAM OF KERSEN LEAF ETHANOL EXTRACT ON RABBIT NEW ZEALAND LEATHER SKIN WHICH IS USED BY UVA RAYS, SKRIPSI, FACULTY PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Free radicals can cause premature aging. The effects of UVA rays that are a source of free radicals can be prevented with antioxidant compounds. Antioxidants are compounds that can counteract or reduce the negative effects of oxidants in the body. Cream preparations of kersen ethanol extract (*Muntingia calabura* L) have antioxidant effectiveness. This research was conducted to determine the cream activity of kersen ethanol extract as anti-aging in vivo using rabbits exposed to UVA rays.

Kersen leaf extract (*Muntingia calabura* L) is carried out by determining the moisture content and identifying the chemical content. The cream preparations were made and then tested for physical quality. The anti-aging test uses 5 rabbits. The rabbit's back is shaved, UVA induction is done 6 hours a day for 2 weeks. Rabbit back skin smeared with kersen leaf extract cream 3%, 6%, and 9% for 30 days. Observation of the parameters of percent collagen, percent elasticity, and percent moisture were carried out before induction, after induction, and after the rabbit's back was smeared with cream.

The results of physical quality tests for cream F1, F2, F3, and F4 meet the organoleptic requirements, pH, homogeneity, viscosity, and dispersion. The stability test results for F1, F2, F3 and F4 creams meet the organoleptic and pH requirements. The primary irritation test results show that the cream is very little irritating to the skin and the results of the ocular irritation test are not irritating. The results showed that the cream of kersen leaf extract with a concentration of 3% gave the most effective anti-aging effect.

Keywords: kersen leaf extract, anti-aging activity, cream, safety test, Skin Analyzer