

ABSTRAK

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OPTIMASI FORMULASI SEDIAAN SERUM EKSTRAK ETANOL 96% DAUN TEKELAN (*Chromolaena odorata* (L.) R.M.King & H. Rob.) DAN UJI ANTIOKSIDAN

Karya Tulis Ilmiah, Fakultas Ilmu Kesehatan (2022).

(XVI+ 70 halaman; 25 Tabel; 16 gambar; 5 lampiran)

Daun tekelan (*Chromolaena odorata* (L.) R.M.King & H. Rob.) diketahui memiliki efek farmakologis salah satunya adalah sebagai antioksidan, sehingga dapat dikembangkan dalam pembuatan sediaan kosmetik. Tujuan dari penelitian ini adalah mengembangkan potensi daun tekelan dalam bentuk sediaan serum kosmetik dan melakukan pengujian aktivitas antioksidan sediaan. Pembuatan ekstrak daun tekelan dilakukan dengan metode maserasi menggunakan pelarut etanol 96%. Ekstrak daun tekelan dibuat menjadi sediaan serum dalam tiga formula dengan variasi bahan emolien yaitu *squalane*, *dimethicone*, dan *almond oil*. Dilakukan evaluasi terhadap sediaan serum yang meliputi uji organoleptik, uji homogenitas, uji pH, uji viskositas, uji bobot jenis, dan uji daya lekat. Kestabilan sediaan serum dilakukan dengan cara serum disimpan selama 10 hari pada suhu ruang. Jumlah rendemen yang diperoleh dari ekstraksi sebesar 25,40% yang mengandung alkaloid, flavonoid, fenol, tanin, saponin, dan steroid. Hasil uji aktivitas antioksidan sediaan serum yang mengandung ekstrak etanol 96% daun tekelan adalah tergolong antioksidan sangat lemah. Hasil evaluasi ketiga formula memenuhi persyaratan uji mutu fisik, namun mengalami ketidakstabilan secara organoleptik yang ditunjukkan dengan adanya perubahan warna dan adanya jamur dalam formula 3 setelah disimpan selama 10 hari.

Kata Kunci: Daun tekelan, antioksidan, sediaan serum.

Referensi : 67 (1983-2021)

ABSTRACT

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OPTIMIZATION FORMULATION OF 96% ETHANOL EXTRACT SERUM LEAVES OF TEKELAN (Chromolaena Odorata (L.) R.M.KING & H. ROB.) AND ANTIOXIDANT TEST

Thesis, Faculty Of Health Sciences (2022)

(XVI +70 pages, 25 tables, 16 figures, 5 appendices)

Tekelan leaves (Chromolaena odorata (L.) R.M.King & H. Rob.) are known to have pharmacological effects, one of which is as an antioxidant so that it can be developed in the manufacture of cosmetic preparations. The purpose of this study was to develop the potential of tekelan leaf in the form of cosmetic serum and to test the antioxidant activity of the preparation. Tekelan leaf extract was made by the maceration method using 96% ethanol as solvent. Tekelan leaf extract was made into serum preparations in three formulas with various emollient ingredients, namely squalane, dimethicone, and almond oil. The serum preparations were evaluated which included an organoleptic test, homogeneity test, pH test, viscosity test, specific gravity test, and adhesion test. The stability of the serum preparation was carried out by storing the serum for 10 days at room temperature. The total yield obtained from the extraction was 25.40% which were alkaloids, flavonoids, phenols, tannins, saponins, and steroids. The results of the antioxidant activity test of serum containing 96% ethanol extract of tekelan leaves are classified as very weak antioxidants. The results of the third evaluation were to meet the requirements of the physical quality test, but experienced organoleptic instability as indicated by a change in color and the presence of mold growth in formula 3 after being stored for 10 days.

Keywords: Tekelan leaf, antioxidant, serum preparation.

Reference : 67 (1983-2021)