

INTISARI

WULANDARI, M. R., 2021, FORMULASI SEDIAAN SERUM EKSTRAK ETANOL DAUN UBI JALAR UNGU (*Ipomoea batatas* (L.) Lamk) SEBAGAI ANTIOKSIDAN, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Daun ubi jalar ungu (*Ipomoea batatas* (L.) Lamk) adalah salah satu jenis tanaman yang mengandung flavonoid, saponin, polifenol, dan tanin. Hasil skrining fitokimia menunjukkan daun ubi jalar ungu memiliki aktivitas antioksidan. Penelitian ini bertujuan untuk mengetahui uji mutu fisik, stabilitas, dan aktivitas antioksidan pada masing formula serum dengan berbagai konsentrasi ekstrak daun ubi jalar ungu.

Ekstrak daun ubi jalar ungu diperoleh dengan metode maserasi menggunakan pelarut etanol 70%. Serum merupakan sediaan dengan zat aktif konsentrasi tinggi dan viskositas rendah sehingga efeknya lebih cepat diserap dan mudah menyebar dikulit. Sediaan serum dibuat dalam 5 formula, formula 1 kontrol negatif, formula 2, 3, 4 dengan berbagai konsentrasi ekstrak yaitu 0,5%, 1%, 2%, dan formula 5 kontrol positif. Sediaan serum diuji mutu fisiknya meliputi uji organoleptis, uji homogenitas, uji pH, uji daya sebar, uji viskositas, dan uji stabilitas. Pengujian aktivitas antioksidan menggunakan metode DPPH.

Hasil penelitian menunjukkan bahwa semua formula sediaan serum mempunyai uji mutu fisik yang baik. Hasil uji aktivitas antioksidan sediaan serum pada formula 1, 2, 3, 4, dan 5 dengan nilai IC_{50} = 384,083 ppm, 55,0689 ppm, 49,1636 ppm, 39,9459 ppm, dan 31,8174 ppm. Formula 4 dengan konsentrasi ekstrak 2% memiliki aktivitas antioksidan paling kuat dengan nilai IC_{50} = 39,9459 ppm.

Kata kunci: Ekstrak daun ubi jalar ungu, antioksidan, serum.

ABSTRACT

WULANDARI, M. R., 2021, FORMULATION OF PURPLE SWEET POTATO LEAVES ETHANOL EXTRACT ON SERUM (*Ipomoea batatas* (L.) Lamk) AS ANTIOXIDANT, THESIS, FACULTY OF PHARMACY, UNIVERSITY OF SETIA BUDI, SURAKARTA.

Purple sweet potato leaves (*Ipomoea batatas* (L.) Lamk) are the type of plant that contains flavonoids, saponins, polyphenols, and tannins. The results of phytochemical screening showed that purple sweet potato leaves had antioxidant activity. The purpose of this study are to determine physical quality, stability, and antioxidant activity of serum formulated with various concentrations of purple sweet potato leaves ethanol extract.

Purple sweet potato leaf extract obtained from maceration with 70% ethanol. Serum is a preparation with high concentrations of active substances and low viscosity, because of that the effect is absorbed more quickly and spreads easily on the skin. serum preparation was made by 5 formulas, formula 1 as negative control, formula 2,3,4 with variations in the contentration of extract contained 0.5%, 1%, 2%, and formula 5 as positive control. Serum preparations tested for physical quality include organoleptic test, homogeneity test, pH test, spreadability test, viscosity test, and stability test. Antioxidant activity testing used the DPPH method.

The results showed that all serum formulations had a good physical quality test. The results of the antioxidant activity test for serum preparations in formulas 1, 2, 3, 4, and 5 with IC_{50} values = 384,083 ppm, 55,0689 ppm, 49,1636 ppm, 39,9459 ppm, and 31,8174 ppm. Formula 4 with an extract concentration of 2% has the strongest antioxidant activity with a value of IC_{50} = 39,9459 ppm.

Key words: Purple sweet potato leaf extract, antioxidants, serum.