

ABSTRAK

Nama : Syifaa Nur Rahmawati
Program Studi : S1 Farmasi
Judul : Penentuan Kadar Total Fenolik Dan Flavonoid Ekstrak Etanol 70% Dan Metanol Daun Dewandaru (*Eugenia uniflora* L.) Serta Aktivitas Antioksidan Dengan Metode DPPH

Daun dewandaru (*Eugenia uniflora* L.) adalah tumbuhan berkhasiat antioksidan yang digunakan sebagai obat tradisional, mengandung senyawa metabolit sekunder seperti saponin, fenolik, flavonoid dan tanin. Tujuan penelitian ini untuk mengetahui aktivitas antioksidan, kadar total fenolik dan flavonoid dari ekstrak daun dewandaru (*Eugenia uniflora* L.). Ekstrak daun dewandaru dibuat dengan cara maserasi menggunakan pelarut etanol 70% dan metanol. Ekstrak daun dewandaru diidentifikasi senyawa aktif dengan skrining fitokimia. Pengujian aktivitas antioksidan ekstrak daun dewandaru dilakukan dengan metode DPPH (2,2-diphenyl-1-picrylhydrazyl) menggunakan spektrofotometri UV-Vis yang dinyatakan dalam nilai IC₅₀. Penentuan kadar total fenolik dilakukan dengan metode Folin-Ciocalteu dan total flavonoid dilakukan dengan metode kolorimetri (AlCl₃). Daun dewandaru menghasilkan nilai IC₅₀ sebesar 11,15 ppm pada ekstrak etanol 70% dan 6,89 ppm pada ekstrak metanol. Hasil kadar total fenolik sebesar 29,18% GAE pada ekstrak etanol 70% dan 22,86% GAE pada ekstrak metanol. Hasil kadar total flavonoid sebesar 1,61% QE pada ekstrak etanol 70% dan 2,35% QE pada ekstrak metanol. Berdasarkan nilai IC₅₀ daun dewandaru (*Eugenia uniflora* L.) memiliki aktivitas antioksidan yang sangat kuat dengan nilai terbesar pada ekstrak metanol yaitu 6,89 ppm. Kadar total fenolik terbesar pada ekstrak etanol 70% sebesar 29,18% GAE, sedangkan kadar total flavonoid terbesar pada ekstrak metanol sebesar 2,35% QE.

Kata kunci :

Aktivitas antioksidan, daun dewandaru, kadar total fenolik, kadar total flavonoid.

ABSTRACT

Name : Syifaa Nur Rahmawati
Study Program : S1 Pharmacy
Title : Determination of Total Phenolic and Flavonoid Content of 70% Ethanol Extract and Methanol of Dewandaru Leaves (*Eugenia uniflora* L.) and Antioxidant Activity Using the DPPH Method

Dewandaru leaves (*Eugenia uniflora* L.) is a plant with antioxidant properties used as traditional medicine, containing secondary metabolites such as saponins, phenolics, flavonoids and tannins. The purpose of this study was to determine the antioxidant activity, total phenolic and flavonoid content of the extract of the leaves of dewandaru (*Eugenia uniflora* L.). Dewandaru leaf extract was prepared by maceration using 70% ethanol and methanol. Dewandaru leaf extract identified active compounds by phytochemical screening. Testing the antioxidant activity of dewadaru leaf extract was carried out using the DPPH (2,2-diphenyl-1-picrylhydrazyl) method using UV-Vis spectrophotometry expressed in IC₅₀ values. Determination of total phenolic content was carried out by the *Folin-Ciocalteu* method and total flavonoids was carried out by the colorimetric method (AlCl₃). Dewandaru leaves produced an IC₅₀ value of 11.15 ppm in 70% ethanol extract and 6.89 ppm in methanol extract. The total phenolic content of 29.18% GAE in 70% ethanol extract and 22.86% GAE in methanol extract. The results of total flavonoid content were 1.61% QE in 70% ethanol extract and 2.35% QE in methanol extract. Based on the IC₅₀ value of dewadaru leaves (*Eugenia uniflora* L.) has a very strong antioxidant activity with the highest value in methanol extract, namely 6.89 ppm. The highest total phenolic content was found in the 70% ethanol extract, which was 29.18% GAE, while the highest total flavonoid content was in the methanol extract, which was 2.35% QE.

Keywords :

Antioxidant activity, dewadaru leaves, total phenolic content, total flavonoid content