

ABSTRAK

FIONA SIDABUTAR (01174190023)

UJI AKTIVITAS ANTIOKSIDAN EKSTRAK ETANOL 70% DAUN *Castanopsis argentea* (Blume) A.DC. MENGGUNAKAN METODE DPPH (1,1-Diphenyl-2-picrylhydrazyl)

Karya Tulis Ilmiah, Fakultas Ilmu Kesehatan (2022)

(xiv + 34 halaman; 4 tabel; 7 gambar; 3 lampiran)

Radikal bebas adalah molekul yang mempunyai satu atau lebih elektron tidak berpasangan, sifat radikal bebas adalah reaktif, apabila terkena dalam tubuh secara berlebihan dapat menyebabkan kerusakan, diperlukan antioksidan yang akan berfungsi meredam radikal bebas. Salah satu tumbuhan yang diduga berpotensi sebagai antioksidan, yaitu daun *C. argentea*. Penelitian ini bertujuan untuk mengetahui kandungan senyawa metabolit sekunder, aktivitas antioksidan, serta kadar total fenolik dan flavonoid daun *C. argentea*. Simplisia daun *C. argentea* diekstraksi dengan pelarut etanol 70% dengan metode maserasi, kemudian dilakukan penapisan fitokimia, uji aktivitas antioksidan, dan dilakukan uji kadar total fenolik dan flavonoid. Dari proses ekstraksi diperoleh rendemen sebesar 6,3062%. Hasil dari penapisan fitokimia yang diperoleh daun *C. argentea* mengandung alkaloid, flavonoid, saponin, tanin, fenolik dan terpenoid. Hasil uji aktivitas antioksidan menunjukkan bahwa ekstrak etanol 70% daun *C. argentea* tiga kali lebih lemah dibandingkan senyawa pembandingnya, yaitu Vitamin C. Hasil uji kadar total fenolik sebesar 383,389 mg GAE/g dan kadar total flavonoid sebesar 21,409 mg QE/g, hal tersebut menandakan bahwa pada daun *C. argentea* mengandung senyawa fenolik lebih banyak dibanding senyawa flavonoid.

Kata Kunci: *Castanopsis argentea* Blume A.DC. , Antioksidan, IC₅₀, DPPH, Kadar Total Fenolik, Kadar Total Flavonoid

Referensi: 31 (1982 – 2019)

ABSTRACT

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ANTIOXIDANT ACTIVITY OF ETHANOL EXTRACT 70% OF SANINTEN LEAVES *Castanopsis argentea* (Blume) A.DC. USING THE DPPH (1,1-Diphenyl-2-picrylhydrazyl)

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(xiv + 34 pages; 4 tables; 7 pictures; 3 appendices)

*Free radicals are molecules that have one or more unpaired electrons, the nature of free radicals is reactive, if exposed in the body excessively it can cause damage, antioxidants are needed that will function to reduce free radicals. One of the plants that is suspected to have the potential to be an antioxidant, namely the leaves of *C. argentea*. This study aims to determine the content of secondary metabolite compounds, antioxidant activity, as well as the total phenolic and flavonoid levels of *C. argentea* leaves. Simplisia leaves of *C. argentea* were extracted with 70% ethanol solvent by the maceration method, then phytochemical screening, antioxidant activity tests, and total phenolic and flavonoid levels were tested. From the extraction process, an amendment of 6.3062% was obtained. The result of phytochemical filtration obtained *C. argentea* leaves contain alkaloids, flavonoids, saponins, tannins, phenolics and terpenoids. The results of the antioxidant activity test showed that ethanol extract was 70% *C. argentea* leaves were three times weaker than its comparison compound, namely Vitamin C. The test results of total phenolic levels of 383,389 mg GAE / g and total flavonoid levels of 21,409 mg QE / g, this indicates that the leaves of *C. argentea* contain more phenolic compounds than flavonoid compounds.*

*Keywords: *Castanopsis argentea* Blume A.DC., Antioxidants, IC₅₀, DPPH, Total Phenolic Content, Total Flavonoid Content*

References: 31 (1982-2019)