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SKRINING FITOKIMIA DAN PENETAPAN KADAR FLAVONOID TOTAL EKSTRAK DAUN KEMANGI (*Ocimum sanctum* L.) MENGGUNAKAN SPEKTROFOTOMETRI UV-VISIBLE

ABSTRAK

Latar Belakang : Daun kemangi merupakan tanaman yang dimanfaatkan sebagai tanaman obat disebabkan karena adanya kandungan senyawa aktif seperti alkaloid, fenol, saponin, flavonoid, triterpenoid dan tanin. Daun kemangi berfungsi sebagai antipiretik, antifungsi, antiseptic, antibakteri, *hepatoprotektor*, *imunomodulator*, *antirepellent* dan *antiekseptoran*. Tujuan penelitian ini untuk mengidentifikasi senyawa fitokimia yang ada pada daun kemangi dan menetapkan kadar flavonoid total ekstrak daun kemangi menggunakan spektrofotometri uv-visible.

Metode : Penelitian bersifat eksperimental dengan sampel daun kemangi asal Bandungan, menggunakan metode ekstraksi maserasi dengan pelarut etanol 70%, untuk menganalisa alkaloid, fenol, saponin, flavonoid, triterpenoid dan tanin dilakukan uji kualitatif dan kuantitatif dan hasil dianalisa dengan spss 16.0

Hasil : Hasil rendemen yang diperoleh dari ekstraksi menggunakan metode maserasi sebesar 4,83%. Penapisan skrining fitokimia menunjukkan hasil positif mengandung kandungan yang diujikan, dan hasil kandungan senyawa flavonoid total ekstrak daun kemangi sebesar 35,891 mgQE/g ekstrak.

Kesimpulan : Uji kualitatif pada penelitian ini menunjukkan hasil yang bermakna serta pada uji kuantitatif memperoleh hasil flavonoid total 35,891 mgQE/g ekstrak.

Kata kunci : Daun kemangi, kadar flavonoid total, skrining fitokimia.

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PHYTOCHEMICAL SCREENING AND DETERMINATION OF TOTAL FLAVONOID CONTENT OF BASIL LEAF EXTRACT (*Ocimum sanctum* L.) USING UV-VISIBLE SPECTROPHOTOMETRY

ABSTRACT

Background: Basil leaves are a plant that is used as a medicinal plant due to the presence of active compounds such as alkaloids, phenols, saponins, flavonoids, triterpenoids and tannins. Basil leaves function as antipyretic, antifungal, antiseptic, antibacterial, hepatoprotector, immunomodulator, antirepellent and antiexpectorant. The purpose of this study was to identify the phytochemical compounds present in basil leaves and determine the total flavonoid content of basil leaf extract using uv-visible spectrophotometry.

Methods: This research is an experimental study with samples of basil leaves from Bandungan, using the maceration extraction method with 70% ethanol solvent. To analyze alkaloids, phenols, saponins, flavonoids, triterpenoids and tannins, qualitative and quantitative tests were carried out and the results were analyzed using SPSS 16.0.

Results: The yield obtained from the extraction using the maceration method was 4.83%. The phytochemical screening showed positive results for the tested ingredients, and the results showed that the total content of flavonoids in basil leaf extract was 35.891 mgQE/g extract.

Conclusion: The qualitative test in this study showed significant results and the quantitative test obtained a total flavonoid yield of 35.891 mgQE/g extract.

Keywords: *Basil leaves, total flavonoid content, phytochemical screening.*