IDENTIFIKASI SENYAWA TOTAL FLAVONOID DAN FENOLIK EKSTRAK ETANOL DAUN KERSEN (*Muntingia calabura* L.*)* DENGAN SPEKTROFOTOMETRI UV-VIS

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INTISARI

Latar Belakang: Kersen atau talok (*Muntingia calabura* L.) merupakan tanaman yang sering ditemui di pinggir jalan dan disebut sebagai tanaman perindang. Tanaman kersen tidak memiliki nilai ekonomis karena keterbatasan pengetahuan masyarakat, padahal tanaman kersen memiliki khasiat antioksidan karena mengandung senyawa flavonoid dan fenolik yang dapat menangkap radikal bebas.
Tujuan Penelitian: Mengetahui kadar senyawa flavonoid dan fenolik total yang ada di dalam ekstrak etanol daun kersen (*Muntingia calabura* L.).
Metode Penelitian: Penelitian dilakukan secara eksperimental. Ekstrak daun kersen diekstraksi dengan metode ultrasonik menggunakan pelarut etanol 96% dengan perbandingan (1:10) selama 10 menit pada suhu 40°C. Dilakukan perhitungan rendemen ekstrak, pengujian organoleptik, skrining fitokimia, identifikasi senyawa flavonoid menggunakan metode Kromatografi Lapis Tipis (KLT), dan penentuan kadar total senyawa fenolik dan flavonoid ekstrak etanol daun kersen. Kuersetin digunakan sebagai standar pada penentuan kadar senyawa flavonoid, sedangkan asam galat sebagai standar penetapan kadar fenolik ekstrak etanol daun kersen.
Hasil Penelitian: Hasil penelitian ini menunjukkan bahwa ekstrak etanol daun kersen memiliki kandungan senyawa fenolik, flavonoid, saponin, tanin, dan alkaloid. Penetapan kadar senyawa total flavonoid ekstrak etanol daun kersen memiliki nilai rata-rata±SD sebesar 33,286±0,311, sedangkan penetapan kadar senyawa total fenolik dengan nilai rata-rata±SD sebesar 39,830±0,310.
Kesimpulan: Analisis secara kualitatif ekstrak etanol daun kersen mengandung senyawa fenolik dan flavonoid, serta kadar total senyawa fenolik lebih besar dibandingkan senyawa flavonoid.

Kata kunci: Daun kersen, Etanol 96%, Fenolik, Flavonoid, Ultrasonik.

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ABSTRACT

Background: Kersen or talok (*Muntingia calabura* L.) is a plant that is often found on the roadside and is referred to as a shade plant. *Muntingia calabura* do not have economic value due to limited public knowledge, whereas *muntingia calabura* have antioxidant properties because they contain flavonoid and phenolic compounds that can capture free radicals.
Objectives: To determine the levels of total flavonoid and phenolic compounds in the ethanol extract of *muntingia calabura*.
Method: The research was conducted experimentally. *Muntingia calabura* extract was extracted by ultrasonic method using 96% ethanol solvent in a ratio (1:10) for 10 minutes at 40°C. Extract yield calculation, organoleptic testing, phytochemical screening, identification of flavonoid compounds using Thin Layer Chromatography (TLC) method, and determination of total phenolic and flavonoid levels of *muntingia calabura* ethanol extract were carried out. Quercetin was used as a standard for determining the levels of flavonoid compounds, while gallic acid was used as a standard for determining the phenolic content of *muntingia calabura* ethanol extract.
Result: The results of this study indicate that the ethanolic extract of cherry leaves contains phenolic compounds, flavonoids, saponins, tannins, and alkaloids. The determination of the total flavonoid content of the cherry leaf ethanol extract had an average ± SD value of 33.286±0.311, while the determination of the total phenolic compound content with an average ±SD value of 39.830±0.310.
Conclusion: Qualitative analysis of ethanol extract of *muntingia calabura* contains phenolic and flavonoid compounds, and the total content of phenolic compounds is greater than flavonoid compounds.

Keywords: *Muntingia calabura*, Ethanol 96%, Phenolic, Flavonoid, Ultrasonic.

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