

ABSTRAK

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Judul : Uji Aktivitas Antioksidan, Penetapan Kadar Fenolik Dan Flavonoid Total Ekstrak Etanol Daun Pecut Kuda (*Stachytarpheta jamaicensis* L.) Menggunakan Berbagai Metode Ekstraksi

Tanaman pecut kuda (*Stachytarpheta jamaicensis* L.) digunakan untuk mengobati alergi, penyakit pernapasan seperti batuk, flu, asma, dan bronkitis serta gangguan pencernaan seperti indigesti, ulser, konstipasi, dispepsia, dan digesti lemah. Penelitian ini bertujuan untuk mengetahui perbedaan kadar fenolik dan flavonoid total serta aktivitas antioksidan ekstrak etanol daun pecut kuda menggunakan berbagai metode ekstraksi yaitu maserasi, ultrasonikasi dan soxhletasi. Berdasarkan hasil penelitian diperoleh kadar fenolik dan flavonoid total serta aktivitas antioksidan ekstrak etanol daun pecut kuda dengan berbagai metode ekstraksi yaitu ekstrak etanol daun pecut dengan metode maserasi didapatkan hasil 31,0356 mgGAE/g, 15,4299 mgQE/g, dan IC_{50} sebesar 6,205 ppm. Ekstrak etanol daun pecut kuda dengan metode ultrasonikasi didapatkan hasil 45,7137 mgGAE/g, 17,6660 mgQE/g, dan IC_{50} sebesar 4,870 ppm. Ekstrak etanol daun pecut kuda dengan metode soxhletasi didapatkan hasil 38,6533 mgGAE/g, 13,3649 mgQE/g, dan IC_{50} sebesar 8,220 ppm. Sedangkan untuk pengukuran aktivitas antioksidan pada vitamin C diperoleh nilai IC_{50} sebesar 1,388 ppm. Terdapat perbedaan kadar fenolik dan flavonoid total serta aktivitas antioksidan menandakan adanya pengaruh metode ekstraksi berdasarkan berbagai faktor antara lain suhu, waktu ekstraksi dan perlakuan pada masing-masing metode ekstraksi.

Kata Kunci : Aktivitas Antioksidan, Kadar Fenolik Total, Kadar Flavonoid Tota, Metode Ekstraksi, *Stachytarpheta jamaicensis* L.

ABSTRACT

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Judul : Antioxidant Activity Test, Determination of Total Phenolic and Flavonoid Content of Ethanol Extract Pecut Kuda Leaves (*Stachytarpheta jamaicensis* L.) Using Various Extraction Methods

Pecut kuda (*Stachytarpheta jamaicensis* L.) plant is used to treat allergies, respiratory diseases such as cough, flu, asthma, and bronchitis as well as digestive disorders such as indigestion, ulcers, constipation, dyspepsia, and weak digestion. This study aims to determine differences in total phenolic and flavonoid content and antioxidant activity of pecut kuda leaves extract using various extraction methods, namely maceration, ultrasonication, and soxhletation. Based on the research, the total phenolic and flavonoid content as well as antioxidant activity of the ethanol extract of pecut kuda leaves with various extraction methods, namely the ethanol extract of pecut kuda leaves with the maceration method, the results obtained were 31.0356 mgGAE/g, 15.4299 mgQE/g, and an IC_{50} of 6.205 ppm. The ethanol extract of pecut kuda leaves by ultrasonication method obtained results of 45,7137 mgGAE/g, 17,6660 mgQE/g, and IC_{50} of 4,870 ppm. The ethanol extract of pecut kuda leaves using the soxhletation method obtained results of 38.6533 mgGAE/g, 13.3649 mgQE/g, and an IC_{50} of 8.220 ppm. Meanwhile, for the measurement of antioxidant activity in vitamin C, the IC_{50} value was 1.388 ppm. There are differences in total phenolic and flavonoid content as well as antioxidant activity which indicates the effect of the extraction method based on various factors including temperature, extraction time, and treatment of each extraction method.

Keywords : Antioxidant Activity, Total Phenolic Content, Total Flavonoid Content, Extraction Method, *Stachytarpheta jamaicensis* L.