**PENETAPAN KADAR FLAVONOID TOTAL EKSTRAK ETANOL HERBA RUMPUT BAMBU (*Lopatherum gracile* Brongn.) DENGAN METODE SPEKTROFOTOMETRI VISIBLE**

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# ABSTRAK

Penggunaan tumbuhan sebagai ramuan obat sangat berkaitan dengan kandungan kimia yang terdapat dalam tumbuhan tersebut terutama zat aktif biologisnya. Senyawa bioaktif yang terdapat dalam tumbuh-tumbuhan biasanya merupakan senyawa metabolit sekunder seperti steroid, flavonoid, alkaloid, saponin, terpenoid dan tanin. Salah satu tanaman yang mengandung senyawa metabolit sekunder yaitu herba rumput bambu (*Lopatherum gracile* Brongn*.*). Tumbuhan ini berkhasiat mengobati demam, infeksi saluran kencing, kemih berdarah, bisul, perasaan gelisah dan kehausan terus menerus. Tujuan penelitian ini adalah untuk mengetahui senyawa kimia yang terdapat didalam ekstrak etanol dan untuk mengetahui nilai flavonoid total ekstrak etanol herba rumput bambu.

Tahapan penelitian ini meliputi pengolahan bahan tumbuhan, pembuatan ekstrak etanol, pemeriksaan karakterisasi, skrining fitokimia dan penetapan kadar flavonoid total ekstrak etanol herba rumput bambu dengan metode spektrofotometri Visible. Ekstrak herba rumput bambu dibuat dengan metode maserasi dengan menggunakan etanol 96% dan ekstrak yang diperoleh dipekatkan dengan rotary evaporator, Selanjutnya dilakukan penetapan kadar flavonoid total dengan metode spektrofotometri Visible.

Hasil skrining fitokimia pada ekstrak etanol herba rumput bambu bahwa terdapat kandungan golongan senyawa kimia seperti alkaloid, flavonoid, saponin, tanin, dan steroid/triterpenoid. Penentuan kadar flavonoid total dilakukan dengan menentukan panjang gelombang maksimum kuersetin, *operating time*, pengukuran kurva kalibrasi kuersetin dan perhitungan kadar flavonoid total dengan menggunakan metode spektrofotometri Visible. Hasil penentuan kadar flavonoid total pada ekstrak etanol herba rumput bambu sebesar 223.4188 ± 0.6749 mg QE/g.

**Kata kunci**: *Herba Rumput Bambu, Flavonoid, Spektrofotometri visible*

***DETERMINATION OF TOTAL FLAVONOID LEVELS OF ETHANOL EXTRACT OF BAMBOO HERBAL (Lopatherum gracile Brongn.) USING VISIBLE SPECTROPHOTOMETRY METHOD***

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***ABSTRACT***

*The use of plants as medicinal herbs is closely related to the chemical content contained in these plants, especially their biologically active substances. Bioactive compounds found in plants are usually secondary metabolites such as steroids, flavonoids, alkaloids, saponins, terpenoids and tannins. One of the plants containing secondary metabolites is bamboo grass (Lopatherum gracile Brongn.). This plant is efficacious in treating fever, urinary tract infections, bloody urine, ulcers, feelings of restlessness and continuous thirst. The objective of the research was to determine the chemical compounds contained in the ethanol extract and to determine the total flavonoid value of the bamboo grass herb ethanol extract.*

*The stages of this research consist of processing plant materials, making ethanol extracts, examining characterization, phytochemical screening and determining the total flavonoid content of bamboo grass herb ethanol extracts using Visible spectrophotometric methods. Bamboo grass herb extract was made by maceration method using 96% ethanol and the extract obtained was concentrated using a rotary evaporator, then the total flavonoid content was determined using the Visible spectrophotometric method.*

*The results of phytochemical screening on the ethanolic extract of bamboo grass showed that there were chemical compounds such as alkaloids, flavonoids, saponins, tannins, and steroids/triterpenoids. Determination of total flavonoid content was carried out by determining the maximum wavelength of quercetin, operating time, measuring the quercetin calibration curve and calculating the total flavonoid content using the Visible spectrophotometric method. The result of determination of total flavonoid content in ethanol extract of bamboo grass was 223.4188 ± 0.6749 mg QE/g.*

***Keywords: Bamboo Grass Herbs, Flavonoids, Visible Spectrophotometry***