**PENATAPAN KADAR FENOL TOTAL DAUN KATUK *(Breynia androgyna*** **(L.)*.)* PADA BERBAGAI METODE PENGERINGAN YANG BERBEDA**

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**ABSTRAK**

 Daun katuk merupakan jenis tanaman tahunan yang setiap saat dapat dipetik dan tidak tergantung pada musim, dapat bekerja sebagai antioksidan yang ditunjukkan oleh adanya senyawa golongan fenol. Secara umum senyawa fenol memiliki sifat bakteriosid, antimetik, antihelmintik, antiasmatik, analgetik, antiinflamasi, meningkatkan mortilitas usus, antimikroba, dan masih banyak lagi. Senyawa fenol dapat dipengaruhi oleh temperature dan radiasi, suhu optimum pengeringan untuk mendapat kadar total fenol maksimum adalah 60º C.

 Penelitian ini bertujuan untuk mengetahui golongan senyawa kimia dan pengaruh suhu terhadap kandungan senyawa fenol pada daun katuk *Breynia androgyna* (L.)dengan metode pengeringan yang berbeda yaitu dengan pengeringan dibawah sinar matahari, kipas angin, oven dan lemari pengering.

 Penyarian sampel daun katuk dilakukan dengan cara maserasi menggunakan etanol, maserat dipekatkan dengan alat *Rotary evaporator* sehingga diperoleh ekstrak kental. Hasil skrining fitokimia dari serbuk simplisia dan ekstrak etanol daun katuk menunjukkan bahwa serbuk simplisia dan ekstrak etanol daun katuk mengandung senyawa kimia alkaloid, flavonoid, tanin, polifenol, dan steroid/triterpenoid.

 Penetapan kadar fenol total dilakukan dengan metode Spektrofotometri UV-Visible menggunakan pereaksi Folin Ciocelteau dan larutan Natrium Karbonat 7,5 % diukur pada panjang gelombang 637 nm. Hasil penelitian penetapan kadar fenol total diperoleh kadar total fenol pengeringan oven yaitu 19,24 ± 9,24 mg GAE/g Ekstrak, pada pengeringan lemari pengering 20,9 ± 6,45 mg GAE/g Ekstrak, pada pengeringan kipas angin 20,7 ± 4,83 mg GAE/g Ekstrak, dan pada pengeringan dibawah sinar matahari 12,9 ± 3,22 mg GAE/g Ekstrak. Kadar fenol tertinggi terdapat pada pengeringan kipas angin, dan kadar fenol terendah terdapat pada pengeringan dibawah sinar matahari.

**Kata Kunci**: *Daun katuk, Breynia androgyna* (L.)*, kadar fenol total, metode pengeringan, Spektrofotometri UV-Visible*

***THE DETERMINATION OF TOTAL PHENOL LEVELS OF KATUK LEAVES (Breynia androgyna (L.).) ON A VARIETY
OF DIFFERENT DRYING METHODS***

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***ABSTRACT***

 *Katuk leaves are a type of annual plant that at any time can be picked and not depending on the season, can work as antioxidants indicated by the presence of phenol group compounds. In general phenol compounds have bacteroid, antiemetic, anthelmintic, anti-asthmatic, analgetic, anti-inflammatory, increase intestinal mortality, antimicrobial, and many more. Phenol compounds can be affected by temperature and radiation, the optimum drying temperature to get the maximum total phenol content was 60º C.*

*The objective of this research was to find out the group of chemical compounds and the influence of temperature on the content of phenol compounds on the leaves of katuk breynia androgyna (L.) with different drying methods namely by drying under the sun, fan, oven and dryer.*

*The presentation of katuk leaf samples was done by maceration using ethanol, macerate was glued with Rotary evaporator tools so that thick extracts were obtained. Phytochemical screening results of simplicial powder and katuk leaf ethanol extract showed that simplicial powder and katuk leaf ethanol extract contained alkaloid chemical compounds, flavonoids, tannins, polyphenols, and steroids/triterpenoids.*

*The determination of total phenol levels was performed by UV-visible spectrophotometry using Folin Ciocelteau reagents and a 7.5% sodium carbonate solution measured at a wavelength of 637 nm. The results of the research determined the total phenol content obtained the total level of oven drying phenols that was 19.24 ± 9.24 mg GAE / g Extract, on drying cabinet dryer 20.9 ± 6.45 mg GAE/g Extract, on fan drying 20.7 ± 4.83 mg GAE/g Extract, and on drying under sunlight 12.9 ± 3.22 mg GAE/g Extract. The highest phenol levels were found in fan drying, and the lowest phenol levels are found in drying in the sun.*

***Keywords:*** *Katuk leaves, Breynia androgyna (L.), Total Phenol Content, Drying Method, UV-Visible spectrophotometry*