

## ABSTRAK

### **PENETAPAN KADAR TOTAL FENOL DAN FLAVONOID EKSTRAK ETIL ASETAT DAUN RAMBUTAN (*Nephelium lappaceum* L.) DENGAN METODE SPEKTROFOTOMETRI UV-VIS (Oleh Amelia Hidayati; Pembimbing Norhayati dan Putri Indah Sayakti)**

Tanaman Rambutan (*Nephelium Lappaceum* L.) merupakan tanaman yang mudah dijumpai dan tersebar di berbagai daerah, yang memiliki kandungan fenolik dan flavonoid yang berpotensi sebagai obat. Penelitian ini bertujuan untuk mengetahui kandungan fenol dan flavonoid berdasarkan uji skrining fitokimia dan untuk menetapkan kadar total fenol dan flavonoid menggunakan metode spektrofotometri UV-Vis. Daun Rambutan diekstraksi dengan metode sokletasi menggunakan pelarut etil asetat. Identifikasi senyawa fenol dan flavonoid menggunakan skrining fitokimia. Penetapan kadar total fenol menggunakan pereaksi *Folin-Ciocalteu* dengan larutan standar asam galat, sedangkan penetapan kadar total flavonoid menggunakan pereaksi  $AlCl_3$  dengan larutan standar kuersetin. Hasil dari penelitian menunjukkan dari uji skrining fitokimia ekstrak etil asetat daun rambutan memiliki kandungan fenol dan flavonoid, dan hasil kadar fenol ekstrak etil asetat daun rambutan yaitu sebesar 437,695 mgGAE/gram atau 43,7695%, sedangkan kadar total flavonoid ekstrak etil asetat daun rambutan yaitu sebesar 81,490 mgQE/gram atau 8,1490%. Berdasarkan hasil penelitian dapat disimpulkan bahwa ekstrak etil asetat daun rambutan mengandung senyawa metabolit sekunder berupa fenol dan flavonoid yang berpotensi sebagai obat.

**Kata kunci:** Daun Rambutan (*Nephelium lappaceum* L.), Ekstrak Etil Asetat, Fenol, Flavonoid.

## ABSTRACT

### **DETERMINATION OF TOTAL PHENOL AND FLAVONOID LEVELS OF ETHYL ACETATE EXTRACT OF RAMBUTAN LEAVES (*Nephelium lappaceum* L.) BY USING THE UV-VIS SPECTROPHOTOMETRY METHOD (By Amelia Hidayati; Advisor Norhayati and Putri Indah Sayakti)**

Rambutan plant (*Nephelium Lappaceum* L.) is a plant that is commonly found and spread in various regions. Moreover, this plant contains phenolics and flavonoids that have potential as medicine. This study aims to determine the content of phenols and flavonoids based on phytochemical screening tests and to determine total phenol and flavonoid levels using UV-Vis spectrophotometry method. Rambutan leaves are extracted by socleation method using ethyl acetate solvent. Identification of phenol and flavonoid compounds using phytochemical screening. Determination of total phenol levels using *Folin-Ciocalteu* reagent with gallic acid standard solution, while determination of total flavonoid levels using  $AlCl_3$  reagent with quercetin standard solution. The results of the study showed that the phytochemical screening test, ethyl acetate extract of rambutan leaves contained phenols and flavonoids, and the total phenol content of was 437.695 mgGAE /g or 43.7695%, while the total flavonoid content of ethyl acetate extract of rambutan leaves was 81.490 mgQE / gram or 8.1490%. Based on the results of the study, it can be concluded that ethyl acetate extract of rambutan leaves contains secondary metabolite compounds in the form of phenols and flavonoids which have the potential as medicine

**Keywords:** Rambutan Leaf (*Nephelium lappaceum* L.), Extract of Ethyl Acetate, Phenol, Flavonoid.