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Skripsi, Agustus 2023
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**PENGARUH METODE EKSTRAKSI TERHADAP KADAR FLAVONOID
TOTAL EKSTRAK BUAH BIT (*Beta vulgaris* L) SECARA
SPEKTROFOTOMETRI UV-Vis**

ABSTRAK

Latar Belakang: Buah bit (*Beta vulgaris* L) merupakan tanaman yang mengandung senyawa flavonoid yang memiliki aktivitas farmakologis. Kandungan flavonoid salah satunya dipengaruhi oleh perbedaan metode ekstraksi. Pada penelitian ini bertujuan untuk menganalisis kadar flavonoid total ekstrak buah bit dengan metode ekstraksi maserasi dan digesti.

Metode: Simplisia buah bit, diekstraksi menggunakan metode maserasi dan digesti. Uji kualitatif flavonoid dengan menggunakan uji warna dan KLT. Penentuan flavonoid total secara kuantitatif dengan metode spektrofotometri UV-Vis. Analisis data menggunakan *software* SPSS

Hasil: Rendemen ekstrak hasil metode maserasi 3 hari dan 5 hari sebesar 24,66% dan 24,88%. Rendemen ekstrak dengan metode digesti 3 jam dan 6 jam sebesar 10,06% dan 16,59%. Hasil uji kualitatif dengan metode KLT dari sampel ekstraksi metode maserasi 3 hari dan 5 hari serta sampel ekstraksi metode digesti 3 jam dan 6 jam, diperoleh nilai Rf kuersetin 0,80 dan nilai Rf pada ekstrak 0,41 (senyawa vitexin/iso-orientin), Rf 0,65, Rf 0,68 dan Rf 0,80. Hasil uji kuantitatif penetapan kadar flavonoid total pada metode ekstraksi maserasi selama 3 hari dan 5 hari sebesar 61,40 mg/gram dan 67,62 mg/gram, serta hasil ekstraksi dengan metode digesti selama 3 jam dan 6 jam sebesar 64,45 mg/gram dan 73,32 mg/gram. Hasil uji SPSS dengan uji *Post Hoc Test* menunjukkan nilai signifikansi (sig) 0,000.

Kesimpulan: Terdapat perbedaan signifikan, karena pada uji *post hoc test* menunjukkan nilai signifikansi (sig) 0,000 lebih kecil dari 0,05 yang artinya terdapat perbedaan signifikan antara kadar flavonoid pada hasil ekstraksi metode maserasi 3 hari dan 5 hari dengan ekstraksi metode digesti 3 jam dan 6 jam.

Kata kunci: Buah bit, flavonoid, maserasi, digesti.

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Final Project, August 2023
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**EFFECT OF EXTRACTION METHOD ON TOTAL FLAVONOID
LEVELS OF BEET EXTRACT (*Beta vulgaris* L) BY
SPECTROPHOTOMETRY UV-Vis**

ABSTRACT

Background: Beetroot (*Beta vulgaris* L) is a plant that contains flavonoid compounds that have pharmacological activity. Flavonoid content is one of them influenced by differences in extraction methods. In this study the aim was to analyze the total flavonoid content of beetroot extract by maceration and digestion extraction methods.

Methods: Simplicia of beets, extracted using maceration and digestion methods. Qualitative test of flavonoids using color tests and TLC. Quantitative determination of total flavonoids by UV-Vis spectrophotometry method. Data analysis using SPSS software.

Results: The yield of the extract from the maceration method for 3 days and 5 days was 24.66% and 24.88%. Extract yield with 3 hours and 6 hours digestion method was 10.06% and 16.59%. The results of the qualitative test using the TLC method of the 3-day and 5-day maceration method extraction samples and the 3-hour and 6-hour digestion method extraction samples obtained an R_f value of quercetin of 0.80 and an R_f value of the extract of 0.41 (vitexin/iso-orientin compound) , R_f 0.65, R_f 0.68 and R_f 0.80. Quantitative test results for determining total flavonoid levels in the maceration extraction method for 3 days and 5 days were 61.40 mg/gram and 67.62 mg/gram, as well as the results of extraction using the digestion method for 3 hours and 6 hours of 64.45 mg/ gram and 73.32 mg/gram. The results of the SPSS test with the Post Hoc Test showed a significance value (sig) of 0.000.

Conclusion: There is a significant difference, because the post hoc test shows a significance value (sig) of 0.000 which is less than 0.05, which means that there is a significant difference between the levels of flavonoids in the extraction results of the maceration method 3 days and 5 days with the extraction method 3 hours and the digestion method 6 hours.

Keywords: Beets, flavonoids, maceration, digestion.