

INTISARI

WIDIASTUTI, GALEH, 2020, PENETAPAN KADAR FLAVONOID TOTAL SERBUK DAUN KELOR SECARA EKSPERIMENTAL DENGAN METODE SPEKTROFOTOMETRI UV-VIS DAN STUDI LITERATUR KADAR FLAVONOID TOTAL DALAM FAMILI *MORINGACEAE*, KARYA TULIS ILMIAH, FAKULTAS FARMASI UNIVERSITAS SETIA BUDI, SURAKARTA.

Flavonoid adalah senyawa yang terdiri dari 15 atom karbon yang umumnya tersebar di tumbuhan. Flavonoid hampir terdapat pada semua bagian tumbuhan termasuk buah, akar, daun dan kulit luar batang. Salah satu tanaman yang mengandung flavonoid adalah kelor. Ekstrak daun kelor mengandung flavonoid, steroid, triterpenoid, alkaloid, saponin, dan fenol yang berfungsi sebagai antidiabetik. Penelitian ini bertujuan untuk mengetahui Kadar Flavonoid Total Dalam Serbuk Daun Kelor (*Moringa oleifera* Lam) Secara Spektrofotometri UV-Vis Dan Dalam Study Literatur Penetapan Kadar Flavonoid Total Famili Moringaceae.

Dalam penelitian ini pembuatan ekstrak daun kelor menggunakan metode maserasi dengan pelarut etanol 96%. Metode penetapan kadar serbuk yang digunakan adalah spektrofotometri UV-Vis dengan standar kuersetin dan dibaca pada panjang gelombang 441 nm. Masing-masing perlakuan dilakukan dengan tiga kali replikasi. Penetapan kadar flavonoid total famili moringaceae diperoleh dalam study literatur.

Berdasarkan hasil percobaan diperoleh kadar flavonoid pada serbuk daun kelor sebesar 2,8% dan kadar flavonoid total dari famili Moringaceae berdasarkan literatur review jurnal sebesar 0,45%; 6,20 g IQE/ 100g; 7,79 mg/ g; 9,6 ± 0,5 mg/ 100 mg QE; 99,72 (mg QE/ g berat ekstrak); 20,17 mg QE/ g; 0,34%; 8,3323 mg/ 100 g; 98,308 mg/kg dan (1,97 ± 1,07)%.

Kata kunci : daun kelor, flavonoid, maserasi, spektrofotometri UV-Vis

ABSTRACT

WIDIASTUTI, GALEH, 2020, EXPERIMENTAL DETERMINATION OF TOTAL FLAVONOID POWDER LEAVES WITH UV-VIS SPECTROPHOTOMETRY METHOD AND LITERATURE STUDY OF TOTAL FLAVONOID CONDITIONS IN *MORINGACEAE* FAMILIES, SCIENTIFIC WRITING, FACULTY OF PHARMACY, SETIA BUDI SURAKARTA UNIVERSITY.

Flavonoids are compounds consistad of 15 carbon atoms which are commonly spread in the plant. Flavonoids are almost available in every part of a plant including fruit, stem, leaf and trunk skin. One of the plants that contains flavonoids is Moringa. Moringa leaf extract contains flavonoids, steroids, triterpenoids, alkaloids, saponins, and phenols which function as antidiabetic. This study aims to determine the Total Flavonoid Levels in Moringa oleifera Lam Leaf Powder by UV-Vis Spectrophotometry and in the Study of Literature Determination of Total Flavonoid Levels in Moringaceae Family.

In this study the production of Moringa leaf extract used maceration method with 96% ethanol solvent. The method of determining the content of the powder was used UV-Vis spectrophotometry with quercetin standard and was read at a wavelength of 441 nm. Each treatment was carried out with three replications. The determination of total flavonoid levels in the Moringaceae family was obtained in a literature study.

Based on the experimental results obtained levels of flavonoids in Moringa leaf powder of 2,8%% and total flavonoid levels of the Moringaceae family based on the journal review literature of 0.45%; 6.20 g IQE / 100g; 7.79 mg / g; 9.6 ± 0.5 mg / 100 mg QE; 99.72 (mg QE / g extract weight); 20.17 mg QE / g; 0.34%; 8.3323 mg / 100 g; 98,308 mg/kg and (1.97 ± 1.07)%.

Keywords : moringa leaf, flavonoids, maceration, UV-Vis Spectrophotometry