INTISARI

DESTYA SEPTY S.A, 2021, PENETAPAN KADAR FLAVONOID TOTAL PADA EKSTRAK DAUN ALPUKAT (*Persea americana* Mill.) DAN DAUN SALAM (*Syzygium polyanthum* (Wight)Walp.) DENGAN METODE SPEKTROFOTOMETRI UV-Vis, KARYA TULIS ILMIAH, PROGRAM STUDI D-III ANALIS FARMASI DAN MAKANAN, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA, Dibimbing oleh apt. Fitri Kurniasari., M.Farm.

Tanaman alpukat (*Persea americana* Mill.) dan tanaman salam (*Syzygium polyanthum* (Wight) Walp.) merupakan tanaman obat tradisional karena memiliki banyak khasiat. Tanaman alpukat dan salam memiliki kandungan kimia yaitu alkaloid,flavonoid, tanin, saponin, dan triterpenoid. Penelitian ini bertujuan untuk membandingkan kadar flavonoid total ekstrak etanol 70 % daun alpukat dan ekstrak etil asetat daun salam dengan menggunakan pembanding rutin.

Penelitian ini menggunakan metode maserasi dengan pelarut etanol dan etil asetat. Serbuk daun alpukat dan daun salam dimasukkan ke dalam wadah maserasi kemudian ditambah pelarut masing-masing simplisia dan dimaserasi selama 3 hari. Ekstrak disaring dan diuapkan pada alat *Rotary evaporator* sampai menghasilkan ekstrak kental. Ekstrak kental yang sudah jadi kemudian ditetapkan kadar flavonoid total dengan menggunakan metode kolorimetri. Prinsip dari metode ini yaitu dengan menggunakan pereaksi $AlCl_3$.. Pembentukan senyawa atom kompleks antara $AICI_3$ akan membentuk komplesks berwarna kuning saat dibaca nilai absorbansi pada alat spektrofotometri UV-Vis. Data hasil analisa yang diperoleh dilakukan pengujian dengan metode *independent t-test*.

Hasil penelitian menunjukkan bahwa kadar flavonoid total ekstrak daun alpukat adalah 0,47 % b/b . sedangkan kadar flavonoid total daun salam adalah 1,54 % b/b. Hasil tersebut tidak memenuhi syarat ambang batas penetapan kadar flavonoid total pada masimg-masing sampel ekstrak berdasarkan FHI tahun 2017.

Kata kunci : daun alpukat, daun salam, flavonoid total, spektrofotometri UV-Vis.

ABSTRAK

DESTYA SEPTY S.A, 2021, DETERMINATION OF TOTAL FLAVONOID LEVELS IN EXTRACTS OF AVOCODO LEAVES (*Persea americana* Mill.) AND SALAM LEAF (*Syzygium polyanthum* (Wight) Walp.) USING UV-Vis SPECTROPHOTOMETRY METHOD, SCIENTIFIC PAPERS, DIPLOMA OF PHARMACY AND FOOD ANALYSIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA. Supervised by apt. Fitri Kurniasari ., M.Farm.

Avocado plants (*Persea americana* Mill.) and bay plants (*Syzygium polyanthum* (Wight) Walp.) are traditional medicinal plants because they have many benefits. Avocado and bay plants contain chemical compounds, namely alkaloids, flavonoids, tannins, saponins, and triterpenoids. This study aims to compare the total flavonoid content of 70% ethanol extract of avocado leaves and ethyl acetate extract of bay leaves using a routine comparison.

This study used the maceration method with ethanol and ethyl acetate as solvents. Avocado leaf powder and bay leaf were put into a maceration container then added with solvent for each simplicia and macerated for 3 days. The extract was filtered and evaporated on a rotary evaporator to produce a thick extract. The finished viscous extract was then determined for the total flavonoid content using the colorimetric method. The principle of this method is to use AlCl3 reagent. The formation of complex atomic compounds between AICI3 will form a yellow complex when the absorbance value is read on the UV-Vis spectrophotometer. The data obtained from the analysis were tested using the *independent t-test* method.

The results showed that the total flavonoid content of avocado leaf extract was 0,47 % w/w while the total flavonoid content of bay leaf was 1,54 % w/w. These results did not meet the threshold requirements for determining total flavonoid levels in each extract sample based on the 2017 FHI.

Keywords: avocado leaf, bay leaf, total flavonoids, UV-Vis spectrophotometry.