

ABSTRAK

UJI AKTIVITAS FLAVONOID TOTAL SIRUP DAUN KELAKAI (*Stenochlaena palustris* (Burm.F) Bedd) DENGAN PENAMBAHAN INFUSA DAUN PANDAN WANGI (*Pandanus amaryllifolius*) MENGGUNAKAN METODE SPEKTROFOTOMETRI UV-VIS (Oleh Wafiq Aziza; Pembimbing Didik Rio Pambudi dan Putri Indah Sayakti; 2024; 143 halaman).

Tanaman kelakai dan pandan wangi adalah tanaman yang memiliki aktifitas antioksidan tinggi salah satunya berupa senyawa flavonoid. Penelitian ini bertujuan untuk mengetahui kadar total flavonoid menggunakan metode spektrofotometri Uv-Vis. Infusa daun kelakai (*Stenochlaena palustris* (Burm.F) Bedd), infusa pandan wangi (*Pandanus amaryllifolius*), sirup daun kelakai, serta sirup daun kelakai dengan penambahan infusa daun pandan diolah kemudian dilakukan identifikasi senyawa menggunakan skrining fitokimia. Kemudian penetapan kadar Flavonoid menggunakan pereaksi $AlCl_3$ dengan larutan standar kuersetin. Hasil dari penelitian menunjukkan dari uji skrining fitokimia Infusa daun kelakai (*Stenochlaena palustris* (Burm.F) Bedd), infusa pandan wangi (*Pandanus amaryllifolius*), sirup daun kelakai, infusa pandan wangi serta sirup daun kelakai dengan penambahan infusa daun pandan wangi memiliki kandungan flavonoid dan hasil kadar total flavonoid sampel infusa daun kelakai sebesar 3,493 μg QE/ mg atau setara dengan 0,3493 %, sampel infusa daun pandan wangi sebesar 0,202 μg QE/ mg atau setara dengan 0,0202 %, sampel sirup daun kelakai sebesar 36,911 μg QE/ mg atau setara dengan 3,691 %, dan sampel sirup daun kelakai dengan penambahan infusa daun pandan sebesar 247,808 μg QE/ mg atau setara dengan 24,776 %. Kesimpulan dari penelitian ini yaitu sirup daun kelakai dengan penambahan infusa daun pandan wangi memiliki kandungan flavonoid yang lebih tinggi dibandingkan sirup daun kelakai tanpa penambahan infusa daun pandan wangi.

Kata Kunci : Kelakai (*Stenochlaena palustris* (Burm.F) Bedd), Pandan Wangi (*Pandanus amaryllifolius*), Flavonoid, Infusa , Sirup.

ABSTRACT

TEST OF TOTAL FLAVONOID ACTIVITY OF KELAKAI SYRUP (*Stenochlaena palustris* (Burm.F) Bedd) WITH THE ADDITIONAL INFUSION OF PANDAN WANGI LEAVES (*Pandanus amaryllifolius*) BY USING UV-VIS SPECTROPHOTOMETRY METHOD (By Wafiq Aziza; Supervisors Didik Rio Pambudi and Putri Indah Sayakti; 2024; 143 pages).

Kelakai and pandan wangi plants are plants that have high antioxidant activity, which is specifically as the form of flavonoid compounds. This study aims to determine the total flavonoid levels using the UV-Vis spectrophotometry method. Infusion of kelakai (*Stenochlaena palustris* (Burm.F) Bedd), infusion of pandan wangi (*Pandanus amaryllifolius*), syrup of kelakai, and syrup of kelakai with the additional infusion of pandan wangi leaves are processed, and identifying the compound by using is carried out using phytochemical screening afterwards. The flavonoid levels were then determined using the $AlCl_3$ reagent and a quercetin standard solution. The results of the study showed phytochemical screening tests Infusion of kelakai (*Stenochlaena palustris* (Burm.F) Bedd), infusion of pandan wangi (*Pandanus amaryllifolius*), syrup of kelakai, infusion of pandan wangi, and syrup of kelakai with the additional infusion of pandan leaves containing flavonoids and the results of total flavonoid levels Samples of kelakai leaf infusion amounted to 3.493 $\mu\text{g QE / mg}$ or equivalent to 0,3493 %, samples of pandan leaf infusion amounted to 0,202 $\mu\text{g QE / mg}$ or equivalent to 0,0202 %, samples of lakai syrup amounted to 36,911 $\mu\text{g QE / mg}$ or equivalent to 3,691 %, and samples of kelakai syrup with the additional of pandan wangi leaf infusion of 247,808 $\mu\text{g QE / mg}$ or equivalent to 24,776 %. The conclusion of this study is that kelakai syrup with the addition of an infusion of pandan wangi leaves has a higher flavonoid content than kelakai syrup without the addition of an infusion of pandan wangi leaves.

Keywords: Kelakai (*Stenochlaena palustris* (Burm.F) Bedd), Pandan Wangi (*Pandanus amaryllifolius*, Flavonoids, Infusions, Syrups.