

**PENGARUH PENAMBAHAN EKSTRAK KAYU SECANG
(*CAESALPINIA SAPPAN*) TERHADAP KADAR FLAVONOID,
SIFAT ORGANOLEPTIK DAN SIFAT FISIK SIRUP
BELIMBING WULUH (*AVERRHOA BILIMBI*)**

Kamila Nida Ramadhanty

Abstrak

Belimbing wuluh (*Averrhoa bilimbi*) dan ekstrak kayu secang (*Caesalpinia sappan*) mengandung senyawa aktif flavonoid pada bagian buah dan batang. Senyawa flavonoid dalam belimbing wuluh dan kayu secang memiliki sifat antidiabetik. Penelitian ini bertujuan menganalisis kadar flavonoid, sifat organoleptik dan sifat fisik serta kandungan gizi pada formula terpilih sirup belimbing wuluh dengan penambahan ekstrak kayu secang. Penelitian ini merupakan penelitian eksperimental dengan Rancangan Acak Lengkap (RAL). Terdapat 2 kali pengulangan dalam 4 formula yaitu 1 formula kontrol (F0) dan 3 formula penambahan ekstrak kayu secang pada F1 (30%), F2 (40%), dan F3 (50%). Analisis data menggunakan Uji Kruskal Wallis dan One-Way ANOVA. Formula terbaik yaitu formula F3 dengan penambahan ekstrak kayu secang 50%, formula F3 lebih banyak disukai dari segi warna. Berdasarkan hasil uji flavonoid sebesar 301.79 ppm, viskositas 2080.400 cP, pH 4.15, kadar air 91.73%, kadar abu 0.16%, kadar lemak 0.33%, kadar protein 0.19% dan kadar karbohidrat 7.59%. Hasil analisis uji Kruskal Wallis menyatakan adanya perbedaan nilai organoleptik pada karakteristik warna ($P=0,000$). Analisis One-Way ANOVA menyatakan ada perbedaan pada kadar flavonoid ($P=0,049$), viskositas ($P=0,003$) dan pH ($P=0,001$). Penambahan ekstrak kayu secang pada sirup belimbing wuluh berpengaruh terhadap kadar flavonoid, karakteristik warna, viskositas, dan pH.

Kata Kunci: Sirup, Kayu Secang, Flavonoid, Sifat Fisik, Organoleptik

THE EFFECT OF CAESALPINIA SAPPAN WOOD EXTRACT ADDITIONAL ON FLAVONOID LEVELS, ORGANOLEPTIC PROPERTIES AND PHYSICAL PROPERTIES OF SYRUP AVERRHOA BILIMBI

Kamila Nida Ramadhanty

Abstract

Averrhoa bilimbi L and Caesalpinia sappan wood extract contain active compounds flavonoid in the fruits and stem. Flavonoid compounds in the Averrhoa bilimbi L and Caesalpinia sappan wood extract have an antidiabetic properties. This research was done to analyze the flavonoid content, organoleptic properties and physical properties of the formulated syrup of Averrhoa bilimbi L and Caesalpinia sappan wood extract. This research was an experimental study with completely randomized design. There were 4 times repetition in 4 formulas, one control formula (F0) and 3 formulas Caesalpinia sappan wood extract F1 (30%), F2 (40%), dan F3 (50%). Data was analyzed by Kruskal Wallis and One-Way ANOVA. The color of the formula F3 was more acceptable than others. Based on the flavonoid test results of 301.79 ppm, viscosity 2080,400 cP, pH 4.15, water content 91.73%, ash content 0.16%, fat content 0.33%, protein content 0.19% and carbohydrate content 7.59%. Analysis of the results of Kruskal Wallis stated that there were differences in organoleptic values in the color ($P = 0,000$). One-Way ANOVA analysis states that there is difference in flavonoid content ($P = 0.049$), viscosity ($P = 0.003$) and pH ($P = 0.001$). The addition of Caesalpinia sappan wood extract to syrup of Averrhoa bilimbi affects the color, flavonoid content, viscosity, and pH.

Keyword: Syrup, Caesalpinia sappan, Flavonoid, Physical Properties, Organoleptic