

**EVALUASI SIFAT KIMIA, FISIK, DAN TINGKAT KESUKAAN SETUP
DENGAN VARIASI JUMLAH SUKROSA DAN JAMBU BIJI (*Psidium
guajava L*)**

INTISARI

Jambu biji merupakan buah klimaterik yang memiliki senyawa-senyawa yang bermanfaat bagi tubuh salah satunya yaitu vitamin C. Jambu biji merah berpotensi dijadikan produk diversifikasi pangan yang memiliki antioksidan dan nilai ekonomi tinggi, namun mudah rusak. Oleh karena itu perlu diversifikasi antara lain dibuat setup. Penelitian ini bertujuan untuk menghasilkan setup jambu biji yang mengandung vitamin C dan disukai panelis.

Penelitian dilakukan menggunakan Rancangan Acak Lengkap (RAL) dengan 2 perlakuan, yaitu dengan penambahan sukrosa dan jambu biji. Penambahan sukrosa dengan variasi 15, 30 dan 45% (dalam 500 ml air) dan buah jambu biji variasinya: 300, 500 dan 700 g. Analisis kimia yang dilakukan ialah kadar air, vitamin C, aktivitas antioksidan, gula total, total asam, padatan terlarut, dan pengujian fisik adalah warna, viskositas serta untuk menentukan tingkat keukaan dilakukan uji hedonik tingkat.

Hasil penelitian menunjukkan kadar vitamin C sebanyak $86,50 \pm 0,21$ mg/100 g, air $87,17 \pm 0,51\%$ dan aktivitas antioksidan dengan nilai RSA (*Radical Scavenging Activity*) $24,56 \pm 0,50\%$. Analisis kimia setup jambu biji didapatkan vitamin C tertinggi sebesar 137,46 mg/ 700 g, aktivitas antioksidan 33,64% RSA, gula total 62,12%, total asam 0,23%, imbalanced gula asam 477,85 dan padatan terlarut 27%. Variasi penambahan sukrosa dan jambu biji memberikan pengaruh nyata terhadap warna, viskositas dan tingkat kesukaan panelis. Hasil penelitian menunjukkan bahwa formulasi terbaik yang paling disukai panelis adalah setup yang dibuat dengan penambahan variasi sukrosa 15% dan jambu biji 300 g, dengan vitamin C sebesar $121,88 \pm 0,62$ mg/ 100 g.

Kata Kunci: Setup, Jambu biji, Sukrosa, Vitamin C

**EVALUATION OF CHEMICAL PROPERTIES, PHYSICAL
PROPERTIES, AND PREFERENCE LEVEL OF SETUP WITH
VARIATION OF THE TOTAL OF SUCROSE AND GUAVA (*Psidium
guajava* L)**

ABSTRACT

Guava is a climacteric fruit that can benefit the body, one of which is vitamin C. Red guava can be used as a food diversification product with antioxidants and high economic value but is easily damaged. Therefore, it is necessary to diversify, among others, make a setup. This study aims to produce a guava setup that contains vitamin C and is preferred by panelists.

The study was conducted using a Completely Randomized Design (CRD) with two treatments, namely the addition of sucrose and guava. The addition of sucrose use variations of 15, 30, and 45% (in 500 ml water) and fruit use variants: 300, 500, and 700 g. The analysis chemical carried out is water content, vitamin C, antioxidant activity, total sugar, total acid, dissolved solids, and testing of physical properties is color, viscosity and to determine the level of preference hedonic test is carried out.

The results showed that the levels of vitamin C as much as 86.50 ± 0.21 mg/100 g, water content $87.17 \pm 0.51\%$, and antioxidant activity with an RSA (Radical Scavenging Activity) value of $24.56 \pm 0.50\%$. Chemical analysis of guava setup obtained the highest vitamin C at 137.46 mg/700 g, antioxidant activity 33.64% RSA, total sugar 62.12%, total acid 0.23%, acid sugar balance 477,85 and soluble solids 27%. Variations in the addition of sucrose and guava significantly affected the color, viscosity, and the panelists' level of preference. The results showed that the best formulation preferred by the panelists was the setup made with the addition of a variation of 15% sucrose and 300 g guava, with 121.88 ± 0.62 mg/100 g of vitamin C.

Keywords: Setup, Guava, Sucrose, Vitamin C