

PENGARUH VARIASI RASIO JAMBU BIJI MERAH DAN EKSTRAK AIR DAUN KELOR TERHADAP ATRIBUT ORGANOLEPTIK PADA KONJAC JELLY DRINK

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INTISARI

Latar Belakang: Dislipidemia merupakan masalah kesehatan yang dapat ditangani melalui modifikasi pola makan dengan menggunakan pangan fungsional. Glukomanan dari konjak berfungsi sebagai serat larut, sementara likopen dari jambu biji merah, fitosterol, dan antioksidan dari daun kelor berpotensi menurunkan kadar lipid darah secara sinergis, sehingga cocok untuk dijadikan bahan baku minuman jeli fungsional.

Tujuan: Penelitian ini bertujuan menganalisis pengaruh variasi rasio jus jambu biji merah dan ekstrak air daun kelor terhadap atribut organoleptik (warna, aroma, rasa, tekstur) dan tingkat penerimaan keseluruhan pada *konjac jelly drink*, serta menentukan komposisi yang paling disukai panelis melalui skor hedonik tertinggi.

Metode: Penelitian eksperimen kuantitatif menggunakan Rancangan Acak Lengkap (RAL) satu faktor dengan empat formula berdasarkan rasio antara jus jambu biji merah dan ekstrak air daun kelor, yaitu F0 (100:0), F1 (90:10), F2 (85:15), dan F3 (70:30). Sebanyak 31 panelis semi terlatih menilai sampel menggunakan skala hedonik 6 poin. Data dianalisis dengan uji nonparametrik Friedman untuk perbandingan antar formula dan uji post-hoc Wilcoxon pada taraf signifikansi $\alpha = 0,05$.

Hasil: Terdapat perbedaan signifikan pada parameter warna ($p < 0,001$), aroma ($p < 0,001$), rasa ($p < 0,001$), tekstur ($p = 0,030$), dan penilaian keseluruhan ($p < 0,001$).

Kesimpulan: Variasi rasio jambu biji merah dan ekstrak air daun kelor berpengaruh signifikan terhadap atribut organoleptik dan penerimaan keseluruhan *konjac jelly drink*. Formula 1 dengan perbandingan jambu biji merah (90%) dan ekstrak air daun kelor (10%) mendapat skor hedonik tertinggi.

Kata kunci: daun kelor; glukomanan; jambu biji merah; *konjac jelly drink*; uji hedonik.

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EFFECT OF VARYING RATIOS OF RED GUAVA JUICE AND MORINGA LEAF AQUEOUS EXTRACT ON THE ORGANOLEPTIC ATTRIBUTES OF A KONJAC JELLY DRINK.

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ABSTRACT

Background: Dyslipidemia is a health problem that can be managed through dietary modification using functional foods. Glucomannan from konjac functions as a soluble fiber, while lycopene from red guava, phytosterols, and antioxidants from moringa leaves have the potential to synergistically reduce blood lipid levels, making them suitable raw materials for a functional jelly beverage.

Objective: This study aimed to analyze the effect of varying ratios of red guava juice and moringa leaf aqueous extract on the organoleptic attributes (color, aroma, taste, texture) and overall acceptance of a konjac jelly drink, and to determine the composition most preferred by panelists based on the highest hedonic score.

Methods: This quantitative experimental study used a one-factor Completely Randomized Design (CRD) with four formulations based on the ratio of red guava juice to moringa leaf aqueous extract: F0 (100:0), F1 (90:10), F2 (85:15), and F3 (70:30). Thirty-one semi-trained panelists evaluated the samples using a 6-point hedonic scale. Data were analyzed with the nonparametric Friedman test for comparisons among formulations and the post-hoc Wilcoxon test at a significance level of $\alpha = 0.05$.

Results: Significant differences were observed in color ($p < 0.001$), aroma ($p < 0.001$), taste ($p < 0.001$), texture ($p = 0.030$), and overall acceptance ($p < 0.001$).

Conclusion: Variations in the ratio of red guava juice and moringa leaf aqueous extract significantly affect the organoleptic attributes and overall acceptance of the konjac jelly drink. Formula F1 (90% red guava:10% moringa leaf water extract) received the highest hedonic score.

Keywords: moringa leaves; konjac glucomannan; red guava; konjac jelly drink; hedonic test.

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