

**PENGARUH PERBANDINGAN ALBEDO
SEMANGKA (*Citrullus vulgaris*, Schard.) DAN
SARI BUAH NANGKA (*Artocarpus heterophyllus*)
TERHADAP KARAKTERISTIK PERMEN JELLY**



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Pengaruh Perbandingan Albedo Semangka (*Citrullus vulgaris*, Schard.) dan Sari Buah Nangka (*Artocarpus heterophyllus*) Terhadap Karakteristik Permen Jelly

Fakhirah Rahmi, Kesuma Sayuti, Novelina

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh perbandingan sari albedo semangka dan sari buah nangka terhadap karakteristik permen *jelly* ditinjau dari sifat organoleptik, fisik, dan kimia. Penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Data dianalisis menggunakan ANOVA yang dilanjutkan dengan uji Duncan pada taraf 5%. Perlakuan yang digunakan yaitu perbandingan sari albedo semangka dan sari buah nangka: A (90:10), B (80:20), C (70:30), D (60:40), dan E (50:50). Hasil penelitian menunjukkan bahwa perbandingan sari albedo semangka dan sari buah nangka berpengaruh nyata terhadap kekerasan, kadar air, gula reduksi, sukrosa, pH, a_w , total karotenoid, aktivitas antioksidan serta penerimaan organoleptik. Perlakuan terbaik berdasarkan analisis fisik, kimia, dan mikrobiologi adalah E (50% albedo semangka : 50% sari nangka) dengan nilai warna $82,74^\circ\text{Hue}$, kekerasan 35,77 gf, kadar air 33,42%, kadar abu 0,54%, gula reduksi 13,20%, sukrosa 48,77%, pH 4,64, a_w 0,847, total karotenoid 12,29 $\mu\text{g}/100\text{ g}$, aktivitas antioksidan 33,41%, angka lempeng total $8,9 \times 10^3\text{ CFU/g}$, dan tingkat kesukaan panelis pada warna 3,80 (suka), aroma 4,00 (suka), rasa 4,15 (suka), serta tekstur 3,60 (suka).

Kata kunci: albedo semangka ; antioksidan ; karotenoid ; sari nangka ; permen *jelly*

Effect of Differences Ratio of Watermelon Albedo (*Citrullus vulgaris*, Schard.) and Jackfruit Juice (*Artocarpus heterophyllus*) on the Characterization of Jelly Candy

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ABSTRAK

This study aimed to determine the effect of different ratios of watermelon albedo juice and jackfruit juice on the characteristics of jelly candy in terms of organoleptic, physical, and chemical properties. The research was conducted using a Completely Randomized Design (CRD) with 5 treatments and 3 replications. Data were analyzed using ANOVA followed by Duncan's Multiple Range Test (DMRT) at a 5% significance level. The treatments consisted of the ratios of watermelon albedo juice and jackfruit juice: A (90:10), B (80:20), C (70:30), D (60:40), and E (50:50). The results showed that the ratio of watermelon albedo juice and jackfruit juice had a significant effect on hardness, moisture content, reducing sugar, sucrose, pH, water activity (a_w), total carotenoids, antioxidant activity, and organoleptic acceptance. The best treatment based on physical, chemical, and microbiological analysis was E (50% watermelon albedo : 50% jackfruit juice), with values of color 82.74°Hue, hardness 35.77 gf, moisture content 33.42%, ash content 0.54%, reducing sugar 13.20%, sucrose 48.77%, pH 4.64, a_w 0.847, total carotenoids 12.29 $\mu\text{g}/100\text{ g}$, antioxidant activity 33.41%, total plate count 8.9×10^3 CFU/g, and panelist acceptance scores of 3.80 (like) for color, 4.00 (like) for aroma, 4.15 (like) for taste, and 3.60 (like) for texture.

Keyword : watermelon albedo; antioxidant ; carotenoid ; jackfruit juice ; watermelon albedo