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Pengembangan Snack Bar Tinggi Serat Berbasis Bubuk Salak Afkir dan Kulit Buah Naga
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Pengembangan *Snack Bar* Tinggi Serat Berbasis Bubuk Salak Afkir dan Bubuk Kulit Buah Naga Merah

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ABSTRAK

Buah salak afkir dan kulit buah naga merah merupakan hasil samping komoditas hortikultura yang mengandung serat pangan dan berpotensi dimanfaatkan sebagai bahan baku dalam pengembangan produk pangan, seperti *snack bar*. Penelitian ini bertujuan mengembangkan *snack bar* dan menganalisis pengaruh variasi bubuk buah salak afkir dan bubuk kulit buah naga merah terhadap karakteristik fisik (warna dan tekstur), kimia (serat pangan total, kadar air, aktivitas air, kadar abu, kadar protein, dan kadar lemak), sensoris *snack bar* (uji hedonik dan uji skoring), dan menentukan formulasi terbaik. Penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan empat formulasi, yaitu F1 (100:0), F2 (75:25), F3 (50:50), dan F4 (25:75). Data karakteristik fisik dan kima dianalisis menggunakan ANOVA atau uji Kruskal Wallis yang dilanjutkan uji Tukey HSD atau Mann Whitney, sedangkan data sensoris dianalisis menggunakan uji Friedman dilanjut uji Wilcoxon pada taraf kepercayaan 95%. Hasil penelitian menunjukkan bahwa penambahan bubuk kulit buah naga meningkatkan kadar serat pangan total, kadar air, aktivitas air, nilai warna, dan kekerasan produk, namun menurunkan tingkat kesukaan panelis terhadap beberapa parameter sensori. Berdasarkan metode *Simple Additive Weighting* (SAW), formulasi terbaik diperoleh pada F1 (100% bubuk buah salak) karena memberikan keseimbangan terbaik antara karakteristik fisik, kimia dan sensori

Kata kunci: bubuk buah salak afkir, bubuk kulit buah naga, serat pangan total, *snack bar*, *Simple Additive Weighting* (SAW)

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Development of a High-Fiber Snack Bar Based on Rejected Salak Powder and Red Dragon Fruit Peel Powder

by

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ABSTRACT

Rejected salak fruit and red dragon fruit peels are by products of horticultural commodities that contain dietary fiber and have the potential to be used as raw materials in the development of food products, such as snack bars. This study aims to develop a snack bar and analyze the effects of varying amounts of discarded salak fruit powder and red dragon fruit peel powder on the snack bar's physical characteristics (color and texture), chemical characteristics (total dietary fiber, moisture content, water activity, ash content, protein content, and fat content), and sensory characteristics (hedonic and scoring tests), as well as to determine the optimal formulation. The study used a completely randomized design (CRD) with five formulations: F1 (100:0), F2 (75:25), F3 (50:50), and F4 (25:75). Physical and chemical data were analyzed using ANOVA or the Kruskal-Wallis test, followed by the Tukey HSD or Mann-Whitney test, while sensory data were analyzed using the Friedman test followed by the Wilcoxon test at a 95% confidence level. The results of the study showed that the addition of dragon fruit peel powder increased the total dietary fiber content, moisture content, water activity, color value, and firmness of the product, but decreased the panelists' acceptability ratings for several sensory parameters. Based on the Simple Additive Weighting (SAW) method, the best formulation was obtained for F1 (100% salak fruit powder) because it provided the best balance between physical, chemical, and sensory characteristics.

***Keywords**: rejected salak fruit powder, dragon fruit peel powder, total dietary fiber, snack bars, and Simple Additive Weighting (SAW)*

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