

**PENGARUH PENAMBAHAN *PUREE PARE* (*Momordica charantia* L.) TERHADAP KARAKTERISTIK MUTU *MARSHMALLOW PANDAN* (*Pandanus amaryllifolius* Roxb.)
RENDAH KALORI**



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SISKA NURWIDYA WIRASTUTI



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Pengaruh Penambahan Puree Pare (*Momordica charantia* L.) Terhadap Karakteristik Mutu Marshmallow Pandan (*Pandanus amaryllifolius* Roxb.) Rendah Kalori

Siska Nurwidya Wirastuti, Fauzan Azima, Tuty Anggraini

ABSTRAK

Marshmallow dikenal sebagai kembang gula lunak, yaitu jenis kembang gula bertekstur lunak yang dihasilkan dengan penambahan komponen hidrokoloid seperti agar, gum, pektin, pati, karagenan, gelatin dan lain-lain. Penelitian ini bertujuan untuk mengetahui pengaruh penambahan *puree* pare terhadap karakteristik mutu *marshmallow* pandan rendah kalori serta tingkat kesukaan panelis. Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Penelitian ini dilakukan penambahan *puree* pare dengan konsentrasi A (0%), B (2%), C (4%), D (6%), dan E (8%). Hasil penelitian pada setiap parameter dianalisis secara statistik menggunakan *Analysis of Variance* (ANOVA), dan jika hasil analisis berbeda nyata, dilanjutkan dengan analisis *Duncan's New Multiple Range Test* (DNMRT) pada taraf 5%. Hasil penelitian menunjukkan bahwa penambahan *puree* pare memberikan pengaruh berbeda nyata terhadap kadar air, kadar abu, aktivitas antioksidan, total fenol, total gula, kekerasan, dan organoleptik (rasa dan tekstur). Penambahan *puree* pare berbeda tidak nyata terhadap nilai energi dan organoleptik (warna dan aroma). Perlakuan terbaik penambahan *puree* pare berdasarkan karakteristik kimia, fisik, mikrobiologi, dan organoleptik adalah perlakuan D (penambahan *puree* pare 6%) dengan nilai rata-rata sebagai berikut: kadar air (24,48%), kadar abu (0,22%), total fenol (19,71 mg GAE/g), aktivitas antioksidan (13,36%), nilai energi (2,61 kkal/g), total gula (8,06%), kekerasan (4,96 N/Cm²), angka lempeng total (1,6×10⁴ CFU/g), dan analisis tingkat kesukaan terhadap warna 4,28 (suka), aroma 3,60 (suka), rasa 3,48 (suka) dan tekstur 4,12 (suka).

Kata kunci : *marshmallow*, mutu, pandan, *puree* pare, rendah kalori

The Effect of Adding Bitter Melon Puree (*Momordica charantia* L.) on the Quality Characteristics of Low-Calorie Pandan Marshmallow (*Pandanus amaryllifolius* Roxb.)

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ABSTRACT

Marshmallow is a soft confectionery produced by adding hydrocolloid components, such as gums, pectin, starches, and gelatine. This study aimed to determine how adding bitter melon puree affects the quality characteristics and panellist's preference levels of low-calorie pandan marshmallows. The study employed a completely randomized design (CRD) with five treatments, each with three replications. The bitter melon puree was added at concentrations of A (0%), B (2%), C (4%), D (6%), and E (8%). Each parameter was analysed statistically using analysis of variance (ANOVA). Then Duncan's new multiple range test (DNMRT) was applied at the 5% significance level for a parameter that showed a significant. The results showed that adding bitter melon puree significantly affected water content, ash content, antioxidant activity, total phenol, total sugar, hardness, and organoleptic characteristics (taste and texture), but did not significantly affect energy value or organoleptic properties (colour and aroma). Based on the chemical, physical, microbiological, and organoleptic characteristics, the best treatment was on D treatment (6% bitter melon puree), with values as follows: water content (24.48%), ash content (0.22%), total phenol (19.71 mg GAE/g), antioxidant activity (13.36%), calorific value (2.61 kcal/g), total sugar (8.06%), hardness (4.96 N/cm²), total plate count (1.6×10⁴ CFU/g), and preference scores for colour (4.28, like), aroma (3.60, like), taste (3.48, like), and texture (4.12, like).

Keywords: marshmallow, quality, pandan, bitter melon puree, low calories

