PENGARUH PENAMBAHAN BUBUK KAYU MANIS (*Cinnamomum burmanii*) TERHADAP SIFAT FISIKO-KIMIA DAN PENERIMAAN ORGANOLEPTIK GULA SEMUT TEBU (*Saccharum officinarum*, L.)

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ABSTRAK

Gula semut tebu merupakan salah satu produk gula merah yang memiliki bentuk berupa serbuk atau butiran yang memiliki karakteristik berwarna coklat muda atau coklat tua. Penelitian ini bertujuan untuk mengetahui pengaruh penambahan bubuk kayu manis terhadap sifat fisiko-kimia dan penerimaan organoleptik gula semut tebu, serta analisis titik impasnya. Penelitian ini menggunakan rancangan acak lengkap (RAL) dengan 5 perlakuan dan 3 kali ulangan dengan variasi penambahan bubuk kayu manis yaitu A (0 %), B (1,5 %), C (3 %), D (4,5 %), dan E (6 %). Data dianalisis secara statistik menggunakan *Analysis of Varience* (ANOVA) dan dilanjutkan dengan uji *Duncan's New Multiple Range Tes*t (DNMRT) pada taraf 5 % jika berbeda nyata, serta dihitung titik impas produk berdasarkan perlakuan terbaik pada uji sensori. Penambahan bubuk kayu manis berpengaruh nyata terhadap rendemen, derajat putih, bagian tidak larut air, kadar air, kadar abu, kadar gula pereduksi, antioksidan, sensori (warna, rasa, aroma, dan tekstur) gula semut tebu. Hasil uji sensori didapatkan bahwa perlakuan C merupakan perlakuan yang paling disukai panelis, yakni jika penambahan bubuk kayu manis sebanyak 3 % dengan tingkat kesukaan terhadap warna 4,17 (suka), rasa 4,03 (suka), aroma 3,70 (mengarah ke suka), tekstur 3,70 (mengarah ke suka), dan penampakan 4,07 (suka). Produksi gula semut tebu dengan penambahan bubuk kayu manis 3 % (perlakuan C) akan mencapai titik impas ketika perusahaan dapat menjual produk sebanyak sebanyak 2.796 unit dengan bobot per unitnya berisi 0,25 kg dan harga jual sebesar Rp 23.116/unit.

Kata kunci : bubuk kayu manis; gula semut tebu; titik impas

THE EFFECT OF ADDITION OF CINNAMON POWDER (*Cinnamomum burmanii*) ON THE PHYSICO-CHEMICAL PROPERTIES AND ORGANOLEPTIC ACCEPTANCE OF GRANULATED CANE SUGAR (*Saccharum officinarum*, L.)

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ABSTRACT

Granulated cane sugar is one of the brown sugar products that has a form of powder or granules that have characteristics of light brown or dark brown. This study aimed to determine the effect of the addition of cinnamon powder on the physico-chemical properties and organoleptic acceptance of granulated cane sugar, as well as the break-even point analysis. This study used a completely randomised design (CRD) with 5 treatments and 3 replications with varyin of hibiscus leaf extract, namely A (0 %), B (1,5 %), C (3 %), D (4,5 %), dan E (6 %). Data were statistically analysed using Analysis of Varience (ANOVA) and continued with Duncan's New Multiple Range Test (DNMRT) at the 5 % level if significantly different, and calculated the break-even point of the product based on the best treatment in the sensory test. The addition of cinnamon powder had a significant effect on yield, degree of whiteness, water insoluble part, water content, ash content, reducing sugar content, antioxidant, sensory (color, taste, aroma, and texture) of granulated cane sugar. The results of the sensory test found that treatment C is the treatment most favored by panelists, namely if the addition of 3 % cinnamon powder with a level of preference for color 4.17 (like), taste 4.03 (like), aroma 3.70 (leads to like), texture 3.70 (leads to like), and appearance 4.07 (like). The production of granulated cane sugar with the addition of 3 % cinnamon powder (treatment C) will break event when the company can sell 2.796 units of products with a weight per unit of 0.25 kg and a selling price of Rp 23.116/unit.

Keywords : break-event point; cinnamon powder; granulated cane sugar