

PENGARUH KOMBINASI KONSENTRASI CMC DAN JERUK NIPIS TERHADAP KADAR VITAMIN C DAN SENSORIS SORBET BUAH PEPAYA

[The Effect of Combination of CMC and Lime's Concentration on Vitamin C Level and Sensories of Papaya Sorbet]

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ABSTRACT

The purpose of this research was to know the effect of combination of CMC and lime's concentration on vitamin C level and sensories of papaya sorbet. The method used in this research was an experimental method conducted in the laboratory using the Completely Randomized Block Design (CRBD) with factorial experiments (3 x 3), which consisted of two factors. The first factor was the concentration of CMC (0%, 0.25%, and 0.5%) and the second factor was the concentration of lime (0%, 1.5%, and 3%). The parameter observed were vitamin C, total solids, overrun, resistance and sensory (color, aroma, taste, and texture). Data was analyzed using Co-stat software with 5% significance. The treatment that significantly different were analyzed using Honestly Significance Difference (HSD). Result showed that concentration of CMC had a significant effect on vitamin C level, overrun, resistance and texture (scoring) of papaya sorbet. The concentration of lime had a significant effect on vitamin C, total solids, overrun, resistance, color, aroma, taste (scoring) and taste (hedonic) of papaya sorbet. The concentration of CMC and lime had a significant effect on the texture (hedonic). The selected product of papaya sorbet was C2J3 sample (0.25% of CMC and 3% of lime) with 39.89 mg/100 g of vitamin C, 8.60% of total solid, 28.44% of overrun, 55.12 minutes of resistance, color (light orange), aroma (normal), texture (normal), and taste (normal).

Keywords: CMC, lime, papaya, sorbet.

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh kombinasi konsentrasi CMC dan jeruk nipis terhadap kadar vitamin C dan sensoris sorbet buah pepaya. Metode yang digunakan dalam penelitian ini adalah metode eksperimental yang dilakukan di laboratorium dengan menggunakan rancangan percobaan Rancangan Acak Kelompok (RAK) dengan percobaan faktorial (3 x 3), yang terdiri dari dua faktor. Faktor pertama yaitu konsentrasi CMC (0%, 0,25%, dan 0,5%) dan faktor kedua jeruk nipis (0%, 1,5%, dan 3%). Parameter yang diamati yaitu vitamin C, total padatan, *overrun*, resistensi dan sensoris (warna, aroma, rasa, dan tekstur). Data hasil pengamatan diuji dengan analisis keragaman pada taraf nyata 5% dengan menggunakan *software Co-Stat*. Perlakuan yang berbeda nyata diuji lanjut menggunakan Beda Nyata Jujur (BNJ) dengan taraf nyata 5%. Hasil penelitian menunjukkan konsentrasi CMC memberikan pengaruh yang nyata terhadap kadar vitamin C, *overrun*, resistensi dan tekstur (*scoring*) sorbet buah pepaya. Konsentrasi jeruk nipis memberikan pengaruh nyata terhadap vitamin C, total padatan, *overrun*, resistensi, warna, aroma, rasa (*scoring*) dan rasa (hedonik) sorbet buah pepaya. Interaksi konsentrasi CMC dan jeruk nipis memberikan pengaruh nyata terhadap tekstur (hedonik) sorbet buah pepaya. Produk sorbet buah pepaya terpilih adalah perlakuan C2J3 (CMC 0,25% dan jeruk nipis 3%) dengan kadar vitamin C sebesar 39,89 mg/100 g, total padatan 8,60%, *overrun* 28,44%, resistensi 55,12 menit, warna (oranye muda), aroma (normal), tekstur (normal), dan rasa (normal).

Kata kunci: CMC, jeruk nipis, pepaya, sorbet.