

ABSTRACT

Aulia Joana. B.1610756. Quality Characteristics of Hard Candy with the addition of Bangka White Pepper (*Piper nigrum Linn*). Supervised by Rosy hutami and Dwi Aryanti Nur'utami.

This study aims to diversify white pepper as an ingredient in hard candy products. This study used a factorial Completely Randomized Design (CRD) with two factors, namely the ratio of sucrose to glucose (50:50), and (70:30) and the concentration of white pepper (1%, 3%, 5%). Product analysis includes hedonic test as a determinant of selected products and chemical analysis, microbiological analysis, sensory quality test and energy content calculation of selected products. The data analysis used was ANOVA with Duncan's Advanced Test. The results showed that the hard candy selected was a 50:50 ratio of sucrose and glucose with the addition of 1% white pepper. Selected white pepper hard candy has a moisture content of 3.46%, an ash content of 0.89%, a reduced sugar content of 11.31%, 62.93% saccharose content, and a total plate number of 8×10^1 colonies/g, a fat content of 12%, and protein content of 1.43%. The antioxidant activity of selected white pepper hard candy had an IC_{50} value of 141208.03 mg/L, an AEAC of 20.58 mg/100g Vit.C, and% inhibition of 17.66%. The energy content of the selected products is 1.38 kcal/100gr. The results of the sensory quality test of the selected products, the color parameters lead to golden yellow (8.31), the taste leads to spicy (5,58), the aroma leads to no pepper aroma (2.86), and the texture is hard (4, 34).

Keywords: Hard candy, Bangka White pepper, antioxidants, sucrose



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ABSTRAK

Aulia Joana. B.1610756. Karakteristik Mutu Permen Keras dengan Penambahan Lada Putih (*Piper nigrum Linn*) Bangka. Di bawah bimbingan Rosy Hutami dan Dwi Aryanti Nur'utami.

Penelitian ini bertujuan untuk mendiversifikasikan lada putih sebagai *ingredient* pangan produk permen keras. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) faktorial dengan dua faktor yaitu perbandingan sukrosa dengan glukosa (50:50), dan (70:30) dan konsentrasi lada putih (1%, 3%, 5%). Analisa produk meliputi uji hedonik sebagai penentu produk terpilih dan analisa kimia, analisa mikrobiologi, uji mutu sensori serta perhitungan kandungan energi pada produk terpilih. Analisis data yang digunakan adalah ANOVA dengan Uji Lanjut *Duncan*. Hasil penelitian menunjukkan bahwa permen keras terpilih adalah perbandingan sukrosa dan glukosa 50:50 dengan penambahan lada putih 1%. Permen keras lada putih terpilih memiliki kadar air 3,46%, kadar abu 0,89%, kadar gula reduksi 11,31%, kadar sakarosa 62,93%, dan Angka Lempeng total 8×10^1 koloni/g, kadar lemak sebesar 12%, dan kadar protein sebesar 1,43%. Aktivitas antioksidan permen keras lada putih terpilih memiliki nilai IC_{50} sebesar 141208,03 mg/L, AEAC sebesar 20,58 mg/100g Vit.C, dan % inhibisi sebesar 17,66%. Kandungan energi produk terpilih sebesar 1,38 kkal/100gr. Hasil uji mutu sensori produk terpilih parameter warna mengarah ke arah kuning keemasan (8,31), rasa mengarah kearah pedas (5,58), aroma mengarah kearah tidak tercium aroma lada (2,86), dan tekstur mengarah kearah keras (4,34).

Kata Kunci: Permen keras, lada putih Bangka, antioksidan, sukrosa



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