

## ABSTRACT

**Muhammad Revy Firdaus 1710151.** Protein and Organoleptic Characteristics of Boba Made from Tapioca Flour, Soybean Flour, and White Glutinous Flour. Supervised by Lia Amalia and Muhammad Rifqi.

Boba or bubble pearls are tapioca pearls in the form of balls with a chewy texture with a diameter of  $\pm 8$  mm made from tapioca. This study aims to increase the protein content in boba and as an alternative ingredient in boba food products. The addition of soybean flour and brown sugar to boba is expected to increase the functional value of kboba products. This study used a factorial completely randomized design (CRD) with two treatment factors, namely the concentration of soybean flour and glutinous rice flour (15% : 35%, 20% : 30%, and 25% : 25%) and the concentration of palm sugar (20%, 25%, 30%). Product analysis includes protein chemical analysis as well as sensory and hedonic quality tests as a determinant of selected products. Chemical analysis of water content, ash content, fat content, protein content and carbohydrate content in selected products. Analysis of the research data used was ANOVA with Duncan's Advanced Test with a 95% confidence interval. The results showed that tapioca flour boba, soy flour, white glutinous rice flour and palm sugar were selected. Boba was made by treatment with the addition of soy flour percentage: 25%: 25% white glutinous rice flour and 30% palm sugar addition. The results of the sensory quality test for had a dark brown color, sweet taste, no unpleasant aroma and very chewy texture. The results of the hedonic test showed that panelists liked color, taste and texture. Selected boba products contain 10.42% water content, 1.42% ash content, 5.88% fat content, 6.31% protein content and 76.15% carbohydrate content.

Keywords: boba, soybean, glutinous, tapioca, palm

## ABSTRAK

**Muhammad Revy Firdaus 1710151.** Karakteristik Protein Dan Organoleptik Boba Berbahan Tepung Tapioka, Tepung Kedelai, Dan Tepung Ketan Putih. Dibawah bimbingan Lia Amalia dan Muhammad Rifqi.

Boba atau bubble pearls merupakan mutiara tapioka (*tapioca pearl*) berbentuk bola bertekstur kenyal dengan diameter  $\pm 8$  mm yang terbuat dari tapioka. Penelitian ini bertujuan untuk meningkatkan kandungan protein pada boba dan sebagai ingredient alternatif pangan produk boba. Penambahan tepung kedelai dan gula merah ke dalam boba diharapkan dapat meningkatkan nilai fungsional produk boba. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) faktorial dengan dua faktor perlakuan yaitu konsentrasi tepung kacang kedelai dan tepung ketan (15% : 35%, 20% : 30%, dan 25% : 25%) dan konsentrasi gula aren (20%, 25%, 30%). Analisa produk meliputi analisa kimia protein serta uji mutu sensori dan hedonik sebagai penentu produk terpilih. Analisa kimia kadar air, kadar abu, kadar lemak kadar protein dan kadar karbohidrat pada produk terpilih. Analisis data penelitian digunakan adalah ANOVA dengan Uji Lanjut Duncan dengan selang kepercayaan 95%. Hasil penelitian menunjukkan bahwa Boba tepung tapioka, tepung kedelai, tepung ketan putih dan gula aren terpilih adalah boba dibuat dengan perlakuan dengan presentase perbandingan tepung kedelai : tepung ketan putih 25% : 25% dan penambahan gula aren 30%. Hasil uji mutu sensori menunjukkan bahwa boba mempunyai warna coklat tua, rasa manis, aroma tidak tercium langu dan tekstur sangat kenyal. Hasil uji hedonik menunjukkan bahwa panelis menyukai warna, rasa, dan tekstur. Produk boba terpilih mengandung kadar air 10.42% kadar abu 1,42%, kadar lemak 5.88%, kadar protein 6.31% dan kadar karbohidrat 76.15%.

Kata kunci: boba, kedelai, ketan, tapioka, aren